
City of Saskatoon Contract Management Advisory Project

November 2018



Executive Summary

Background & Objectives

The City's Strategic Risk Register identifies Risk A&FS-12 related to procurement risk, which states "*The City's purchases may not be in accordance with approved policy*". The City is currently undertaking the development of a new procurement policy; however, the City identified there are opportunities for policy and process improvement around contract management post-contract award relating to this risk.

The objectives of this advisory project were to gain an understanding of the City's current contract lifecycle management (CLM) practices and provide a road map of prioritized improvement opportunity recommendations for the City to align with leading practice CLM frameworks for post-contract award activities.

Key Strengths

The City has many formal document templates/guidelines to aid project and contract management activities, and a Sharepoint site was created as a centralised repository for these templates to ease access and increase awareness amongst all City divisions. Key strengths include developing an initial draft Project Management Framework (PMF) document covering all CLM stages. Strong corporate finance controls, among various other project activities, support City teams in managing project and operating program budgets.

Leading Practice

Typically industry and government leading practice for contract and project management includes a formal PMF that comprehensively covers all CLM stages. The PMF is often integrated into corporate policy, and supported by associated formal document templates, process manuals and process flow diagrams to outline various activities required at each CLM stage.

Key Improvement Opportunities

The City should consider finalizing the draft PMF guideline and implementing a holistic end-to-end PMF on all projects across all departments. Further, City staff should be provided with education and training to provide a consistent understanding of expected application of PMF tools and activities and how they allow the City to act in a more cohesive manner. In order for this change to be successful, the City should consider developing metrics to measure the success and level of improvement of the PMF in terms of its Planning, Project Budgets, Scheduling, Project Risk Management, and Project Reporting.

Road Map

The CLM road map in Section 4 consolidates and prioritizes improvement opportunities and recommendations for each observation, and aids the City in integrating required resources and implementation milestones into annual planning. As enhanced CLM processes are implemented, the City can coordinate awareness and training campaigns to increase process adoption.

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1. *Background & Advisory Objectives*

Strategic Risks

The City's Strategic Risk Register identifies Risk A&FS-12 related to procurement risk, which states "*The City's purchases may not be in accordance with approved policy*". The City is currently undertaking the development of a new procurement policy; however, the City identified that there are opportunities for policy and process improvement around contract management post-contract award relating to this risk.

Background

CLM includes proactive and methodical management of a contract starting with the identification of a need, to contract initiation, through to contract renewals. As organizations identify risk and implement CLM frameworks earlier in the contract lifecycle, their ability to realize maximum value from third-party relationships increases. Effective contract management is underpinned by robust governance and effective decision-making to enhance value across each CLM stage.

Scope

The scope of this project included an assessment of the City's current CLM (Operational and Capital) post-contract award processes to determine existing good practices within the City. We have also assessed whether control activities in each CLM post-contract award phase are designed to address relevant information processing objectives (i.e. Completeness, Accuracy, Validity and Restricted Access). Improvement opportunities and leading practice considerations for short- to long-term process efficiencies and technology enablement were also identified.

Advisory Objectives & Approach

Objectives: Gain an understanding of the City's current policies, key strengths and inherent CLM processes for executing, managing, monitoring and closing its contracts. Provide a road map indicating requirements and subsequent activities for the City to achieve desired future state CLM framework for post-contract award processes.

Approach: We conducted an analysis to increase our knowledge of current governance, systems, processes, and controls in place to manage the City's contracts. Once key stakeholders validated draft recommendations, we identified key themes and developed a road map of prioritized recommendations. Recommendation ownership, resource allocation, and competing priorities across the organization were considered by collecting feedback among key stakeholders involved in drafting recommendations, enabling alignment on themes and prioritization.

Further details on our background, scope, objectives and approach are included in Appendix 1.

2. Key Strengths

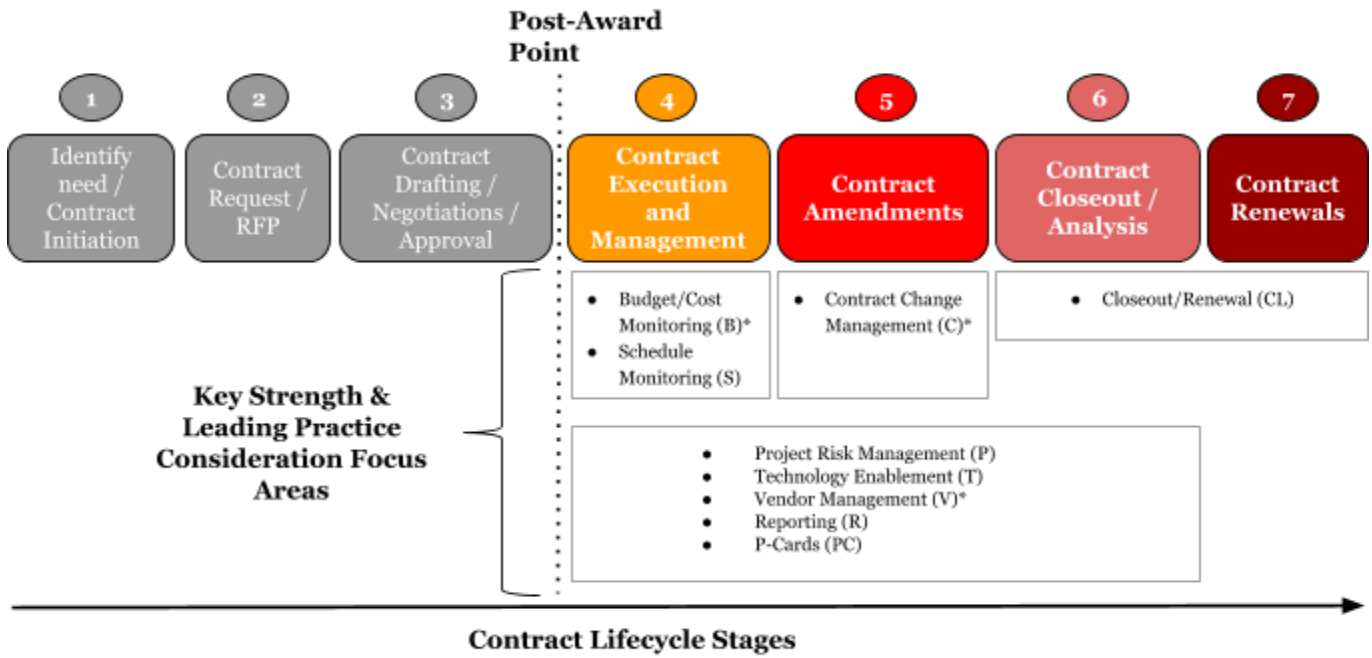
The City has many formal document templates/guidelines to aid project and contract management activities, and a Sharepoint site was created as a centralised repository for these templates to ease access and increase awareness amongst all City divisions. Over 25 interviews were held with City staff during this project (see Appendix 2). Key documents were also acquired and used to review projects/contracts executed by those interviewed, as well as understand the City's key strengths in CLM as identified below:

