



Project Portfolio Management Solution Phase 2: Requirements Analysis

Version 2.0

FINAL

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With input from PPMS Core Project Team

Project Portfolio Management Project

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Corporate Support Services Department

Winnipeg, MB. R3B 1B9

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Document Quality Information

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Document Approval

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Approver	Project Role	Signature	Approval Date:
Ron Amman	Business Owner		February 9, 2016
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Document Reference Table

The following table lists the supporting documents and artifacts that are referenced in this document.

#	PPMS RFQ Attachment	Document Name	Document Location	PPMS Requirements Analysis Page #
1	2	Asset Management – Management System and Investment Planning Framework	-	Page 10
2	3	Investment Planning and Business Case Development Guidance	-	Page 16
3	4	F1-001: Asset Management Policy	-	Pages 20,28,101
4	5	FM-004: Asset Management Administrative Standard	-	Pages 20,28,101
5	6	F1-003: Materials Management Policy	-	Pages 20,28,72
6	7	Investment Planning Manual	-	Pages 16,20,58,59, 61, 64,101
7	8	Asset Management Plan Framework & Guideline	-	Pages 20,35,57,101
8	9	PMM: Project Management Manual	-	Pages 20,28,42,47-48, 50-53,72-74,81,101
9	10	Project Delivery Framework	-	Page 24
10	11	Capital Projects Detail	-	Pages 36,39
11	12	Basis of Estimate (BoE)	-	Page 36
12	13	Changes from Capital Forecast	-	Page 39
13	14	Changes from Capital Forecast – Narrative	-	Page 40
14	15	Long Term Capital Projections	-	Page 40
15	16	2015 Adopted Budget Operating and Capital - Volume 2	-	Page 59

#	PPMS RFQ Attachment	Document Name	Document Location	PPMS Requirements Analysis Page #
16	17	2016 Budget: Community Trends and Performance Report - Volume 1	-	Page 60
17	18	NPV and Benefit calculation Template	-	Page 62
18	19	Business Case Evaluation Template	-	Page 63
19	-	Project Management Templates Site	http://winnipeg.ca/finance/infrastructureplanning/camp.stm ;	Page 102
20	20	AS-006 Corporate Recordkeeping	-	Page 89
21	21	Multiple Criteria Prioritization Template	-	Pages 16,37,59,63
22	-	City Asset Management Program	http://winnipeg.ca/finance/infrastructureplanning/camp.stm ;	Page 19
23	22	Budget Process (Ref: 2014FY)	-	Page 37
24	-	Consultant Information Page	http://www.winnipeg.ca/matmgt/templates/consultants/Consultant_Information_Page.stm	Page 48
25	-	Safety & Health Information	http://www.winnipeg.ca/matmgt/Safety/default.stm	Page 49
26	23	FM-002: Signature Authority for Procurement	-	Page 52
27	24	Service Level Agreement Template	-	Page 58
28	-	W3C Web Content Accessibility Guidelines	http://www.winnipeg.ca/interhom/accessibility/accesswinnipegca.stm	Page 89

1 Executive Summary

The key objectives of Phase 2 of the Project Portfolio Management Solution (PPMS) project are:

- To allow the City to leverage recent investments in formal processes for Investment Planning and Project Management stages of the Asset Management System
- To expand the preliminary requirements assessment from PPMS Phase 1 (summer 2014)
- To update the PPMS Project Business case (to a Class 3 estimate level), and
- To develop a Solution Bid Opportunity supporting an RFQ competition, using the baseline requirements outlined in this **PPMS Requirements Analysis** document.

The in-scope delivery milestones for PPMS Phase 2, which will support these objectives, include:

Project Milestone	Completion/Target Date	Notes:
Initiation Phase	November 9 th , 2015	Project Charter and PDP documents
Stage 1 (PPMS Requirements and Process Analysis):		
Internal (department/SOA) Stakeholder Interviews	December 18 th	21 interviews performed
External (Consultant) Stakeholder Interviews		5 consultant firms interviewed
Municipal Environment Scan (PPMS)		Detailed feedback received from: <ul style="list-style-type: none"> • City of Calgary • City of Ottawa, and • Ontario (Shared Services)
PPMS Requirements - Approved	January 29 th , 2016	
Stage 2 (Business Case Updates and Solution Bid Opportunity):		
PPMS Change Impact Readiness Assessment	February 22 nd	Consolidated findings from both PPMS Project team and departmental/agency surveys
PPMS Solution Opportunity (RFQ) – Competition Open	March 17 th	
PPMS RFQ - Competition Closes	April 7 th	
PPMS RFQ – Evaluation Phase Complete	May 20 th	

Key findings from the Internal Stakeholder interviews in 2015 include:

- *There are gaps in the knowledge/document transfer process between the Investment Planning and Program/Project Delivery cycles*
- *Overall understanding of what a PPMS could offer to the City of Winnipeg project planning and prioritization processes is very limited across departments/agencies, and*
- *Current state gaps seem to suggest that the City is not ready yet for widespread implementation of a PPMS tool. Therefore a Phased approach is recommended.*

The PPMS Project team undertook external consultant interviews, which identified several important findings including:

- *There is a significant lack of consistent City documentation or process standards, as most current interactions with staff are based on 'who knows what' i.e. not a repeatable process*
- *There also appears to be no common vendor evaluation process upon completion of a project. This impacts both the ability to undertake standardised performance assessment of consultants or identify areas for improvement, and*
- *Core project control information, including task status, burn rate and progress estimates could be provided by consultants on a weekly or monthly basis. The level of information requested by City PMs at the present time however varies widely.*

Initial feedback was also received from the following municipalities - City of Ottawa and City of Calgary. Key findings from these discussions on each city's proposed PPMS and implementation approach include:

- *Enterprise PPMS initiatives tend to be run as programs, as they are usually multi-faceted;*
- *Significant OCM support is required, as there is often a need for fundamental cultural change with a City's current workforce*
- *The planned timeline for enterprise PPMS implementation is typically around 3 years duration, and*
- *Some desired changes to the core financial control system (SAP / PeopleSoft) have also been identified by both cities*

PPMS Requirements: Summary of Findings:

The requirements gathering process has identified a few key areas that the PPMS would be required to address, including:

1. Document Management

- i. The Investment Planning Framework produces the documents required to support Investment Requests. The information contained in these documents is required to support the process of obtaining funding, which is then used to execute projects. Managing the documents and storing the investment planning information will assist in improving hand-offs from the Planning to Project Execution stages.
- ii. The Project Delivery Framework produces the required documents to execute projects [charters, schedules, status], as well as the deliverables to support Transfer to Owners and Project Close Out. Managing the documents and storing the project

delivery information will improve the monitoring and control of projects as well as providing repository of all project documents to assist in the PPMS function.

2. Project Financial Tracking and Asset Capitalization

- i. The process of performing Investment Planning, obtaining funding and then setting up project financials in PeopleSoft is creating a gap in the details needed to track project financials and support asset capitalization. Project cost details contained in the Basis of Estimate are not necessarily reflected in PeopleSoft when projects are created. The loss of cost detail results in less detailed project financial tracking and difficulties assigning capitalization amounts.
- ii. The payment process may introduce a time lag with respect to when a project invoice is received and when that invoice appears as an actual cost to the project in PeopleSoft. The lag can be as long as 6-8 weeks. This lag hinders the capability of providing “real time” project actuals from PeopleSoft and results in project managers/contract administrators maintaining their own financial tracking spreadsheets.

3. Project Financial Reporting

- i. Financial reports are created manually and are not system generated currently. The process of providing project financial reports requires manual investigation and retrieval of information from the PeopleSoft general ledger. Project costs are allocated to the various accounts set up to support the project and in order to determine costs for a project a user must search through the various account looking for entries related to their project and recording them in a spreadsheet that serves as the project financial report.

4. Project Tracking and Reporting

- i. There are various approaches and levels of rigour applied to managing projects. There are various levels of standardization across the City of Winnipeg departments and even within departments, resulting in:
 - a) A lack of standard project deliverables being produced.
 - b) A lack of standard project status and performance reporting.
 - c) A lack of standard tools being used to manage the projects.
 - d) A lack of standard project tracking detail.

Planned next steps for PPMS Phase 2, following approval of this **PPMS Requirements Document** would include:

- To update the PPMS Project Business Case so that it aligns with this approved document
- To develop effective PPMS Solution Bid Opportunity documentation for the desired RFQ competition, and
- To conduct a procurement evaluation exercise for external vendors who respond to the PPMS RFQ, so that a short-list of approved PPMS vendors can be established.

2 Project Summary

Currently the ability to develop a portfolio view of projects at the City of Winnipeg requires substantial effort from project managers and financial resources at both the Department and Corporate level.

No IT solution (asset) exists to operationalize and automate the initial investment planning, budgeting and financial system set up of the capital budgeting process.

No IT solution (asset) exists to automate the the subsequent project planning and delivery functions of the PM framework as detailed in the Project Management Manual (PMM).

A Corporate Portfolio-Project Management solution is meant to address the above LOS gap and would provide centralized and automated collection of planning artifacts and user defined metrics such as status, financials, resources and issues at a project and portfolio level. When all key project information across the City of Winnipeg is stored in a single place, there will be efficiencies to be gained in tracking, reporting and communication.

2.1 Project Background

The 2008 Capital Project audit identified the need for a formal project management approach in the City of Winnipeg. In response, the City of Winnipeg has developed a formal Investment Planning Framework and Project Management Framework (including PMM, complete with processes, procedures and templates) which is being implemented into department's asset and project management operations. The City of Winnipeg has also developed and documented formal governance policies and processes which are itemized in [Appendix C: Asset Management Policy Notes](#).

As part of the PMM development, the stakeholders identified a gap in their ability to manage projects in a consistent manner within their Departments and across the City. In March of 2013, the City of Winnipeg initiated a Needs Assessment surrounding the procurement of a PPMS tool as part of improving and standardizing Investment Planning and Project Management processes. The assessment was used as input into a business case that was developed for the 2015 budget cycle.

2.1.1 Project Portfolio Management Solution [PPMS] Phase 1

Phase 1 developed an initial Business Case to validate the need for an IT solution to support the City's Portfolio and Project delivery processes:

Phase 1 of the PPMS Project deliverables had deliverables including:

1. Execution of the Pre-Project Steps for Funding & Project Initiation.
2. Development of a set of high level requirements. See [Appendix A: PPMS Phase 1 High Level Requirement](#).
3. Submission of an investment request into the 2015 capital budget.

2.1.2 Project Portfolio Management Solution [PPMS] Phase 2

The City of Winnipeg started Phase 2 of the PPMS project in September 2015. The purpose of Phase 2 is to:

- Refine the preliminary requirement assessment.
- Update the PPMS Business Case and,
- Develop a Solution Bid Opportunity for the PPMS.