Focus Area	Key Strength
Project Risk Management (P)	<p>The City has developed an initial draft PMF document that outlines end-to-end guidance on project management activities throughout the entire project lifecycle.</p> <p>The City has a Corporate Governance Risk Based Management Policy and many projects have a formal risk log being maintained to track risks, which are often discussed and managed at routine (weekly/monthly) project meetings.</p>
Corporate Finance Budget and Cost Monitoring (B)	<p>Departments create asset management plans, complete with costs and business case statements. These are submitted to Corporate Finance and approved by Council in the budget. Each capital project is assigned a unique project ID in the City's General Ledger (GL) system. Timberline, a SAGE 300 product, is used to report and monitor capital budgets, including contracts, on many projects. Often Project Managers analyze variances to budget and complete updated project forecasts for further analysis by Corporate Finance.</p> <p>Operating program budgets are also approved by Council on an annual basis. Reports detailing variance to budget are generated by Corporate Finance from the GL system, and Program Managers are responsible for explaining variances and managing related contract budgets. Annual forecasts are completed on a monthly basis for further analysis by Corporate Finance.</p>
Project Contract Budget and Cost Monitoring (B)	<p>Corporate Finance assigns a divisional accountant to every project to enter approved expenditures and report on actual spend. The City understands the importance of project level budget and cost management with a variety of templates being used. Project Managers typically ensure their budget is updated and reported frequently and many try to understand whether contract contingency will be used or if additional funding will be required.</p>
Contract Schedule Monitoring (S)	<p>The City ensures a schedule or milestones are included in contracts and monitored on projects. Project Managers and those involved in</p>

Focus Area	Key Strength
	executing projects understand scheduling importance and its impact on contract budget and project success.
Contract Change Management (C)	Many projects utilise the change order process and templates outlined in the City’s draft PMF document to manage and control contract changes.
Project Reporting (R)	Timberline is often used to report actual cost vs budget for many project IDs on a monthly basis. The City’s draft PMF document includes a status report template which indicates a dashboard executive overview, description of project status, updated milestone schedule, progress completed, progress planned, and cost summary for the reporting period.
Contract Closeout (CL)	The divisional accountant assigned to each project prepares a close out package that is approved by the project engineer and operating director, then submitted to accounts payable to release project holdback.
Technology (T)	The City’s new ERP system will provide opportunities for improved reporting in the Finance module.
Vendor Management (V)	The City has included vendor management within their revised procurement policy and is in the process of integrating ISNetWorld and inserting their vendor safety data into this database.
P-Card Spend (PC1)	The City implements a P-Card policy manual including a number of differential indicators that provide business unit guidance on effective P-Cards utilization. This includes an implemented P-Card spending limit.

The key strengths identified above are categorized by focus areas from the CLM framework detailed below. The following section outlines leading practice considerations aligned with each focus area. Detailed current state observations are included in Appendix 3, and are aligned to the agreed upon objectives of this advisory project.

Diagram 1: CLM Framework



*Observation areas where the City should consider integrating post-award contract activities performed by functional project teams with the City’s procurement department processes.

3. *Leading Practice & Key Improvement Opportunities*

Leading practice organizations include formal and standardized processes and templates within each CLM category and implement a comprehensive PMF cross enterprise to enable multiple divisions within an organization to functionally manage contracts & projects consistently and transparently.

Project Framework Improvement Opportunity

The City should consider implementing a holistic, end-to-end approach within a formal PMF within each department by further developing contract/project management guidelines currently stored on the City's SharePoint site and refining and customizing to the functional/department level to support adoption and consistent application throughout the organization.

CLM Stage Improvement Opportunities

Improvement opportunities to align the City with leading practice for each CLM category, post contract award, are shown below.

- **Multiple CLM Stages:**
 - **Project Risk (P1):** The City should consider reviewing its current Risk Management policy and determine how it can be implemented at the divisional and functional level to identify and manage specific contract and project risks. This will allow proactive risk identification, monitoring and mitigation activities to be consistently performed at the project level and inform enhanced project and portfolio level decision making.
 - **Project Reporting (R1):** The City should consider creating a matrix to define tiered reporting requirements which would specify the daily, weekly, monthly, annual and close out reporting requirements across all contracts/projects/portfolios. Reporting templates could define project attributes such as schedule progress, risk, safety and operational milestones to include in addition to current budget and cost attributes presented in the Timberline report. This could improve consistency in key information requirements for more informed decision making and project risk management activities.
 - **Technology (T1):** The need for an ERP system has been noted by the City and options are actively being reviewed. As it may take significant time for a single system to be selected and implemented the City should consider ways to use Sharepoint or Office 365 to improve contract management practices in a more formal and standardized setting. Activities should be conducted to improve awareness and adoption of document controls and central repository to improve team access to information for enhanced decisions.
(T2): To enhance the efficiency of document approval we recommend the City consider automating workflows enabling reviewers to receive and approve documents electronically.

- **Vendor Management (V1):** The PMF guidelines specifies that KPIs should be included within the project charter. We recommend The City consider conducting a review to determine where KPIs/Service Level Agreements (SLAs) are appropriate.
 - **(V2):** The City should consider enhancing their revised procurement policy and supplier performance evaluation protocol to include processes to track vendor performance data in ISNetWorld. .
 - **P-Card Spend (PC1):** City divisions should consider utilizing a centralized system which indicates all required approvals, pre and post P-card transaction, and the status of those approvals for both instances (procurement option and payment method) that P-Cards are used.
- **CLM Stage 4: Contract Execution and Management**
 - **Project Budget (B1):** The City should consider enhancing their budget and cost monitoring process to include a formal monitoring template with key information attributes across all areas responsible for project management, potentially in Microsoft Excel with Office 365 sharing capabilities. The City intends for these attributes to form part of the future ERP Finance module. This would allow all project managers and budget owners to consistently monitor the status of project budgets, approved and pending budget changes, current commitments, actual costs, budget variances and forecasts at a functional level for each project scope area.
 - **Project Schedule (S1):** The City should consider the creation and implementation of a standard scheduling template that could outline minimum requirements to those creating and monitoring contract and project schedules. This will create consistency and transparency between contracts/projects, enabling the City, and associated vendors, to increase clarity of status reports and proactively identify schedule delays.
- **CLM Stage 5: Contract Amendments**
 - **Contract Change (C1):** The City should consider the implementation of procedures and documentation requirements around change management, including the difference between a change order and a force account/contingency amounts, being formally documented with policy and process flows. Further, standard contract templates, including change management terms and conditions should be developed and integrated into the City's contract award process. As appropriate, contracts should include unambiguous terms and conditions regarding use of change orders versus force accounts/contingency amounts. This will improve communication and understanding in managing scope and budget.
- **CLM Stage 6: Contract Close out**
 - **Project Turnover (CL1.1):** The City should consider implementing a formal process flow outlining operational turnover which could detail departmental accountabilities for scope sign-off and turnover checkpoints, inspections, and document retentions. This would ensure appropriate and timely knowledge transfer to operational program managers.
 - **Lessons Learned (CL1.2):** The City should consider requiring a formal lessons-learned document to be completed for significant projects/portfolios and maintained within the City's Sharepoint site. The completion of this document should form part of a broader close out process. Significant lessons learned (positive and

negative) should be shared, as appropriate, with other departments/groups to ensure continuous improvement and effective knowledge sharing to avoid potential duplication efforts in the future.

- **Warranty Work (CL1.3):** The City should consider developing and implementing a formal process and checklist for warranty inspections to ensure any rework issues with completed work is completed by the accountable contractor. Functional confirmation of process completion could form part of final contract archive.

In general, the City is working to mature its CLM practices, starting with a new procurement policy and continuing the process of determining ERP requirements for future implementation. There have been a number of system requirements identified that will assist the City in meeting information processing objectives over the longer term. Our observations are based on our assessment of the current state, not on the City's future CLM plans. Our recommendations highlight improvement opportunities to align the City with leading practices, as well as current departmental good practices that can be shared across the City. Detailed leading practice considerations are included in Appendix 3.