This document:

- Details current state assessment of the processes used in the City of Winnipeg departments that perform Investment Planning and Project Management, identifying issues and opportunities.
- Identifies the high level future state processes, use cases and requirements of a Portfolio-Project Management Solution that would provide a centralized, automated tool that operationalizes the initial investment planning, budgeting and the subsequent project planning and delivery functions. Automated collection would include planning artifacts, user defined metrics such as status, financials, resources and issues at a project and portfolio level.
- Describes conceptual designs of potential solutions and the functions PPMS would be required to perform, itemizing issues and opportunities of each approach. *“PPMS” refers to a “black box” version of the final solution which has not been identified, designed or selected at this phase of the PPMS project. This document will identify all of the capabilities that must be present in a new solution, regardless of how they will be realized or implemented.*

3 Project Scope

3.1 In Scope

The purpose of Phase 2 of the PPMS project is to:

- To develop Approved Requirements and Systems Specification documentation for the PPMS Solution based on extensive internal and external stakeholder interviews.
- To update the Business Case for the PPMS Project so that it aligns with these approved documents.
- To perform a current-state Organizational Assessment, including PPMS stakeholder change readiness assessments. These initial Change Identification activities would support Change Management Planning and Reinforcement activities that should occur during future phases of the PPMS Project.
- To develop effective PPMS Solution Bid Opportunity documentation for future City procurement activities, and
- To conduct a procurement evaluation exercise for external vendors who respond to the PPMS Solution Opportunity Request.

The purpose of future Phases of the PPMS project will be:

- To undertake implementation activities associated with delivery of a proposed PPMS, including system design & development, and
- To also perform organizational change management (OCM) activities for the PPMS, which support either *Managing Change (detailed change plans)* or *Reinforcing Change (corrective actions)* stages of the ADKAR model

3.2 Out of Scope

The following items have been identified by stakeholders as being out of scope for this project at this point, including:

- Any requirements gathering, system design, development or testing which relate to Enterprise Content Management (ECM), and
- Any analysis or design activities associated with process re-engineering of current business processes

4 Stakeholder Groups

A Portfolio-Project Management Solution is an enterprise level endeavour that will include stakeholders from all areas of the City of Winnipeg internally and externally who participate in the capital budgeting process to procure funds and the areas responsible for delivering and reporting on projects that have been allocated those funds.

4.1 Internal / Administrative

1. Council
2. CAO
3. Executive Policy Committee
4. Standing Policy Committee(s)
5. Corporate Finance - Corporate Asset Management Office/Project Management Office
6. Corporate Finance – Major Capital Projects
7. Corporate Finance – Budgeting
8. Corporate Finance – Materials Management
9. Corporate Finance – Risk Management
10. Corporate Finance – Controller
11. Legal Services
12. Corporate Support Services (CSS)
13. Property Planning and Development (PP&D)

14. Public Works
15. Transit Services
16. Winnipeg Parking Authority
17. Fire and Paramedics Services
18. Police Services
19. Community Services
20. Fleet Management Services, and
21. Water and Waste (W&W)

4.2 External

1. General Public
2. Vendors
3. Consultants
4. Contractors

5 Current State Assessment

The current state assessment for the PPMS was performed to provide an understanding of the current department environments to identify critical solution and implementation considerations. Conducting a current statement assessment builds a solid understanding of the problems or opportunities to be addressed and provides a foundation for the PPMS Business Case to move forward.

5.1 Background

Phase 2 of the PPMS will allow the City of Winnipeg to leverage the policies and business processes for Investment Planning and Project Delivery and truly operationalize these activities. The current state assessment makes use of the Asset Management – Management System and the Project Delivery Framework to verify each stakeholder’s current approach to planning, delivering and closing out of programs/projects.

Facilitated sessions were held with various staff members from 16 departments, including:

1. Corporate Finance - Corporate Asset Management Office
2. Corporate Finance – Major Capital Projects
3. Corporate Finance – Budgeting
4. Corporate Finance – Controller
5. Corporate Finance – Materials Management
6. Corporate Finance – Risk Management
7. Corporate Support Services

8. Property Planning and Development
9. Public Works
10. Transit Services
11. Winnipeg Parking Authority
12. Fire and Paramedics Services [Business and IT Services]
13. Police Services [Business and IT Services]
14. Community Services
15. Fleet Management Services, and
16. Water and Waste

The facilitation sessions employed an [Appendix B: Facilitation Framework](#) to guide the discussions and assist in assessing each department's maturity with the Investment Planning Framework and Project Management Manual; and to understand the current processes and tools used to:

- Plan and prioritize department projects [Investment Planning]
- Manage the delivery of internal and external projects [PMM - Plan, Execute, and Close-Out Projects].

The purpose of these meetings was to document current processes, issues, and opportunities, as well as any requirements and future visions of utilizing a PPMS tool.

External Consultants

PPMS Stakeholder Interviews were also held with a small sample of external engineering consultants, who are often key project delivery partners, including:

- AECOM;
- Stantec;
- Dillon Consulting;
- Morrison Hershfield, and
- KGS

The facilitation sessions employed a set of questions to guide discussions and assist in assessing each consultant's interaction with the City of Winnipeg from the Procure/Bid stage to Project Delivery and Close Out. The set of questions used can be found here: [Appendix E: External Stakeholder Discovery Interview Agenda](#).

Other Municipalities

PPMS discussions and information exchanges were held with other municipalities and government offices to draw upon their experiences in planning and implementation of PPMS, including:

- City of Ottawa
- Government of Ontario – EPPM initiative

- City of Calgary

6 High Level Assessment – Asset Management – Management System As-Is Processes

Asset Management is an integrated set of processes that minimize the lifecycle costs of owning, operating, and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service. The Asset Management – Management System is divided into the four stages of the asset lifecycle:

1. Planning [implements the Investment Planning Process]
2. Project Delivery [implements the Project Delivery Framework]
3. Operations and Maintenance
4. Decommissioning & Disposal

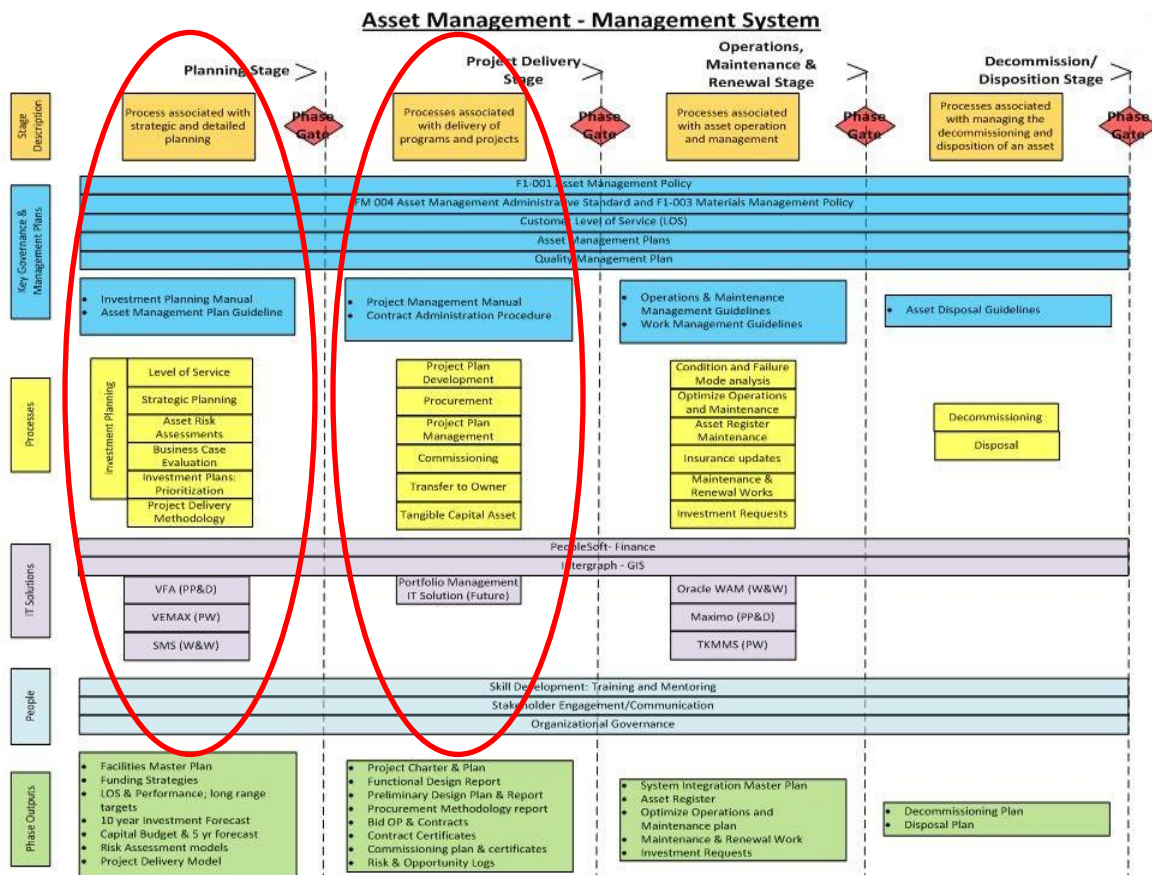


Figure: [Asset Management – Management System and Investment Planning Framework](#)

6.1 Investment Planning Framework – As Is Process

Investment Planning is the process of allocating investment resources by linking infrastructure goals and needs to service delivery.

6.1.1 Investment Planning Process

The Investment Planning process, part of the Planning stage in the asset lifecycle, plays a major role in shaping the services the City delivers. It focuses the development of annual investment plans, providing consistency, transparency and defensibility to the decisions that are made. It follows a series of steps to ensure that capital investment decisions provide the maximum value for money to tax and ratepayers by focusing on delivering required levels of service at an acceptable level of risks, while minimizing the City's costs of owning, operating, and maintaining its assets over the long-term. The Investment Planning Process Involves:

- The definition of Service Levels.
- Strategic Planning.
- The Assessment of asset Risk to service delivery and application of appropriate mitigation measures.
- The creation and Evaluation of Business Cases.
- The application of the Multi-Criteria Prioritization (MCP) model to the list of business cases.
- The development of a prioritized Capital Investment Plan (CIP), which feeds the City's Annual Budgeting Process.

A diagram of the Investment Planning Process is presented in Appendix A of the [Investment Planning Manual](#)

Investment Planning Framework

In the Asset Management – Management System the Planning Stage is focussed around the Investment Planning process. The Planning Stage provides the processes associated with strategic and detailed planning that would result in programs and/or projects being identified for delivery using the Project Delivery Framework. The City of Winnipeg Investment Planning Framework provides all business units with a robust approach for identifying and rationalizing infrastructure investments. The Investment Planning Framework utilizes the following artifacts:

- i. Levels of Service.
- ii. Needs Assessment.
- iii. Business Case Evaluation.
- iv. Project Prioritization Process.
- v. Investment Plans
- vi. Asset Management Plans.