4. *CLM Road Map*

Improvement opportunity recommendations are included within a prioritization matrix (Appendix 4). These recommendations are based on our observations and leading practice considerations detailed in Appendix 3. As seen in the prioritization matrix, recommendations are categorized as high, medium and low priority. The CLM roadmap will assist in understanding how these prioritization levels relate to implementation timeframes and aid the City in planning next steps.

Utilizing the CLM road map, the City can integrate internal and external resource priorities and implementation timelines into their annual planning practices. As standardized processes are implemented, the City can coordinate awareness and training campaigns to increase process adoption throughout all departments.

As part of the road map implementation, the City should consider:

- **Awareness, education and implementation campaigns** across all divisions of the City to facilitate Project and Program Managers' understanding of mandatory control activities (activities to address completeness, accuracy, validity and restricted access) required across the entire project/contract lifecycle.
- **Metrics to measure adoption** of the PMF to continuously improve consistency in planning, budgeting, scheduling, risk management, and reporting. Feedback should be obtained from Administrative Leadership to measure transparency and effectiveness of information produced by all City divisions that is used to support decision making, as well as Council governance and oversight.

Roadmap: Key activities by CLM observation (please refer to Appendix 3 for more details on each improvement opportunity)

Timeline

0-6 months

6-12 months

12-18 months

18-24 months

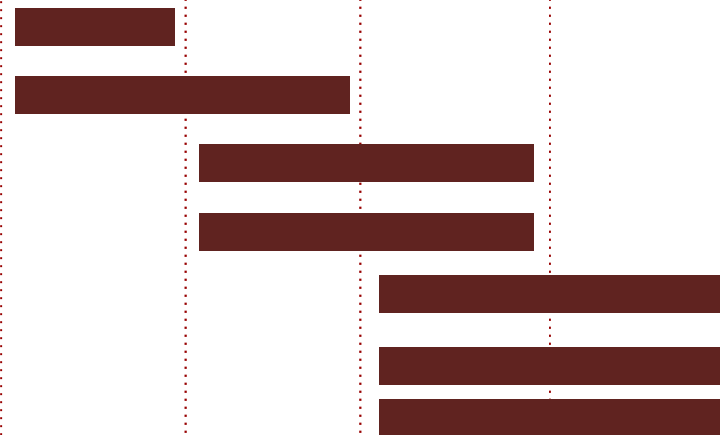
High Priority based on Impact Rating and Level of Effort

- **C1** - Formal documentation of procedures and templates to support change management activities.
- **R1** - Create a matrix to define tiered reporting requirements at project and portfolio levels, including responsibility and accountability for review and approval.



Medium Priority based on Impact Rating and Level of Effort

- **B1** – Enhance budget and cost monitoring to include a formal monitoring template with additional information attributes.
- **S1** - Implementation of overall project schedule template.
- **P1** - Review its current Risk Management policy and determine how it can be implemented in practice at the divisional and functional level.
- **V1** - Utilize KPIs in project contracts
- **T1** - Conduct activities to improve awareness and adoption of document controls and central repository through interim use of existing solutions.
- **T2** - Implementation of automated workflow processes
- **V2** - Implementation of tracking vendor performance data in ISN.



Low Priority based on Impact Rating and Level of Effort

- **CL1** – Enhance policy and practices for transferring responsibility of asset maintenance from for capital project teams to annual operating programs as part of the close-out process
- **PC1** - Implement a centralized P-Card approval system



Appendix 1: Background, Scope, Objectives & Approach

Background

CLM includes proactive and methodical management of a contract starting with the identification of a need, to contract initiation, through to contract renewals. As organizations identify risk and implement CLM frameworks earlier in the contract lifecycle, their ability to realize maximum value from third-party relationships increases. Effective contract management is underpinned by robust governance and effective decision-making to enhance value.

Not having a consistently applied CLM framework across an organization increases the risk of not achieving planned contract value. Sub-optimal contract management may lead to increased administrative costs, financial and operational inefficiencies, unsatisfied contractual obligations, safety concerns and potential reputational damage.

The diagram on the following page (Diagram 2) represents a typical CLM framework with associated phases and demonstrates risk mitigation impact associated with activities at each CLM stage. Early identification of high risk areas within a CLM framework increases management's ability to proactively achieve sustained value from third-party contracts. Achieving optimal contract value across an entire portfolio is an ongoing challenge for many organizations, specifically when contracts are complex, ambiguous and lack transparency. Early adoption and implementation of a comprehensive CLM framework and associated processes can mitigate contract risk and increase delivered value.

Scope

The scope of this project included an assessment of the City's current CLM (Operational and Capital) post-contract award processes to determine existing good practices within the City. We have also assessed whether control activities in each CLM post-contract award phase are designed to address relevant information processing objectives (i.e. Completeness, Accuracy, Validity and Restricted Access). Improvement opportunities for short and long term process efficiencies and technology enablement were also identified.

We selected two capital contracts and one operational contract for detailed assessments to gain a deeper understanding of the different documents implemented to manage the contract/project post-award. In addition, several p-card spend categories were selected to understand current policies and processes in place. P-cards are credit cards provided by the City to authorized officers and employees for use as a payment method to purchase directly from suppliers where permitted under the Purchasing Policy and in accordance with any cardholder agreement and applicable procedures.

The following processes have been included in our review:

- Contract administration and management during contract execution;
- Delivery and/or receipt of goods and/or services;
- Contract amendments or changes;

- Invoicing and payment; and
- Contract close-out and renewals (i.e. issuance of construction completion certificate).

We acknowledge the City is currently pursuing a new Enterprise Resource Planning (ERP) system to decrease the risk of manual errors and control risks and to increase data driven reporting capabilities and automated process efficiencies. Further, we acknowledge the City is currently seeking to approve and implement a revised and updated procurement policy. Both of these current activities were considered when developing the recommendations within this report.

Objectives & Approach

Phase 1 - CLM Framework: Current State Review

Objectives: Gain an understanding of the City's current policies and inherent CLM processes for executing, managing, monitoring and closing its contracts.

Approach: We conducted an analysis to increase our knowledge of current governance, systems, processes, and controls in place to manage the City's contracts.

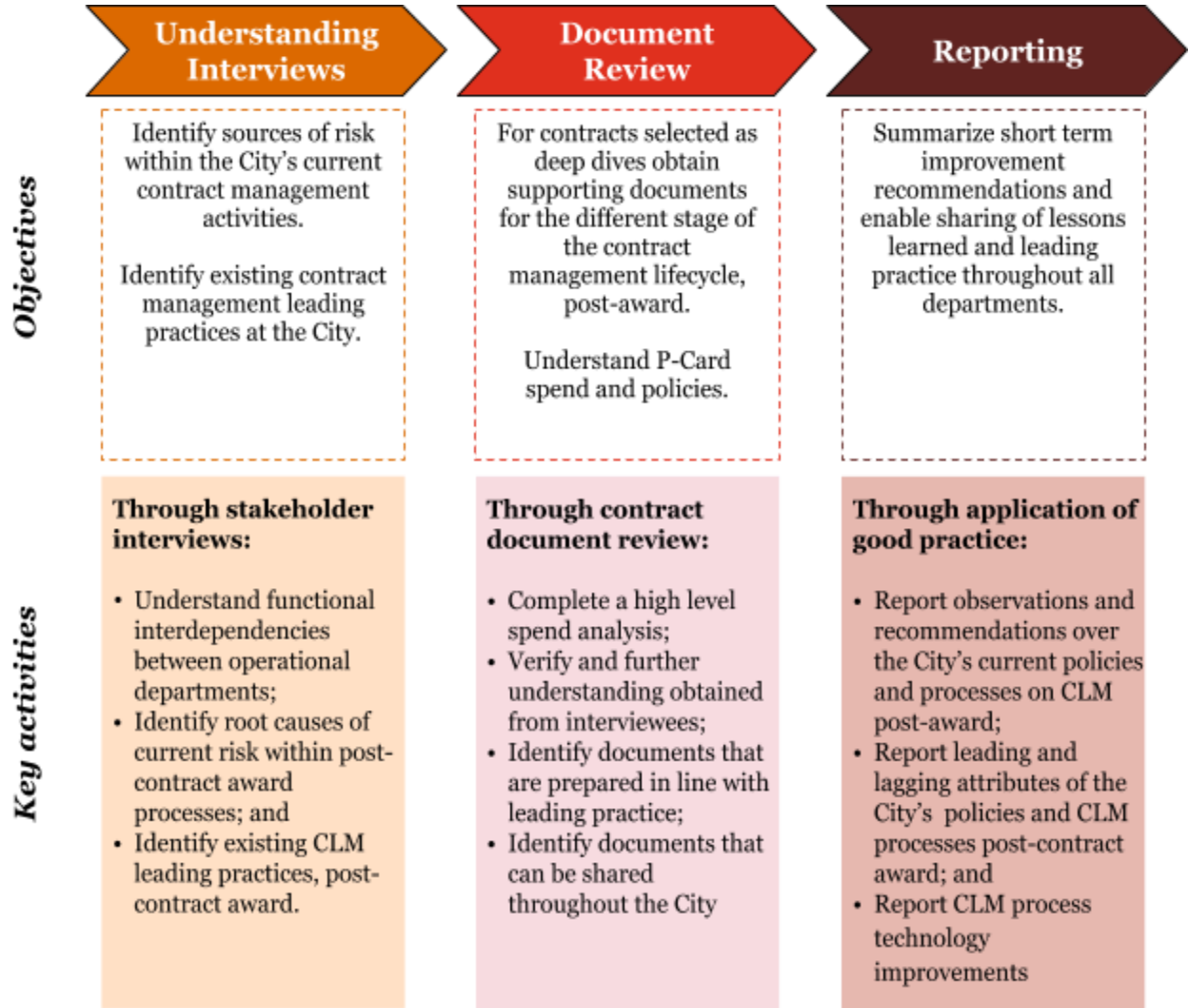
Phase 2 - CLM Framework: Road Map to Maximize Improvement Opportunities

Objectives: Provide a road map indicating requirements and subsequent activities for the City to achieve desired future state CLM framework for post-contract award processes.

Approach: Once key stakeholders validated draft recommendations, we identified key themes and developed a road map of prioritized recommendations. Recommendation ownership, resource allocation, and competing priorities across the organization were considered by collecting feedback among key stakeholders involved in drafting recommendations, enabling alignment on themes and prioritization.

Diagram 2: PwC CLM Current State Understanding Approach

The following diagram provides details of the three main steps we took in our approach, including key activities:



Appendix 2: Interview List

Name	Division	Title
Marc LePage	TU - Saskatoon Light & Power	Buyer
Brock Storey	TU - Construction & Design	Project Engineer
Daniel Mireault	CP - Environment & Corporate Initiatives	Environmental Coordinator
Amber Weckworth	CP - Environment & Corporate Initiatives	Manager, Education and Environmental Performance
Kyrstyna Kotowski	TU - Saskatoon Water	Senior Project Manager Engineer
Lucas Storey	TU - Saskatoon Water	Project Engineer
Dustin Truscott	CP - Human Resources	Manager, Client Services
Kim Matheson	CP - Strategic & Business Planning	Director
Chris Richards	CP - Environment & Corporate Initiatives	Manager, Energy and Sustainability Engineering
Chris Duriez	TU - Major Projects & Preservation	Project Engineer
Cindy Yelland	Solicitors	Lawyer
Celene Anger	TU - Construction & Design	Director
Matt Jurkiewicz	TU - Construction & Design	Engineering Manager (Technical Services)
Jeana South	TU - Major Projects & Preservation	Acting Director
Dean Bucholz	AF - Facilities & Fleet Services	Facility Planner
Gordon Stushnoff	TU - Saskatoon Light and Power	Lighting & Drafting Superintendent
Troy LaFreniere	AF - Facilities & Fleet Services	Director
Clae Hack	AF - Finance	Director

Name	Division	Title
Riwaj Adhikari	TU - Construction & Design	Operations Engineer
Colleen Schultenkamper	AF - Finance	Accounts Payable Coordinator
Daryl Schmidt	TU - Construction & Design	Land Development Manager
Shelley Korte	TU - Business Administration	Director
Katelyn Bonokoski	TU - Major Projects & Preservation	Infrastructure Engineer
Stephen Wood	TU - Major Projects & Preservation	Asset Preservation Manager for Water & Sewer
Mitchell Parker	TU - Major Projects & Preservation	Asset Preservation Manager for Roadways & Sidewalks
Dan Willems	Corporate Performance	A/General Manager
Paul Ottmann	Information Technology	Director of Information Technology
Kevin Shewchuk	Corporate Performance	Information Technology
Jazz Pabla	Information Technology	Technology Infrastructure Manager

Appendix 3: Detailed Observations and Leading Practice Recommendations

Current State Observation: Although some project managers and process owners are aware of the City’s formal document templates and draft PMF guidelines, we identified non-standardized practices over scheduling, budgeting, vendor management and reporting at the functional project level. Project managers in different divisions use varying tools to create their schedules, functionally manage budgets and forecasts outside of Timberline, and track and report on project/contract status.

Potential Causes: While many strong project management activities occur, when a standard PMF is not in place, projects and contracts may be inconsistently set up and operated by different departments. Several individuals identified a need for the City to refine and customize the current templates/documents down to the functional level and support adoption of a formal PMF.

Potential Impacts: Inconsistent processes create potential for misalignment between how budgeted/forecasted project costs, schedules, change, risks and reporting activities are managed throughout a contract’s lifecycle. The use of inconsistent tools can result in varying reporting capabilities and potential version and access control issues. This may lead to reactive versus proactive use of capital funding and limited transparency on the different projects/contracts being administered by the City.

Categorized Observations and Recommendations

This appendix includes categorized recommendations as summarised below by impact rating (refer to Appendix 5 for the impact rating guidance).