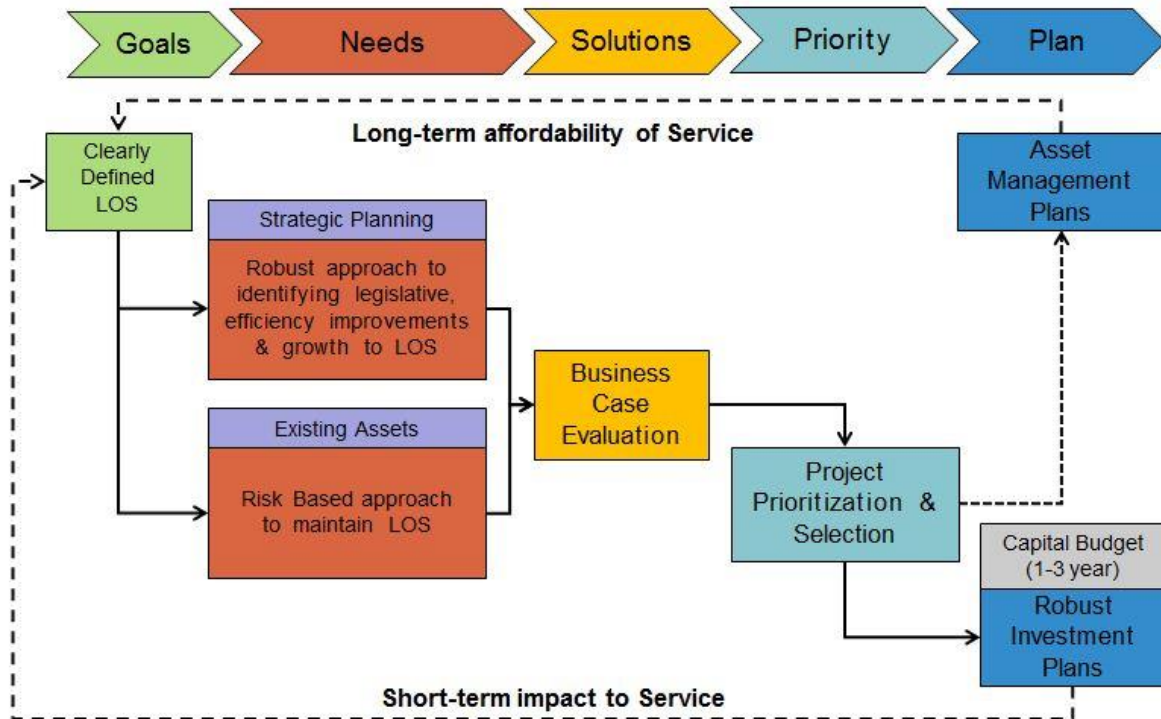


Figure: [Investment Planning and Business Case Development Guidance](#)

Business Case – This is developed at the beginning of an investment and maintained throughout the investment – project delivery’s lifecycle. The delivery framework is tightly integrated with the business case and changes resulting from delivery need to be updated, verified, and validated in the business case. The business case establishes the baseline for assessing the initial investment decision, project risk, issues, or changes.

Assessment involves determining how the matter affects the viability of the investment objectives and benefits. The milestone stages that include formal review of the business case during a project’s life cycle are shown in the Project Management Manual process.

Develop Business Case – Acquire information required to make the investment decision. Refer to the Investment Planning manual for more detailed information.

- a. **Verification** – Assess whether the investment has a valid need to proceed to determining the best solution.
- b. **Update** - Update the business case with more detailed information not available until the project has expended resources to produce, i.e. planning studies.
- c. **Finalize** – Approve the Investment to proceed or not based on the business case put forward. Information in the business case needs to be at a class 3 level per AACE.

Maintains Business Case – Continue to reference the business case in assessing project change control decisions and tracking quantified benefits until the product is turned-over to the business owner or operations (Care & Use owner).

Confirm Benefits - Assess whether the intended benefits have been (or will be) realized; occurs primarily after the project is closed.

Project Delivery Methodology

As Major Capital Projects involve large dollar amounts and risk, it important that the correct delivery method is selected an early stage of the project.

Alternative methods of delivery include:

- Design-Bid Build
- Design Build
- Variations of Design-Build
- Construction Management
- Public-Private Partnership (P3). The Project Management Manual has additional requirements for assessing P3s, and treats them differently in this regard.




6.1.2 System and Asset Management As Is Process Ownership

Owner:

The Asset Management Systems Owner is the **Manager of Corporate Asset Management Office**.

Information Technology Solutions and Tools:

The department and business unit IT Solutions and tools that are available to support the Investment Planning process consist of a variety of products, identified in the following figure.

1 Departmental Investment Plans [Level of Service, Needs Assessment, Risk Register, MCP, Business Case, Basis of Estimate, Budget Sheet]										
Departments	Water & Waste	Public Works	Property Planning & Development	Fleet Management	Transit Services	Parking Authority	Fire and Paramedics Services	Police Services	Community Services	Corporate Support Services
Systems and Tools	PeopleSoft Outlook									
	- VFM - GIS - REPA [work management] - ACCELLA/eNVista - Veolia - Excel - Word/PDF - MS Project - MS Access - Quattro Pro - AutoDesk - GIS - BI tools - Golden (SQL Query)	- Roads: PPT (Performance Prediction Technology from VEMAX) - Bridges: Bridge Manager - TKMS [Work Management] - ACCELLA/eNVista - Signals Inventory [Oracle DB] - Excel - Word/PDF - MS Project - MS Access	- VFA - MAXIMO [Work Request] - Work Requestor interface - Excel - Word/PDF - MS Project - MS Access	- LMMO [lifecycle costing management model] - Replacement Schedules and Lease Agreements - Ron Turley & Associates (RTA) Fleet Management System - RFQ – F [Fleet version of RFQ] - Excel - Word/PDF - MS Project - MS Access	- MMIS (Maintenance Monitoring Information System) - AutoCAD - Red Mine [open source Project tracking tool] - Excel - Word/PDF		- VFA - Red Mine (trouble ticketing and project tracking) - Remedy (IT service management) - Excel - Word/PDF - MS Project - WBS Pro - Visio		- MAXIMO [Work Requestor web interface] - OMBI & CULC [Library metrics] - Active Net [Recreation] - Excel - Word/PDF	- Remedy [IT service Management] - Excel - Word/PD - MS Project
Document Management	Shared Drives SharePoint	Shared Drives FileNet Sharepoint	Shared Drives	Shared Drives	Shared Drives SharePoint	Shared Drives	Shared Drives Red Mine SharePoint	Shared Drives SharePoint	Shared Drives	Shared Drives SharePoint
	 Signed and Stored	 Signed and Stored	 Signed and Stored							

Each department uses their own set of solutions and tools to track and provide information for input into the Investment Planning framework. In the Portfolio Project Management Solution, these IT solutions and tools will continue to provide the information needed to perform Investment Planning.

The Corporate systems and tools available to support the Investment Planning process consist of:

- Various CityNet and City of Winnipeg sites:
 - Asset Management CityNet site: [Asset Management CityNet Site](#) [this is an internal City of Winnipeg site].
 - Materials Management CityNet site: [Materials Management CityNet Site](#) [this is an internal City of Winnipeg site].
 - Infrastructure Planning City of Winnipeg site: [Infrastructure Planning City of Winnipeg Site](#)
- Asset Management SharePoint site. [Asset Management SharePoint Site](#) [this is an internal City of Winnipeg site].

The City of Winnipeg Asset Management Department has developed and documented formal business processes for:

F1-001: [Asset Management Policy](#)

FM-004: [Asset Management Administrative Standard](#)

F1-003: [Materials Management Policy](#)

[Investment Planning Manual](#)

[Asset Management Plan Framework & Guideline](#)

PMM: [Project Management Manual](#)

The City of Winnipeg is still in the process of developing formal governance plans, manuals, procedures and templates and operational processes for:

- Strategic Asset Management Plan (Planned for Summer 2016)
- Corporate and Departmental Asset Management Plans (Planned for Summer 2016)
- Quality Management Plan (Planned for Fall 2016)

6.1.3 Asset Management System As Is Process Assessment

The following is an assessment of the City of Winnipeg's roll out of the Asset Management System and the status of the individual components.

Asset Management – Management System			
Overall Key Governance and Management Plans			
Component	Standard Status	Implementation Status	Plan
F1-001 Asset Management Policy	Complete	Complete	Effective Date: January 28, 2015
FM-004 Asset Management Administrative Standard	Complete	Complete	Last Updated: March 31, 2015
F1-003 Materials Management Policy	Complete	Complete	Effective Date: March 24, 2004 Most Recent Consolidation: January 28, 2015
Customer Level of Service (LOS)	In progress	In Progress	Over the next 5 years
Asset Management Plans	In progress	Fall 2016	RFP 614-2015
Quality Management Plans	Not Started	Not Started	December 2016
Overall People Plans			

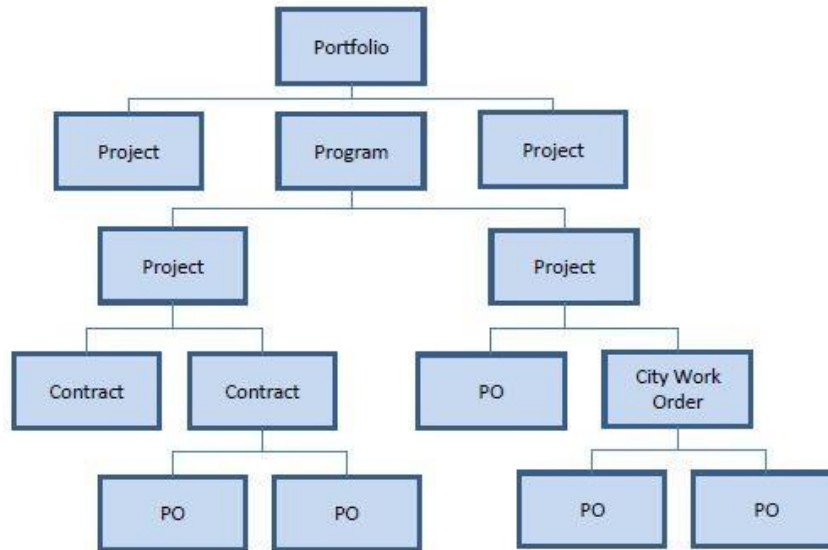
Component	Standard Status	Implementation Status	Plan
Skill Development: Training and Mentoring	Spring 2016	In Progress	Fully implemented Spring 2017
Stakeholder Engagement/Communication	On-going	On-going	Initiated as part of IP roll-out, AM Program Plan being updated as part of AM Plan project RFP 614-2015
Organizational Governance	In Progress	In Progress	Key elements in 2016, maturity will be reached in 3-5 years
Planning Stage: Key Governance and Management Plans			
Component	Standard Status	Implementation Status	Plan
Investment Planning Manual	Complete	On-Going	Next update December 2016
Asset Management Plan Guideline	Complete	Completed	March 2014
Planning Stage: Processes			
Component	Standard Status	Implementation Status	Plan
Level of Service	In Progress	In Progress	Initial models developed by 2017, fully implemented service target - 2020
Strategic Planning	In Progress	In Progress	On-going Service specific
Asset Risk Assessments	Complete	In Progress	Winter 2017
Business Case Evaluation	Complete	In Progress	Part of 2015 Capital Budget plan
Investment Plans Prioritization	Complete	In Progress	Part of 2015 Capital Budget plan
Project Delivery Methodology	Complete	Complete	Section 1.4 of Project Management Manual.
Planning Stage: Outputs			
Component	Standard Status	Implementation Status	Plan
Facilities Master Plan	N/A	N/A	No longer valid
Funding Strategies	In Progress	In Progress	On-going and updated with RFP 2015
LOS & Performance, Long Range Targets	In Progress	In Progress	Operational date <TBD>
10 Year Investment Forecast	Complete	On-going	Part Capital Budget
Capital Budget & 5 Year Forecast	Complete	On-going	Part of 2015 Capital Budget plan
Risk Assessment Models	In Progress	In Progress	Winter 2017
Project Delivery Model	Complete	In Progress	Existing process

6.2 Project Delivery Framework – As Is Process

A streamlined project management framework sets standards for project deliverables, including tracking and communicating schedules, setting measurable delivery goals and milestones, performing stage-gate reviews and conducting quality measures. Defining a Project in measurable terms with a consistent approach, clear milestones and decision points and metrics to measure the success; focuses the project team on the end goals of the project.