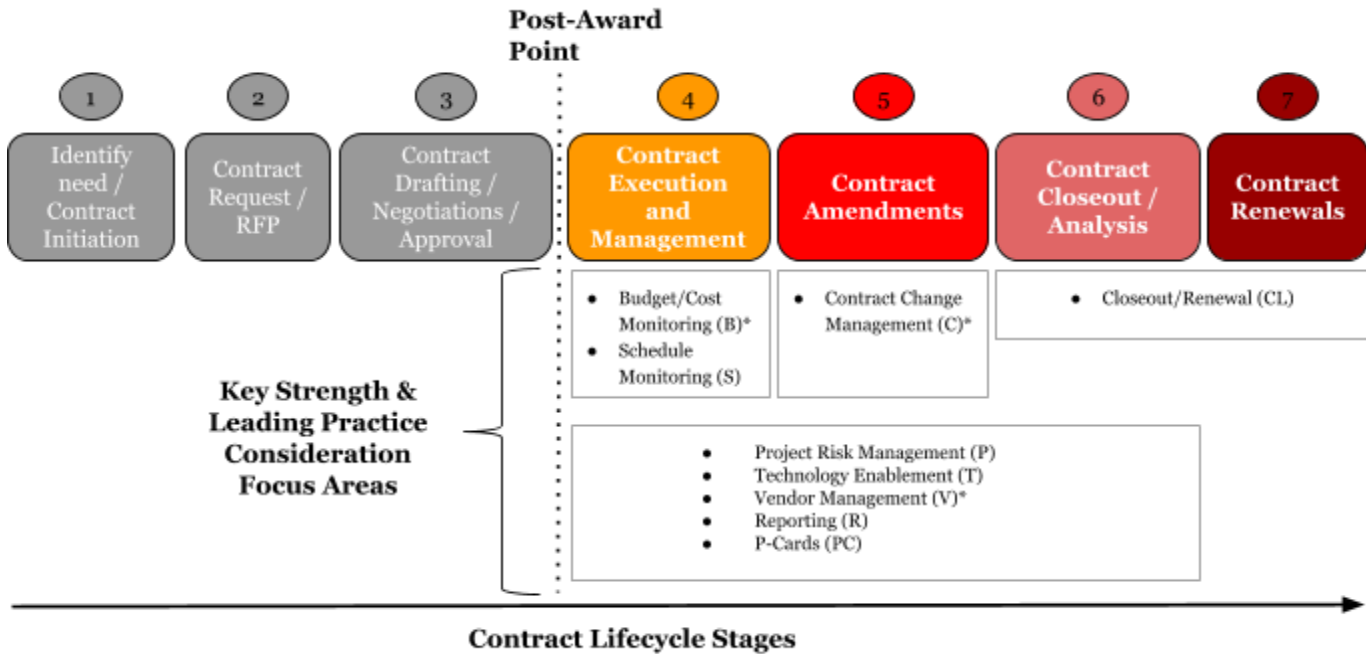
CLM Categories	Recommendation Impact per Risk Rating				
	Critical	High	Medium	Low	Other
Stage 4: Contract Execution and Management	-	1	6	1	-
Stage 5: Contract Amendments	-	1	-	-	-
Stage 6: Contract Closeout/Analysis	-	-	1	1	-
Stage 7: Contract Renewals	-	-	-	-	-

The following diagram details our observations and recommendations for categorical observations identified through our interviews and detailed contract assessments. Within each observations we

identified current risk and provided an impact rating. For each recommendation detailed below consideration should be given to including the policy, template or process within a formal PMF.

Diagram 1: CLM Framework

Diagram 1 is reproduced below (from Section 1) to indicate different categories included in post contract award activities. The recommendations and considerations detailed within this Appendix are plotted on the CLM framework below:



*Recommendations where the City should consider integrating post-award contract activities performed by functional project teams with the City’s procurement department processes.

Budget and Cost Observations (B1*)

Advisory Objective: Understand how the capital/operational project teams monitor and manage their budgets.

Key Strength: Departments create asset management plans, complete with costs and business case statements. These are submitted to Corporate Finance and approved by Council in the budget. Each capital project is assigned a unique project ID in the City's General Ledger (GL) system. Timberline, a SAGE 300 product, is used to report and monitor capital budgets, including contracts, on many projects. Often Project Manager analyze variances to budget and completing updated project forecasts for further analysis by Corporate Finance.

Operating program budgets are also approved by Council on an annual basis. Reports detailing variance to budget are generated by Corporate Finance from the GL system, and Program Managers are responsible for explaining variances and managing related contract budgets. Annual forecasts are completed on a monthly basis for further analysis by Corporate Finance.

Current State Improvement Opportunities and Risks:
B1 - The City understands the importance of budget and cost management with a variety of templates being used by project managers to ensure each area of their project budget is updated and reported frequently; however, this is inconsistently done.

Risk- Some budgets may not be comprehensively reviewed, updated, or reported on by the project manager. This may result in confidence in the completeness, accuracy and validity of contract monitoring and forecasting erodes and funding may not be effectively applied.

Current State Improvement Opportunities

B1 – Enhance budget and cost monitoring to include a formal monitoring template with additional information attributes.

0-6 months

6-12 months

12-18 months

18-24 months

Opportunity

Leading Practice Considerations

B1*

Leading Practice: Per leading practice, budgets and forecasts should be comprehensively monitored in both a quantitative and qualitative manner at the project level for each project scope area. Typically each scope area aligns with a formal Work Breakdown Structure.

Key Consideration: The City should consider enhancing their budget and cost monitoring process to include a formal monitoring template with key information attributes across all areas responsible for project management, potentially in Microsoft Excel with Office 365 sharing capabilities. The City intends for these attributes to form part of the future ERP Finance module. This would allow all project managers and budget owners to consistently monitor the status of project budgets, approved and pending budget changes, current commitments, actual costs, budget variances and forecasts at a functional level for each project scope area.

Impact	Risks	Duration	Target Completion
2 - Medium	Completeness, accuracy, validity	0 - 6 months	April 2019

*Recommendations where the City should consider integrating post-award contract activities performed by functional project teams with the City's procurement department.

Schedule Observation (S1)

Advisory Objective: Understand how the capital/operational project teams create, update and monitor the schedules for their different contracts/projects.

Key Strength: The City ensures a schedule or milestones are included in contracts and monitored on projects. Project Managers and those involved in executing projects understand scheduling importance and its impact on contract budget and project success.

Current State Improvement Opportunities:

The City has a variety of methods for schedule creation, updates, monitoring, integration with contractors and turn over to operations. While inconsistent practices exist amongst divisions, Project Managers and those involved in executing projects understand scheduling importance and its impact on contract budget and project success.

We did not identify an overall project schedule template that had a clear baseline or comprehensive critical path, and there was unclear alignment to cash flow/budget estimates. A critical path defines the critical and non critical tasks of a project detailing the order in which they must be completed (i.e. task a must be completed before task b can be started). The initial PMF guidelines indicates a starting point for schedule requirements which includes a baseline.

Current State Risk: Schedules without a clear baseline or critical path are at greater risk of experiencing bottlenecks and project delays. These delays could result in project funds being used inefficiently, and the contingency or additional funding being used.

Current State Improvement Opportunities

S1 - Consider implementation of an overall project schedule template

0-6 months	6-12 months	12-18 months	18-24 months

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Opportunity

S1

Leading Practice Considerations

Leading Practice: Includes a schedule with attributes that should include baseline, critical path, interrelationship of key events, and significant contract milestones (such as interim financing alignment, integration with contractors schedules and turnover to other divisions). These key attributes would form contractor competency requirements evaluated during the tender process and could be considered as a key performance indicator (KPI).

Key Consideration: The City should consider the creation of a standard scheduling template that could outline minimum requirements to those creating and monitoring contract and project schedules. This will create consistency and transparency between contracts/projects, enabling the City, and associated vendors, to increase clarity of status reports and identify schedule delays earlier.



Impact

2 - Medium

Risks

Completeness, accuracy

Duration

6 - 12 months

Target Completion

October 2019

Change Observation (C1*)

Advisory Objective: Understand how the capital/operational project teams conduct contract change management activities. Understand if a formal change management policy and templates are used.