- **Portfolio Management** is a component collection of programs, projects or operations managed as a group to achieve strategic objective.

Portfolio, Program, and Project Relationships



- **Program Management** is a group of related projects, subprograms and program activities that are managed in a coordinated way to obtain benefits not available from managing them individually.

Program Investment Types		
Type A	Type B	Type C
<ul style="list-style-type: none"> • Aligned to a key service or benefit driver. • Selected based on Risk to Service. • Value varies < or > \$100,000, typically larger than. • Business Case and Cost/Benefit typically at the project level. 	<ul style="list-style-type: none"> • Aligned to a key service or benefit driver. • Selected based on Risk to Service. • Value typically < \$100,000 • Business Case and Cost/Benefit done at the Program Level. • Program Level Business Case requires that typical/standard solutions will be applied to assets at specific points in their life-cycle. The only change is the geographic location. 	<ul style="list-style-type: none"> • Not aligned to consistent investment-benefit driver [multiple non-related Needs]. • Selected based on Risk to Service. • Numerous small value projects < \$100,000 • Cost/Benefit ratio cannot be determined. • Cannot do a problem-solution analysis at the program level. • Feasible to do a solution option analysis at the project level (once approved). • These Programs provide flexibility in a Department to address high risk asset needs identified mid-budget cycle.
<p><u>Examples:</u> Regional Streets, Riverbank stabilization, Fire Stations.</p>	<p><u>Examples:</u> Water, Sewer, Residential Streets, Recreation Equipment Program, Athletic Fields</p>	<p><u>Examples:</u> Accommodation Facilities, Traffic Engineering Improvements, Parks & Recreation Enhancement.</p>

- **Project Management** is the application of knowledge, skills and techniques to execute projects effectively and efficiently. It's a strategic competency for organizations, enabling them to tie project results to business goals.

Project Delivery Framework is divided into four phases:

1. Project Delivery Framework: Pre-Project:

- a. This phase encompasses strategic planning, investment planning, and budgeting.

2. Project Delivery Framework Phase: Initiation:

- a. Project Definition from Planning to Delivery

3. Project Delivery Framework Phase: Execute Project/Program Planning:

- a. Planning Sub-Phase: [to obtain Results, Products, or Services]
- b. Delivery Sub-Phase: [to deliver Results, Products, or Services]
- c. Transfer Sub-Phase: [of Results, Products, or Services to owner (operating business unit)]

4. Project Delivery Framework Phase: Close Out:

- a. Project/Program end of life.

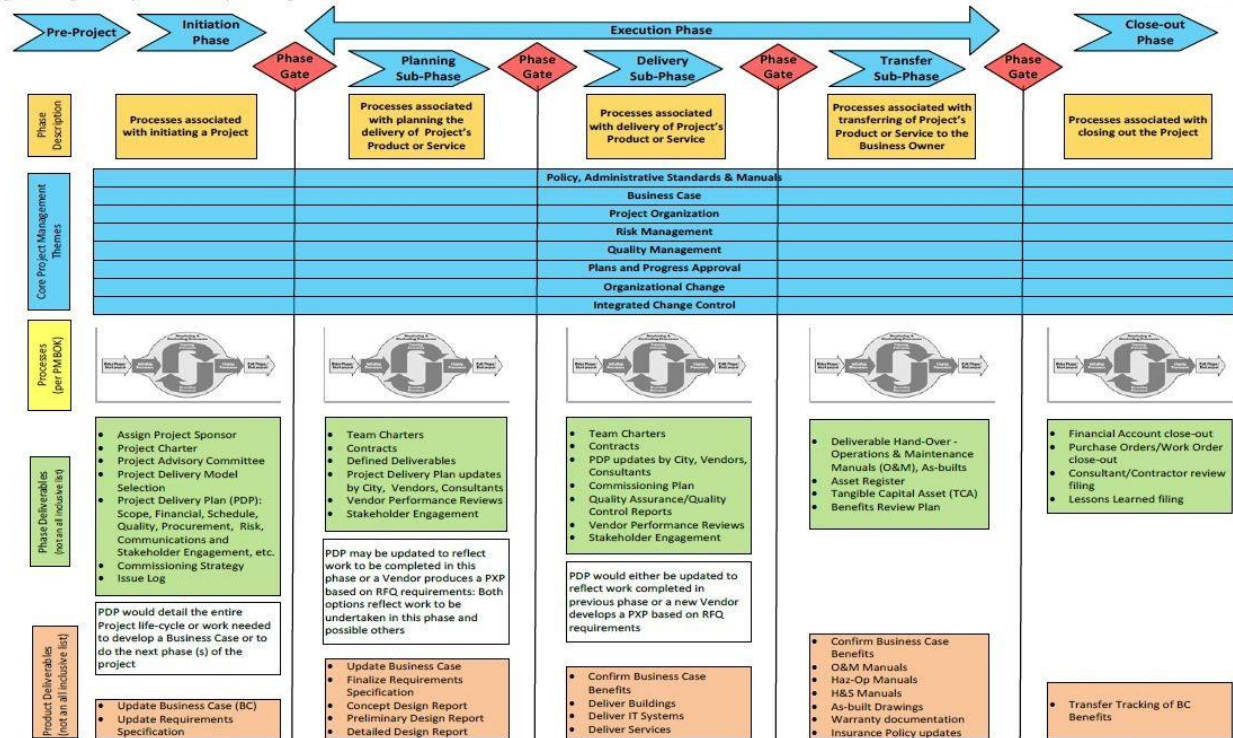


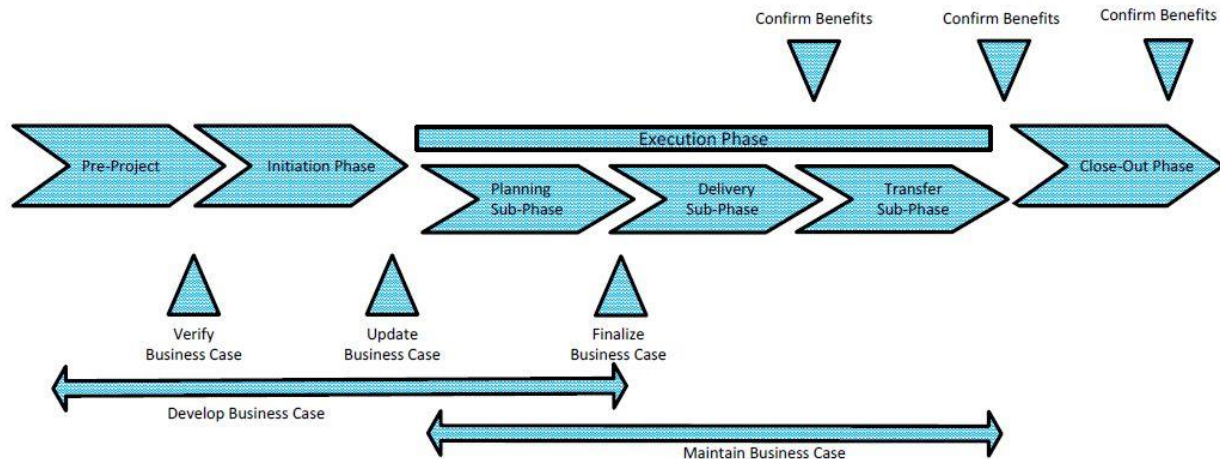
Figure: [Project Delivery Framework](#)

Other Key Disciplines of Project Managers Manual Relevant to the PPMS

- Contract Administration** – Contracts and the administration of those contracts (contract Administration) is significantly involved in and integrated with project management. The role includes managing contract relationships, monitoring contract performance, and modifying contracts as appropriate.
 - Contract administration for Consultants, Construction Contractors, and third-party Contractors is similar. Each is a type of vendor that has a contract with the City, and contract administration for any of the three involves managing the work provided in accordance with the terms and conditions of the contract. The contracts with the three types can be different, which creates differences in the City's role, relationship with the vendor, and administration activities, however the applicable project management and contract administration processes are the same. A Contract Administration manual is provided in Appendix E of the Project Management Manual.
- Change Management** - Refers to the management of organizational change and as such, should not be confused with change control. Change management is a discipline that offers a structured approach that is aligned with Project Management Institute (PMI) project delivery lifecycle. The purpose of change management is to promote and enable the adoption of changes that may occur as the result of project delivery, and thereby to support the achievement of project results and outcomes.
- Public Engagement** – refers to a process, involving communication and interaction between the City of Winnipeg and its residents that serves to inform and involve the public, and uses public input to make better decisions. The purpose of engaging the public is to

achieve decisions that are sensitive and responsive to community values and concerns. It ranges from the mere provision of information through to empowering the community to make decisions.

6.2.1 Project Management Process



From [Project Management Manual](#) Figure 3-1: Project Delivery Framework Showing Project Phases and their Main Components

Pre-Project Phase – This phase encompasses strategic planning, investment planning, and budgeting. These processes must be completed before project initiation. However, considerations for project delivery are integrated concurrently during business case development.