Key Strength: Many projects utilise the change order process and templates outlined in the City's PMF document to manage and control contract changes.

Current State Improvement Opportunities: Different divisions within the City have varying definitions and understanding of contractual change order and force account (payment method used for extra work required by the contractor/vendor rather than the creation of a formal change order) requirements. We did not identify a standardized contract change management process among divisions of the City. The PMF guidelines include an initial change management policy, however it is not being formally implemented across the City. This policy details the process including the identification of change and the different types of change (study order, change order and change directive). It also includes a change management procedure flow chart. Currently senior individuals may be required to approve all change order requests (paper based) regardless of size, nature and impact which can lead to capacity inefficiencies.

Current State Risk: Without a standardized change management process it is difficult to monitor and manage contract budget, progress/schedule, claims, disputes, reporting, and coordination with other groups, including third parties. This could result in incomplete or inaccurate information for decision making. It may also be difficult to assess the validity of the information being used to support approvals.

Current State Improvement Opportunities

C1 - Consider formal documentation of procedures and templates to support change management activities.

0-6 months	6-12 months	12-18 months	18-24 months

Opportunity

Leading Practice Considerations

C1*

Leading Practice: Includes detailed formal Change Management sign off controls and signing authority levels that are tied to the City's formal Delegation of Authority (DOA) and aligned to typical project circumstances to enable Project Managers to approve low value/risk change orders.

Key Consideration: The City should consider the implementation of procedures and documentation requirements around change management, including the difference between a change order and a force account/contingency amounts, being formally documented with policy and process flows. Further, standard contract templates, including change management terms and conditions should be developed and integrated into the City's contract award process. As appropriate, contracts should include unambiguous terms and conditions regarding use of change orders versus force accounts/contingency amounts.

Impact	Risks	Duration	Target Completion
3 - High	Completeness, accuracy, validity	6 - 12 months	October 2019

*Recommendations where the City should consider integrating post-award contract activities performed by functional project teams with the City's procurement department.

Project Risk Observation (P1)

Advisory Objective: Understand how the capital/operational project teams identify, identify, monitor and mitigate project risks.

Key Strength: The City has a Corporate Governance Risk Based Management Policy and many projects have a formal risk log being maintained to track risks, which are often discussed and managed at routine (weekly/monthly) project meetings.

Current State Improvement Opportunities:

The City has a Corporate Governance Risk Based Management Policy; however, individual divisions and project teams are not always aware of the policy. Amongst the different divisions we found evidence of informal risk identification and ratings, formal risk logs being maintained to track risks, inconsistent but formal monitoring meetings where risks were discussed, and informal risk mitigation.

We observed risk logs which included risk descriptions, scores, and mitigation strategies among other attributes, however we found no evidence of risk logs aligning to contract contingency. The PMF guidelines references a project implementation plan which includes guidance on risk management and a risk register template.

Current State Risk: Without the implementation of a proper risk management practices at the division and functional level, the City may not be optimally aligning contract/budget contingencies to project risk.

Current State Improvement Opportunities

P1 - Review current Risk Management policy and determine how it can be implemented in practice at the divisional and functional level.

0-6 months	6-12 months	12-18 months	18-24 months
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Opportunity

P1

Leading Practice Considerations

Leading Practice: Contract contingency should be aligned to current risks and funds released as risks are passed or expired. A formal risk log template outlining required risk attributes (i.e. descriptions, probability, severity etc.) and contract contingency alignment should be considered and be provided to all Project Managers.

Key Consideration: The City should consider reviewing its current Risk Management policy and determine how it can be implemented at the divisional and functional level. An awareness workshop should be held with Project Managers across divisions to understand how to use this policy to identify and manage project risks in practice.

Impact	Risks	Duration	Target Completion
2 - Medium	Validity	12 - 18 months	April 2020

Reporting/Meetings Observation (R1)

Advisory Objective: Understand what reports are prepared and reviewed throughout the life of a contract (post-award) within the capital and operational groups at the City.

Key Strength: Timberline is often used to report actual cost vs. budget for many project IDs on a monthly basis. The City's PMF document includes a status report template which indicates a dashboard executive overview, description of project status, updated milestone schedule, progress completed, progress planned, and cost summary for the reporting period.

Current State Improvement Opportunities: Divisions of the City utilize a number of different reporting methods in order to monitor and record contract status and project events. Some reporting methods include: minutes of progress meetings, capital budget reports, federal government required reports or City Council reports. Most projects have recorded update meetings to discuss contract and project progress.

We did not find evidence of a regular, timely, and consistent method of reporting being performed throughout the contract lifecycle at the Divisional level. The PMF guidelines includes a status report template which indicates a dashboard executive overview, description of project status, updated milestone schedule, progress completed, progress planned, and cost summary for the reporting period, however this process is not being consistently implemented.

Current State Risk: Without a policy that requires regular, timely and consistent contract reports (and a standardized template to cover status, schedule, budget, current risks, quality, safety etc) contracts, projects, and portfolios may not be optimally managed, may not be recorded properly in event of disputes, and executive intervention activities may not be enabled on a timely basis.

Current State Improvement Opportunities

R1 - Consider the creation of a tiered reporting matrix at project and portfolio levels, including responsibility and accountability for review and approval.

0-6 months	6-12 months	12-18 months	18-24 months
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Opportunity

R1

Leading Practice Considerations

Leading Practice: Involves the inclusion of a matrix which would specify the daily, weekly, monthly, annual and close out reporting requirements and associated templates for informed decision making and project risk management.

Key Consideration: The City should consider creating a matrix to define tiered reporting requirements including responsibility and accountability for review and approval. The requirements would be defined across all contracts/projects/portfolios of various risk profiles throughout all departments. Reporting templates could define project attributes such as schedule progress, risk, safety, operational milestones etc to include, in addition to current Timberline report attributes.

Impact	Risks	Duration	Target Completion
3 - High	Completeness, accuracy, validity	6-12 months	October 2019

Close Out Observation (CL1)

Advisory Objective: Understand functional project team activities executed to close out a contract/project.

Key Strength: The divisional accountant assigned to each project prepares a close out package that is approved by the project engineer and operating director, then submitted to accounts payable to release project holdback.

Current State Improvement Opportunities:

As part of project close out, we observed:

- A formal process to involve Operations and transition a project to them upon contract completion did not exist. Multiple close out checklists do exist and provide guidance for project teams, however Operational involvement is informal and inconsistent.
- Although some projects captured lessons learned, we did not identify a formal lessons-learned process to consistently enable internal/external lessons-learned meetings that capture improvement opportunities from all relevant parties.
- Inspection work being done by the City may not be formally monitored and may not be conducted effectively. A formal process is required to ensure inspections prior to warranty expiration is being completed by a qualified individual.

The PMF guidelines includes considerations for project close out requirements and a close out report template.

Current State Risks- Without formalizing these processes to provide complete and accurate information, the City risks scope creep, lost improvement opportunities and increased costs due to required rework not captured prior to warranty expiration.

Current State Improvement Opportunities

CL1 - Enhance policy and practices for transferring responsibility for capital projects to annual operating programs as part of the close-out process

0-6 months	6-12 months	12-18 months	18-24 months
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Opportunity

Leading Practice Considerations

CL1

Leading Practice: A formalized project close out policy as part of the PMF that includes a number of practices, as detailed below:

Key Consideration: The City should consider implementing the following:

CL1.1: A formal process flow outlining operational turnover could detail departmental accountabilities for scope sign-off and turnover checkpoints, inspections, document retentions etc. For complex contracts/projects, informational meetings should occur prior to asset transition to ensure operations is prepared and fully informed.