Initiation Phase – This phase involves clearly defining the project from planning to delivery, developing a project charter. Key Elements:

- Project Charter
- Stakeholder Assessment
- Project Delivery Plan

Execution Phase – In this phase, processes are completed that result in a product. Activities and deliverables can vary widely between projects; however three sub-phases involving the following processes apply to all projects:

a. **Planning sub-phase:** Planning the delivery of the product, result or service [to obtain Results, Products, or Services]. Key elements:

- Creating and/or updating the Project Delivery Plan
- Scheduling
- Risk Assessment (part of Risk Management)

- Basis of Estimate

b. Delivering sub-phase: Delivering the product, result, or service per the project plan [to deliver Results, Products, or Services]. Key Elements:

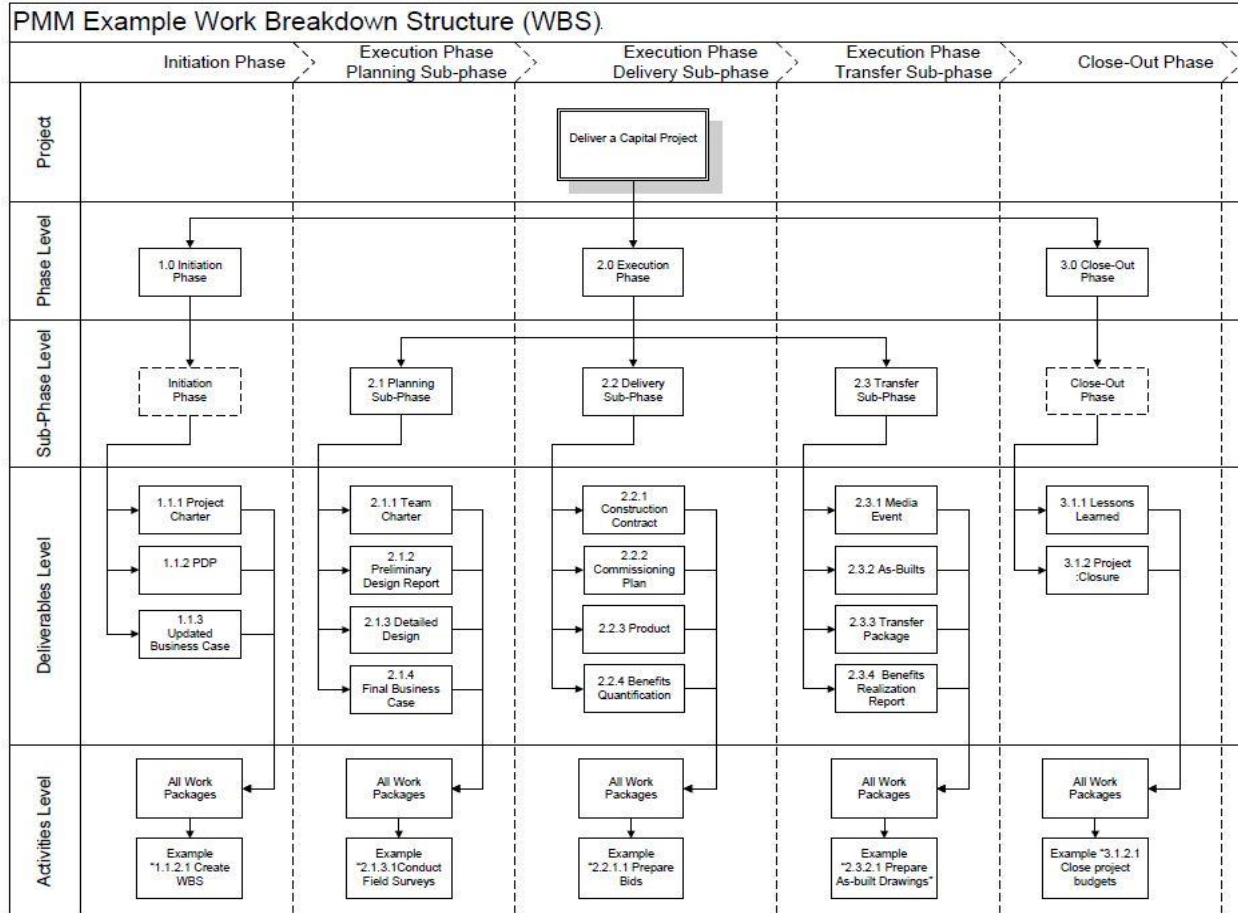
- Direct and Manage the Plan
- Control a Project or a specific phase of a project key elements:
 - Integrated Change Control; Control Scope, Cost & Schedule
 - Control Procurements (Contract Administration)
 - Control Stakeholders and Project Communication
- Conduct Procurements
- Acquire Project Team
- Perform Quality Assurance
- Manage Stakeholders
- Performance Reports

c. Transferring sub-phase: Transferring the Results, Products, or Services to owner (operating business unit). Key Elements:

- Transfer to Owner (Documentation, Asset Register & TCA)

Close-Out Phase – As all projects have a defined life, this phase defines the processes and activities that end the life of a project. Key Elements:

- Lessons Learned
- Close Procurements (Contracts)



From [Project Management Manual](#) Figure 5.2: A WBS Tree Structure Organized by Project Phases

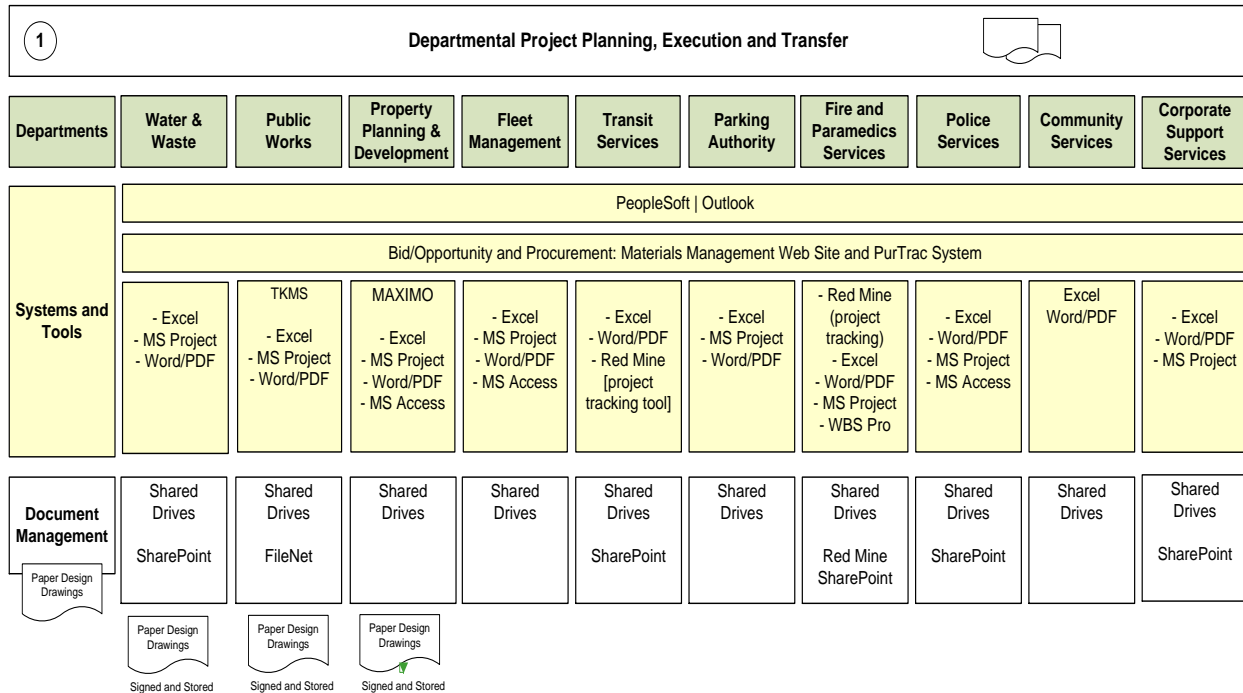
6.2.2 System and As Is Project Delivery Process Ownership

Owner

The Project Management Process Owner is the **Manager of Corporate Asset Management Office**.

I.T. Solutions and Tools

The department and business unit IT Solutions and Tools available to support the Project Delivery process consist of a variety of products, identified in the following figure.



Each department uses their own set of solutions and tools to track and report on the Planning, Execution and Transfer phases of Project delivery. In the Portfolio Project Management Solution, the solution will enable standardization of project processes and required artifacts as per the Project Management Manual.

The Corporate systems and tools available to support the Project Management process consist of:

- Various CityNet and City of Winnipeg sites:
 - Materials Management CityNet site: [Materials Management CityNet Site](#) [this is an internal City of Winnipeg site].
 - Infrastructure Planning City of Winnipeg site: [Infrastructure Planning City of Winnipeg Site](#)
- Asset Management SharePoint site. [Asset Management SharePoint Site](#) [this is an internal City of Winnipeg site].

The City of Winnipeg Asset Management Department has developed and documented formal business processes for:

F1-001: [Asset Management Policy](#)

FM-004: [Asset Management Administrative Standard](#)

F1-003: [Materials Management Policy](#)

PMM: [Project Management Manual](#)

The City of Winnipeg is still in the process of developing formal governance plans, manuals, procedures and templates and operational processes for:

- Strategic Asset Management Plan (Planned for Summer 2016)
- Corporate and Departmental Asset Management Plans (Planned for Summer 2016)
- Quality Management Plan (Planned for Fall 2016)

6.2.3 Project Management As Is Process Assessment

The following is an assessment of the City of Winnipeg's roll out of the Asset Management System and the status of the individual components that support Project planning and delivery.

Asset Management – Management System			
Planning Stage: Key Governance and Management Plans			
Component	Standard Status	Implementation Status	Plan
Asset Management Plan Guideline	Complete	In progress	March 2014 AM Plans being developed as part of RFP-2015
Project Delivery Stage: Key Governance and Management Plans			
Component	Standard Status	Implementation Status	Plan
Project Management Manual	Complete	Not Started	February 2, 2015 version 3.0
Contract Administration Procedure	Complete	Not Started	February 2, 2015 version 3.0
Project Delivery Stage: Processes			
Component	Standard Status	Implementation Status	Plan
Project Plan Development	Complete	Late Spring 2016	Project Management Manual February 2, 2015 version 3.0. Roll-out of PMM in Spring of 2016
Procurement	Complete	Complete	F1-003: Materials Management Policy
Project Plan Management	Complete	Late Spring 2016 Not Started	Project Management Manual February 2, 2015 version 3.0 Roll-out of PMM in Spring of 2016
Commissioning	Complete	Late Spring 2016 Not Started	Project Management Manual February 2, 2015 version 3.0 Roll-out of PMM in Spring of 2016
Transfer to Owner	Complete	Late Spring 2016 Not Started	Project Management Manual February 2, 2015 version 3.0 Roll-out of PMM in Spring of 2016
Tangible Capital Asset	Completed	On-going	Existing process

Project Delivery Stage: Outputs			
Component	Standard Status	Implementation Status	Plan
Project Charter & Plan	Complete	Templates Designed	Project Management Manual February 2, 2015 version 3.0 Roll-out of PMM in Spring of 2016
Functional Design Report	Completed	Completed	Existing output
Preliminary Design Plan & Report	Completed	Completed	Existing output
Requirements Document	Completed	Completed	Existing output
Procurement Methodology Report	Not Started	Not Started	Operational date <TBD>
Bid Op & Contracts	Complete	Complete	F1-003: Materials Management Policy FM-004: Asset Management Administrative Standard
Contract Certificates	Complete	Complete	F1-003: Materials Management Policy FM-004: Asset Management Administrative Standard
Commissioning Plan and Certificates	Not Started	Not Started	Operational date <TBD>
Risk & Opportunity Logs	Complete	Used on larger projects but no consistent process	Project Management Manual February 2, 2015 version 3.0 Roll-out of PMM in Spring of 2016

7 BUSINESS NEEDS

The City of Winnipeg's business needs were identified in Phase 1 of the Portfolio Project Management Solution project. The assessment revealed current process and technology challenges and gaps in providing PPMS capabilities at the City of Winnipeg.

The City of Winnipeg's corporate objective is to deliver a corporate wide Project, Program and Portfolio Management solution including the processes, methods and technology required to:

- Automate specific processes within the Asset Management – Management System; specifically the Investment Planning and Project Delivery processes.
- Support and enable The City of Winnipeg's Investment Planning and Project Management framework.
- Provide Cost Control reporting at the portfolio and project levels for the Investment Planning and Project Delivery processes.

7.1 Gaps\Challenges\Issues – Risks - Improvements - Benefits

The City of Winnipeg's has identified gaps, challenges and issues related to Portfolio Project Management. The City of Winnipeg is expecting that by implementing a PPMS the gaps, challenges and issues will be addressed and provide the following anticipated improvements and benefits:

1. Increased Executive visibility and oversight of projects to support transparency.
2. Increased alignment of projects to the City of Winnipeg strategic objectives.
3. Improved project management planning, execution, and close out.
4. Improved document management.
5. Improved resource management.
6. Elimination of duplicate data entry.

Gaps\Challenges\Issues	Risk if not Addressed	PPMS Improvement	Anticipated Benefit Of Improvement
<ul style="list-style-type: none"> • Inconsistent project governance. • Inability to generate consistent Dashboard reports for project governance and City executive teams. • Inconsistent Benefits tracking. • Time consuming Project status creation process [no standard status report] that results in a lack of timely, transparent reporting 	<ul style="list-style-type: none"> • Loss of unrealized benefits (both tangible and intangible). • Inconsistent monitoring of project cost/benefit profile during project lifecycle. • Potential for negative Audit comments in post-mortem reviews. • Inability to determine project health during delivery cycle. • Inability to maintain the City's current level of project cost overruns. • Inability to maintain City's current level of project throughput (duration to complete projects). 	<ul style="list-style-type: none"> • Solution to provide timely and consistent reporting on actuals and projections for project scope, schedule, cost and quality parameters to assist in decision on whether the project continues or should be stopped\dropped. 	<p>Increased Executive visibility and oversight of projects to support transparency.</p> <ul style="list-style-type: none"> • Consistent snap shot of the City's project portfolio. , Dashboard reports will highlight critical information that supports regular project decision making. These reports would provide visibility and force accountability at the project management level. • Better decision making via understanding of key project benefits metrics e.g. when to adjust/discontinue project or Increase level of business owner engagement (as project benefits owner).
<ul style="list-style-type: none"> • Reporting on a single program with multiple projects is difficult [roll up to the program level is not inherently supported and requires manual intervention]. 	<ul style="list-style-type: none"> • Inability to determine portfolio/program health during delivery cycle. • Inability to accurately determine portfolio and program costs. 	<ul style="list-style-type: none"> • Solution to provide support for the City of Winnipeg portfolio/program/project hierarchy and enable reporting at these levels. 	<p>Increased alignment to City of Winnipeg strategic objectives.</p> <ul style="list-style-type: none"> • Consistent snap shot of the City's project portfolio. , Dashboard reports will highlight critical information that supports regular project decision making.

Gaps\Challenges\Issues	Risk if not Addressed	PPMS Improvement	Anticipated Benefit Of Improvement
<ul style="list-style-type: none"> • Inability to accommodate higher priority requirements into a project/program once it has already started. • Tracking project tasks and work completed [80% of project work is performed by external consultants]. • Inability to Manage/Automate Workflow. • Extended wait times for review and approval of project requests, change orders, etc. • Inconsistent vendor payments tracking results in time consuming, cumbersome reconciliation. • Project Managers expend a significant amount of effort creating reports due to non-standard processes and templates. • Project team lacks efficient and effective communication tools. 	<ul style="list-style-type: none"> • Potential Project delays. • Projects not prioritized for highest benefit impact. • Inability to maintain current level of City PM resource effort dedicated to standard reporting activities. • Limited ability to re-allocate Project Management resources to higher-value project control activities including risk and issue management. 	<ul style="list-style-type: none"> • Solution to provide automated project management functions and provide timely and consistent reporting on actuals and projections for project scope, schedule, cost and quality parameters. • Solution will enable the Project Management Manual standard procedures and templates. • Solution will enable the Project Management Manual standard Contract Administration procedures and templates • Solution to provide workflow capability to automate identified processes. 	<p>Improved project management planning, execution, and close out.</p> <ul style="list-style-type: none"> • Potential reduction in current City project failure rates (from a scope/schedule/cost or quality perspective). • Potential reduction in overall PM time spent on standard status reporting and lower value activities, due to use of consistent templates stored in central PPM system. • Increased sharing of critical project information between both the project delivery and management teams.

Gaps\Challenges\Issues	Risk if not Addressed	PPMS Improvement	Anticipated Benefit Of Improvement
<ul style="list-style-type: none"> No standard Document Management practices. 	<ul style="list-style-type: none"> Limited project team visibility of key project documents. Potential schedule delays or project rework Lost information. Delays. Claims. 	<ul style="list-style-type: none"> Solution to provide document management capabilities. 	<p>Improved document management.</p> <ul style="list-style-type: none"> Improved access to current project information. More timely approval of project control documents. More effective communication between project delivery and governance teams. Improved knowledge transfer and collaboration within project teams. Ability to version control documents.
<ul style="list-style-type: none"> Determining availability of resources (i.e. consultants; vendors; suppliers). Identifying the role assignments and responsibilities on projects/programs. 	<ul style="list-style-type: none"> Missed work and opportunities. Inefficiencies among resources. Potential schedule delays due to resource availability or seasonal factors 	<ul style="list-style-type: none"> Solution to provide resource management capability. 	<p>Improved resource management.</p> <ul style="list-style-type: none"> Efficiencies in planning and deployment of resources. Increased visibility into potential issues due to resource availability.
<ul style="list-style-type: none"> Multiple reports require excessive time for numerous resources to enter the same data multiple times. Ability for external consultants to submit project metrics (e.g. project schedule and financial projections) in a consistent manner. 	<ul style="list-style-type: none"> Poor data quality Poor decisions. Budget Overruns. Audit Issues. Negative publicity. 	<ul style="list-style-type: none"> Solution to provide standardized project data entry processes and provide a single repository for project related data that is the data source for reporting. 	<p>Elimination of duplicate data entry.</p> <ul style="list-style-type: none"> Timely and consistent reporting on actuals & projections for project scope, schedule, cost and quality parameters.

8 Use Case Overview – TO BE SYSTEM

The Use Case overview will depict the core high level uses of the PPMS by each user role/stakeholder within the solution. The Use Case overview is not intended to depict relationships between the users or describe the processes, as these are defined in the high level process flow diagrams in [Process Flow Overview – TO BE SYSTEM](#). The To Be System must support all of the identified uses to meet the needs of the current users.

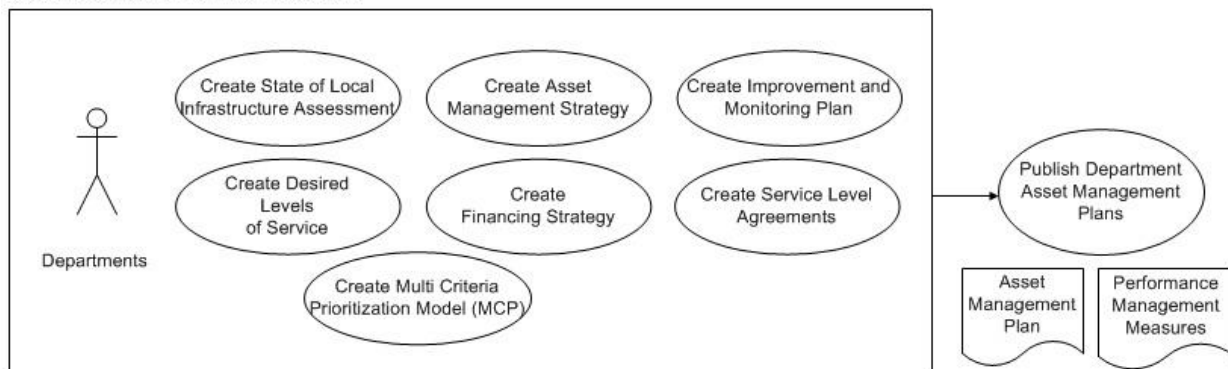
8.1 Asset Management System: Planning Stage

1. Asset Management Planning – Department

As per [Asset Management Plan Framework & Guideline](#) each of the Departments complement the centralized City of Winnipeg asset management function by taking on responsibility for various aspects of infrastructure operations, planning and renewal, and contributing to the corporate budgeting process. Each department has the following core responsibilities:

1. Implement and maintain asset management practices which are consistent with the Corporate Asset Management Framework.
2. Develop and Update a Department Asset Management Plan.
3. Prepare and maintain Lifecycle Management Strategies for key asset classes.

Asset Management Planning - Department



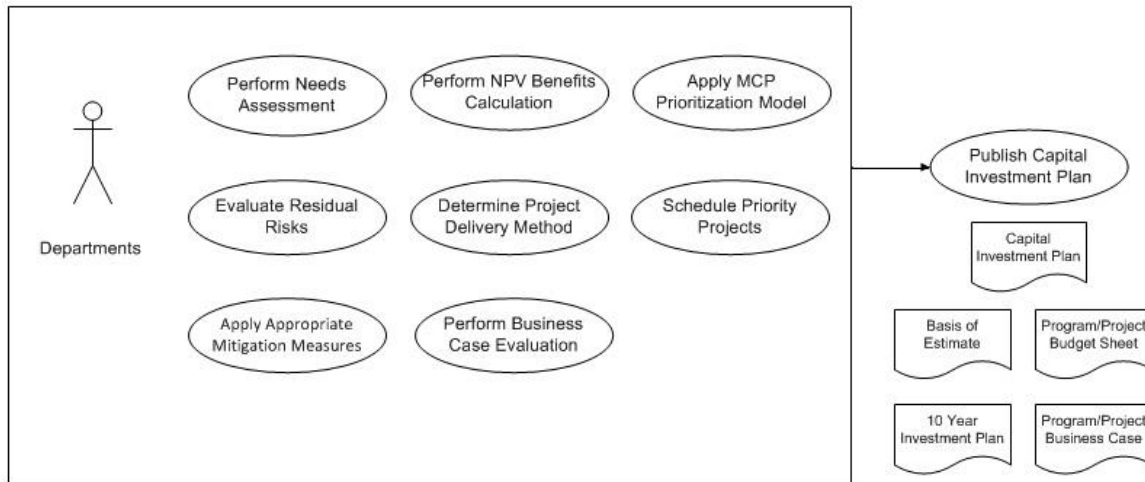
An Asset Management Plan (AMP) documents a strategy for meeting defined service objectives through strategic infrastructure investment and business change over time. AMPs integrate with and guide the Investment Planning process. In addition to identifying needed changes to assets, people, and processes, the document's long-range outlook provides insight in to the affordability of delivering service at a defined level.