CL1.2: A lessons-learned document should be completed for significant projects/portfolios and maintained within the City's sharepoint site, and its completion should form part of a broader close out process. Significant lessons learned (positive and negative) should be shared, as appropriate, with other departments/groups.

CL1.3: The City should consider developing and implementing a formal process and checklist for warranty inspections to ensure any rework issues with completed work is completed by the accountable contractor. Functional confirmation of process completion could form part of final contract archive.

Impact	Risks	Duration	Target Completion
1 - Low	Completeness, accuracy	18 - 24 months	October 2020

Technology Observation (T1, T2)

Advisory Objective: Understand the opportunities that exist for implementing technology into the contract lifecycle (post award) for operational and capital project teams.

Key Strength: The City's new ERP system will provide opportunities for improved reporting in the Finance module.

Current State Improvement Opportunities and Risks:

T1 - For the contracts selected for a deep dive, we noted that each division has their own method for tracking and storing executed contracts. Many contracts and tender documents are only stored in hard copy; occasionally, some electronic files are being deleted.

Risk - A central repository to track executed contracts does not exist. This can lead to less informed decisions by project teams, who are unable to utilize the information gathered in previous, similar projects due to documents being difficult to locate. The current system also leads to an inefficient review process, given that files are manually provided/mailed to supervisors for review as opposed to the document being available for review through a workflow system. The City could consider interim use of existing solutions such as Office 365 and Sharepoint for improved collaboration.

T2 - The City obtains various approvals (i.e. change, design) throughout the contract lifecycle. We understand this is a paper based process with limited implementation of automated workflows

Risk - The result of the lack of automation is that the individuals required to manually approve all changes are unable to spend time or focus on value-add activities. Due to the time involved in executing manual processes, the risk of workarounds increases and may impact the effectiveness of controls over the information used to support the approval decision.

Current State Improvement Opportunities

T1 - Consider conducting activities to improve awareness and adoption of document controls and use of central repository

T2 - Consider the use of automated workflow processes

0-6 months	6-12 months	12-18 months	18-24 months

Opportunity

Leading Practice Considerations

T1

Leading Practice: Implementation of awareness training over mandatory document and record management criteria will allow all contracts and associated documents to be easily located in the event of disputes, audits, litigation, lessons learned, best practice identification.

Key Consideration: Requirements have been set for the new ERP system that include: system integrates with Document Management and Collaboration system, system integrates with Records Management system, system has document management capabilities for version control purposes and system has Records Management capabilities. However, it may take significant time for a single system to be selected and implemented. In the short-term the City should consider ways to use Sharepoint or Office 365 to improve sharing of information.

T2

Key Consideration: To enhance the efficiency of document approval we recommend that the City consider automating workflows enabling reviewers to receive and approve documents electronically. The delegation of authority levels can be built into the workflow to ensure that the correct individuals are reviewing and approving. However, the City should consider adding a requirement or a specification that this should include an automated workflow capability and consider the short term benefits of using another system until the ERP is fully integrated.



Impact

2 - Medium

Risks

Completeness, accuracy, restricted access

Duration

18 - 24 months

Target Completion

October 2020

Vendor Management and KPIs Observations (V1*, V2*)

Advisory Objective: Understand application of KPIs and how project teams monitor, track and share vendor performance.

Key Strengths: The City is in the process of integrating ISNetWorld and inserting their vendor safety data into this database.

Current State Improvement Opportunities and Risks:

V1 - Many City resources understand how KPIs can enhance the ability of both parties to monitor contracts. However it was indicated that KPIs are not utilized to monitor vendor performance nor as part of feedback provided to contractors.

Risk - When not defined in a contract, KPIs cannot be utilized in projects to monitor and provide vendor feedback or be used as incentives/penalties if contract requirements are met/not met.


V2 - Once vendor safety data is integrated into ISN, the City is considering inserting data around other vendor performance data including quality, cost management and schedule. Once vendor performance data is included, ISN could increase the City's ability to prequalify, assess and manage vendors based on prior and currently demonstrated competency, and not rely primarily on price when awarding contracts.

Risk - At times, the City decides to no longer work with a vendor due to quality and/or safety concerns. Not managing vendors/contractors formally can lead to miscommunication between divisions. We acknowledge the revised procurement policy includes a supplier performance evaluation protocol which will support data collection that could be tracked in ISN.

Current State Improvement Opportunities

	0-6 months	6-12 months	12-18 months	18-24 months
V1 - Consider the use of KPIs in project contracts				
V2 - Consider tracking vendor performance data in ISN				

Opportunity	Leading Practice Considerations
V1	<p>Leading Practice: Once the contract is executed the Project Manager/other project team member should monitor and report on the KPIs in order to manage the vendor/contractor and work towards continuous improvement, informed decision making and ultimately improved contractor performance.</p> <p>Key Consideration: The PMF guidelines specifies that KPIs should be included within the project charter. We recommend The City consider conducting a review to determine where KPIs/Service Level Agreements (SLAs) are appropriate. For the areas they are, the City should consider determining KPI focus areas, tolerance levels for each, insert into contract templates as appropriate and conduct awareness sessions to accelerate implementation during contract execution.</p>
V2	<p>Leading Practice: A process that ensures formal vendor performance tracking and corrective action thresholds for vendors that do not perform or complete work to the expected service or quality levels.</p> <p>Key Consideration: The City should consider enhancing their revised procurement policy and supplier performance evaluation protocol to include processes to track vendor performance data in ISNetWorld.</p>

 Impact	Risks	Duration	Target Completion
2 - Medium	Accuracy (V1) Restricted access (V2)	12-18 (V1), 18-24 (V2) months	October 2020

*Recommendations where the City should consider integrating post-award contract activities performed by functional project teams with the City's procurement department 26

P-Card Spend Observation (PC1*)

Advisory Objective: Understand how P-Cards are used at the City and identify any areas of process improvements.

Key Strengths: The City implements a P-Card policy manual including a number of differential indicators that provide business unit guidance on effective P-Cards utilization. This includes an implemented P-Card spending limit.

Current State Improvement Opportunities:

PC1 - P-Cards are used as both a procurement option and/or as a payment method for an existing procurement transaction. Various divisions maintain different pre-approval processes ranging from an internal system that logged approval to email approval confirmations from project/team sources. A concern with current process is procurement divisions and project teams want to prevent delays due to a lag in approver sign off.

Current State Risk:

Without a centralized system to maintain p-card approvals the ability to consistently plan, approve and monitor p-card transactions is decreased. We acknowledge the City intends to include centralised p-card transaction approval capability within their future ERP system.

Current State Improvement Opportunities

0-6 months	6-12 months	12-18 months	18-24 months

PC1 - Consider implementation of a centralized P-Card approval system

Opportunity	Leading Practice Considerations
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PC1

Leading Practice: Understand which vendors have large quantity P-Card transactions and implement blanket purchase orders to reduce approval times and ensure volume discounts are realized.

Key Consideration: City divisions should consider utilizing a centralized system which indicates all required approvals, pre and post P-card transaction, and the status of those approvals for both instances (procurement option and payment method) that P-Cards are used. This requirement could be integrated within their future ERP system. Further, the City should continue to identify vendors with large quantity P-Card transactions and arrange blanket purchase orders as required.