2. Investment Planning Process – Department

The Investment Planning process [See [Investment Planning Process](#) Section 6.1.1] involves each department's identifying an investment need, determining the best whole-cost solution

(BC), and developing a prioritized Investment Plan. This process involves the MCP prioritization model, the assessment of residual risks, the application of appropriate mitigation measures, and the development of a prioritized Capital Investment Plan (CIP), which provides direction for the City's Annual Budgeting Process.

Investment Planning - Department



Departments identify, define and prioritize their investment needs. In support of a project submission to the Capital Budget, the departments are required to create:

- Basis of Estimate (BoE): [Basis of Estimate](#)
- Program/Project Budget Sheet
 - Capital Investment Plan – Authorization
Budget Template Spreadsheet <Authorization Worksheet>
[Capital Projects Detail](#)
 - Capital Investment Plan – Cash Flow
Budget Template Spreadsheet <Cash Flow Worksheet>
[Capital Projects Detail](#)
 - Summary of Net Operating Impact
Budget Template Spreadsheet <Net Impact Worksheet>
[Capital Projects Detail](#)

These department documents are used in the development of the City of Winnipeg Capital Investment Plan (CIP) which feeds the City's Annual Budgeting Process [Investment Planning templates are available via the Asset Management CityNet site: [Asset Management](#) (this is an internal City of Winnipeg site)].

3. Annual Budgeting Process

The budgets present the current year committed funding, and a 5 year projection for operating and capital budgets. This first Plan focuses on the 5 year capital program, and the planned actions and project listings extracted from current budget documents.

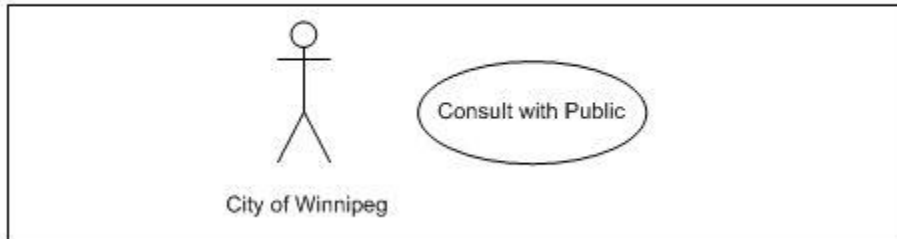
The starting point for the 2016 capital submission is:

- The 2016 to 2020 Council forecasted amounts from the 2015 Adopted Capital Budget
- The forecast for 2021 to 2025 which is the average of the previous five years

Adjustments to these amounts are performed based on the requirements of the Asset Management Investment Planning Process. The Capital Project Details [Budget Sheets] are partially populated from information in the Business case and MCP models. The Capital Investment Plan Authorization is partially populated from information in the Business case and MCP models.

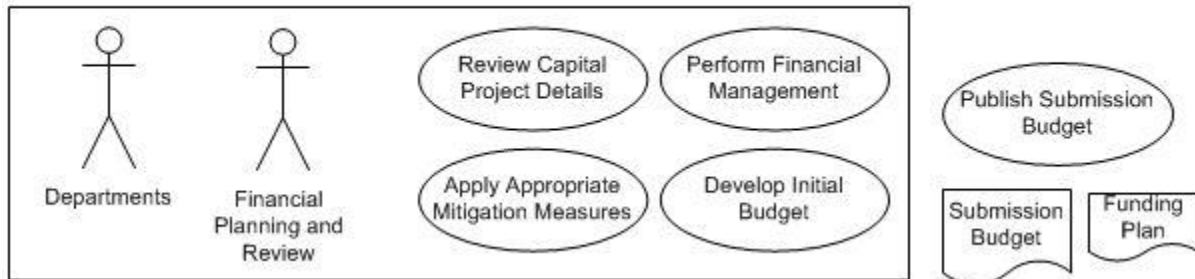
Budget Process: [Budget Process](#)

Public Consultation



Consult with Public: Public consultation is undertaken. Ideas and comments are solicited from the public. The level and extent of consultation may vary depending on the year. An annual citizen service satisfaction survey is also undertaken.

Initial Budget Development



Initial Budget Development: The Council approved forecast from the previous year’s adopted budget process forms the starting point for budget development. It is then updated to reflect recent Council approvals and any new developments that would impact the budget. Departmental budgets are submitted via Capital Project Detail sheets for administrative review and corporate compilation.

Table Preliminary Budget

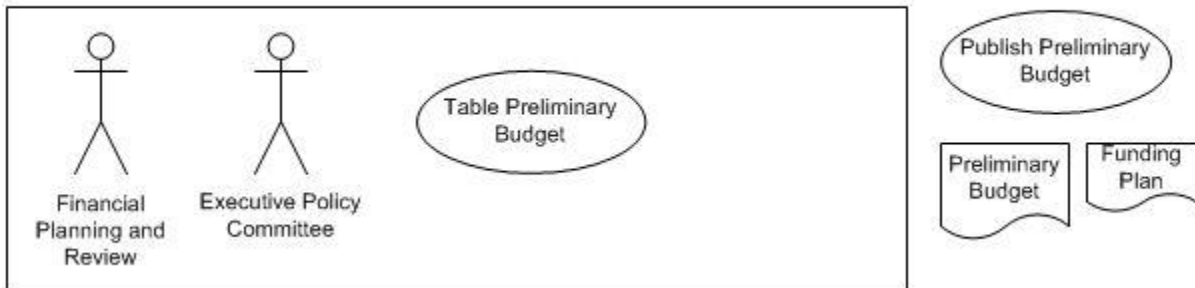
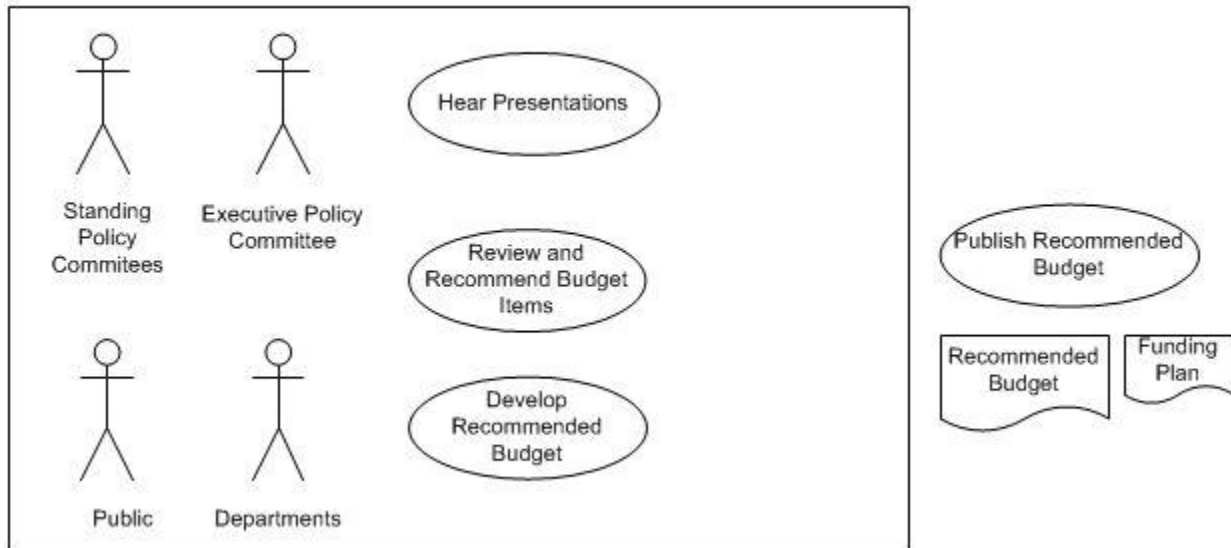


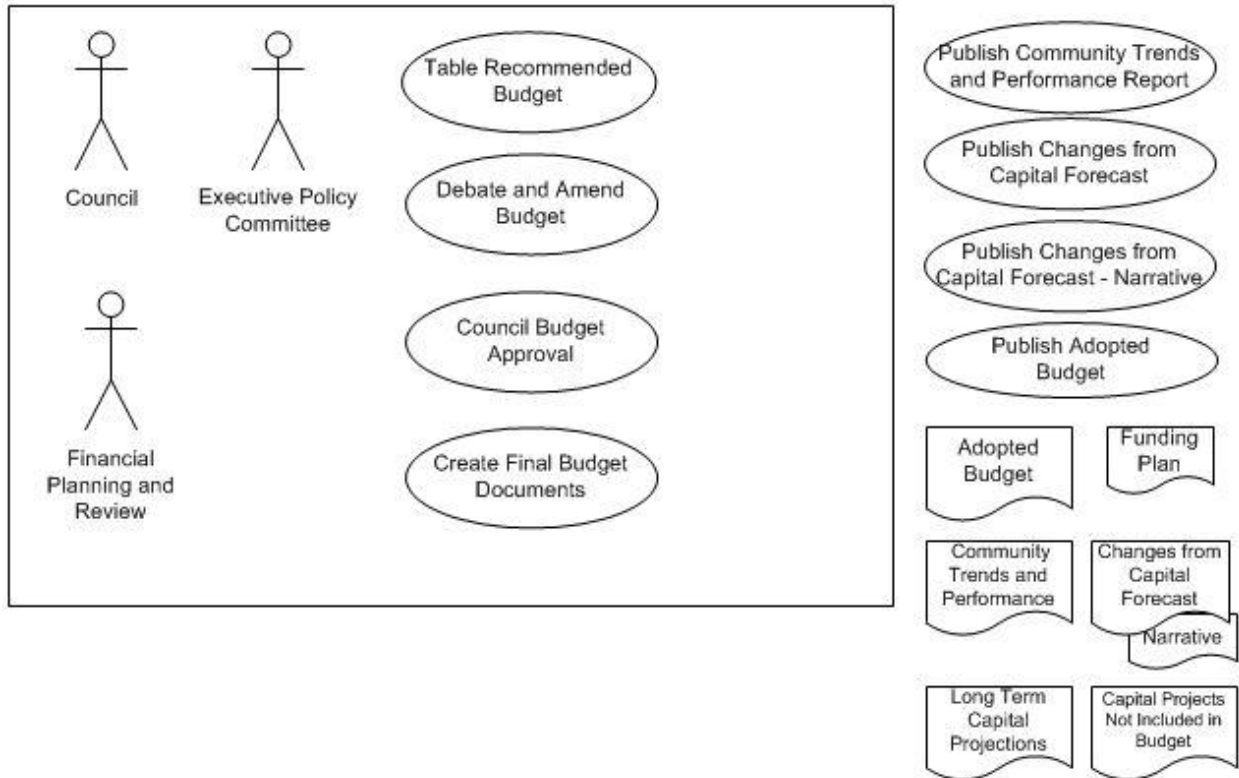
Table Preliminary Budget: The Executive Policy Committee has responsibility for budget development. The Preliminary 2015 - 2017 Operating Budget and the 2015 Preliminary Capital Budget and 2016-2020 Five Year Forecast were tabled at a meeting of Executive Policy Committee in early 2015.