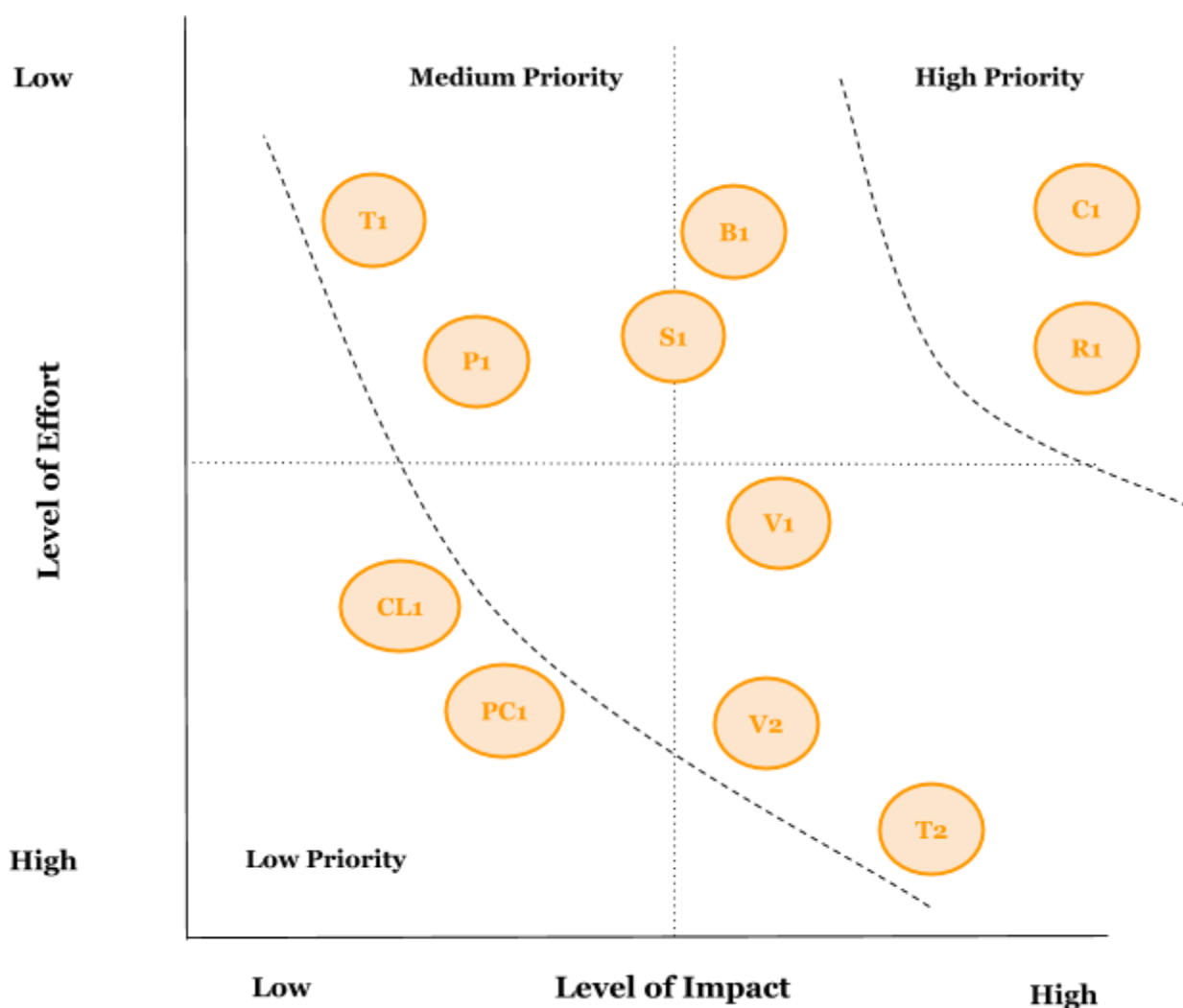
Impact	Risks	Duration	Target Completion
 1 - Low	Validity	12-18 months	April 2020

*Recommendations where the City should consider integrating post-award contract activities performed by functional project teams with the City's procurement department.

Appendix 4: Prioritisation Matrix



Prioritization of Recommendations

The chart below is intended to assist the City in prioritizing recommendations, and should be read in conjunction with Appendix 3. This chart was developed based on an assessment of the level of effort required to implement the identified improvement opportunities, as well as the potential impact to the City of not addressing the identified gaps against leading practice.



Appendix 5: Impact Rating Guidance

The following impact rating is based on the PwC Internal Audit Methodology. The impact rating is based on a scale from one to four, or low to critical. The impact rating has been provided as part of the observations in order to assist the City's awareness of the need to take action. The rating further measures the prioritization of the recommendation.

Observation rating	Assessment rationale
Critical (4) 	An observation for which the exposure arising could have a: <ul style="list-style-type: none">• Critical impact on operational performance [<i>e.g. resulting in inability to continue core activities for more than two days</i>]; or• Critical monetary or financial statement impact; or• Critical breach in laws and regulations that could result in material fines or consequences; or• Critical impact on the reputation or brand of the organization which could threaten its future viability [<i>e.g. high-profile political and media scrutiny i.e. front-page headlines in national press</i>].
High (3) 	An observation for which the exposure arising could have a: <ul style="list-style-type: none">• Significant impact on operational performance [<i>e.g. resulting in significant disruption to core activities</i>]; or• Significant monetary or financial statement impact; or• Significant breach in laws and regulations resulting in significant fines and consequences; or• Significant impact on the reputation or brand of the organization [<i>e.g. resulting in unfavourable national media coverage</i>].

Medium (2)

An observation for which the exposure arising could have a:

- Moderate impact on operational performance [*e.g. resulting in moderate disruption of core activities or significant disruption of discrete non-core activities*]; or
- Moderate monetary or financial statement impact; or
- Moderate breach in laws and regulations resulting in fines and consequences; or
- Moderate impact on the reputation or brand of the organization [*e.g. resulting in limited unfavourable media coverage*].

Low (1)

An observation for which the exposure arising could have a:

- Minor impact on operational performance [*e.g. resulting in moderate disruption of discrete non-core activities*]; or
 - Minor monetary or financial statement impact; or
 - Minor breach in laws and regulations with limited consequences; or
 - Minor impact on the reputation of the organization [*e.g. resulting in limited unfavourable media coverage restricted to the local press*].
-

Appendix 6: Glossary

To increase alignment and understanding this section expands on terms used throughout the report.

Change Management

A deep understanding of effective change management and a robust change control process is essential to:

- Manage identified opportunities for improvement;
- Ensure only value-adding changes are accepted;
- Correct omissions and errors;
- Ensure core-scope commitments are not included in changes; and
- Provide assurance and control for contract/project changes.

Project Risk Management

A comprehensive project risk assessment considers each dimension of contract risk. Effective project risk management ensures:

- Timely identification of risks and appropriate consideration of compliance, performance, delivery and finance risks;
- Consistent and robust assessment of the risks;
- Development of actions to mitigate significant risks;
- Monitoring of progress against mitigation action plans to ensure they are effective; and
- Identification and escalation of issues which affect delivery of services or increase City's exposure.

Vendor Management

Vendor management is key to holding contractors and suppliers accountable for delivery of contracted services. This requires the following:

- Clearly defined and agreed contract performance criteria, including key performance indicators and service level agreements;
- Processes to support identification of trends, thresholds to implement both early preventative action and essential corrective action; and
- Document of vendor performance.

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