Executive Policy Committee Review



Executive Policy Committee Review: The Executive Policy Committee refers the preliminary operating and capital budgets to the City’s Standing Policy Committees for review and recommendations. The Committees hear presentations by departments. Members of the public may also make presentations at these meetings. The Executive Policy Committee provides for delegations from the public and reviews the recommendations from the Standing Policy Committees. Recommendations are finalized by the Executive Policy Committee and forwarded to Council.

Council Approval



Council Approval: Council debates, amends, and adopts the operating and capital budgets received from the Executive Policy Committee. Council then passes a by-law to set the mill rate for the operating tax-supported budget. Council also gives first reading, if required, of a borrowing bylaw to externally finance the capital program. In accordance with legislation, approval of the borrowing is then requested of the Provincial Minister of Finance. Once authorization is received from the Minister, Council must give second and third readings of the by-law before it can be passed. Council must adopt the operating budget no later than March 31 each year, and the capital budget and five-year forecast by December 31 each year, as required by The City of Winnipeg Charter”.

Capital Budget Templates:

[Capital Budget Templates](#) [this is an internal City of Winnipeg site].

Capital Budget Submission Document Checklist:

1. **Capital Projects Detail**
Budget Template Spreadsheet:
[Capital Projects Detail](#)

2. **Changes from Capital Forecast**
Budget Template Spreadsheet:
[Changes from Capital Forecast](#)

Changes from Capital Forecast – Narrative

Budget Template Document:

[Changes from Capital Forecast – Narrative](#)

3. Long-term Capital Projections

Budget Template Spreadsheet:

[Long-term Capital Projections](#)

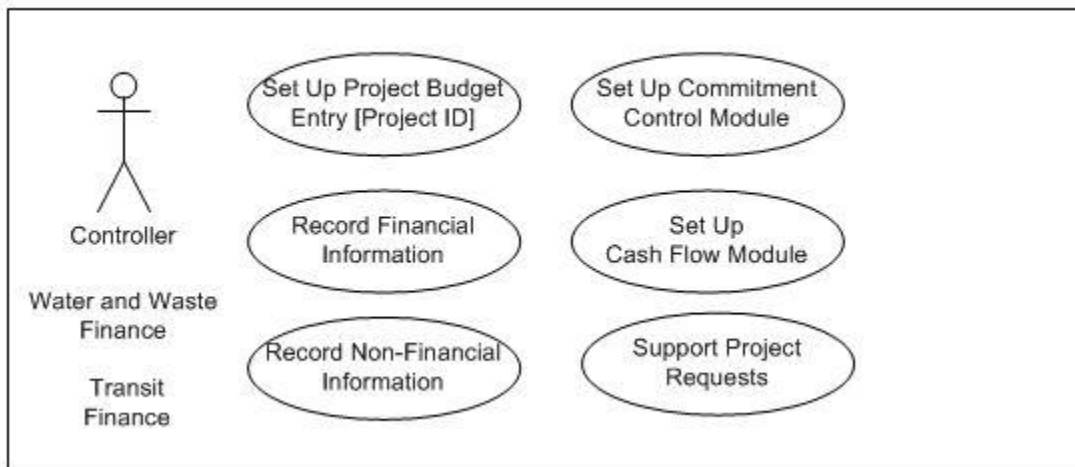
Governance of the Budget Process:

The following directives govern the Budget creation process:

- Asset Management Administrative Standard – FM-004 Asset Management Administrative Standard
- Major Capital Directives
 - MCD - 003
 - MCD - 005
 - MCD - 008
 - MCD - 009
 - MCD - 010

Create PeopleSoft Project Financials

Create PeopleSoft Project Financials



Create PeopleSoft Project Financials

The Adopted Budget triggers entries into PeopleSoft by Capital Accounting [Corporate Finance for tax supported departments; Transit and WWD enter their own information into PeopleSoft].

Capital accounting manually set up the project (Project ID), budget entry – at project level, and different information variables.

The PeopleSoft Project Module records financial and non-financial information about the project, including project manager, vendor details, etc. This information is very important to Capital Accounting when there are questions about a particular project. For every project [Project ID] the Capital Accounting group uses the Project Module to track:

- Original budget amount.
- Amended budget amount: – this is the ‘active’ budget which reflects unforeseen costs, and tracks any alterations to the Adopted budget such as Council requests and approvals since budget adoption.
- Expenses incurred.
- Commitments.
- Requisitions (A/P).
- Actuals.
- Budget expenditure.
- Funding sources (e.g. cash to capital, provincial, surplus, reserves).

The PeopleSoft Commitment Control Module is set up to limit overspend on budgeted amounts.

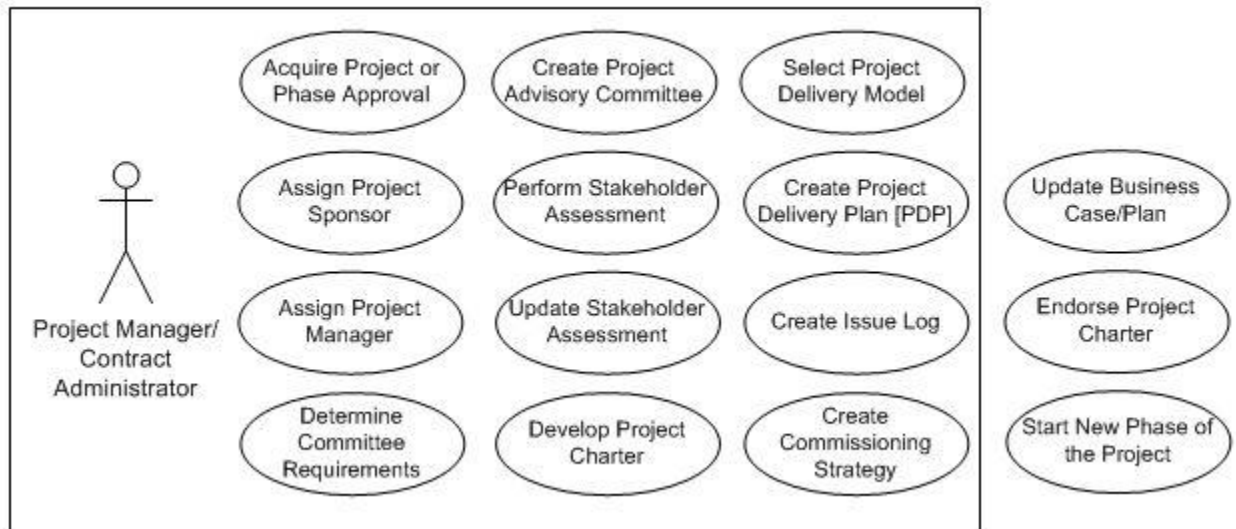
Capital Accounting uses the Cash Flow Module in PeopleSoft to track current and future/forecasted.

Once the projects are using their PeopleSoft budgets, Capital Accounting provides support on any requests about the projects.

8.2 Asset Management System: Project Delivery Stage

8.2.1 Project Delivery Framework Pre-Project and Initiation Phase Use Cases

Project Delivery - Pre-Project and Initiation Phase



Pre-Project and Initiation Phases:

As per the [Project Management Manual](#) the:

- *Pre-Project Phase* encompasses strategic planning, investment planning, and budgeting, which has been detailed in the [Asset Management System: Planning Stage](#).
- *Initiation Phase* involves clearly defining the project from planning to close-out.

Acquire Project or Phase Approval: The project initiation phase begins with Council approval of the project, which is normally the approval of the Capital Budget [In some instances, projects may be approved by Council in-year by approval of Administrative Report].

Assign a Project Sponsor: All projects must have a Project Sponsor. The department responsible for the project budget is identified in the annual Capital Budget. The Department Head of that department is responsible for appointing a Project Sponsor. The Project Sponsor and business owner must be identified in the project and team charters, and their role and responsibilities must be defined in the Project Delivery Plan (PDP). The Project Sponsor is, at a minimum, expected to maintain awareness of the project, its progress, and its issues and to be available for participation in decision-making and dispute resolution.

Assign a Project Manager: A PM is required at the beginning of the project initiation phase and continues in that role through the project close-out phase. The organization assigns a PM to deliver the project, as defined in the business case, with the expectation that the project objectives will be met.

Determine Committee Requirements: The requirement for a project to form a Committee will depend on both the risk and size of the project. In determining the required level of

documentation for the project, the PM will have made a determination as to both the project risk and project size. All projects that are \$10 million or greater require a Major Capital Steering Committee per Administrative Directive FM-004. All projects that are high risk require a Project Advisory Committee. Large projects that are determined to be high or moderate risk require a Project Advisory Committee. Large projects that are low risk do not require a committee.

Create Advisory Committee: The department head for the department responsible for the project budget is responsible for establishing the Project Advisory Committee. The PM shall conduct the analysis as set out in the Project Management Manual to determine if there is a requirement for a Project Advisory Committee. If there is a requirement for a Project Advisory Committee, the PM shall advise the Project Sponsor of the requirement.

Perform Stakeholder Assessment: define their importance and influence. This information is used to categorize stakeholders by potential impact on the project, and strategies are developed to minimize potential negative impacts and maximize positive impacts. The stakeholder assessment is part of the project communication plan and public engagement plan.

Update Stakeholder Assessment: The Stakeholder Assessment is updated as the project progresses since new stakeholders may be identified who were previously unknown.

Develop Project Charter: The project charter initiates the transition from the Pre-Project to Project Initiation phase. It formally authorizes the project to proceed and forms the agreement between the PM and the Project Sponsor. It functions like a work order by setting out the high-level expectations for delivery and commits the organization to providing the identified capital (and/or operating) budget, resources, and project support.

Select Project Delivery Model: Evaluating the benefits of a given procurement and project delivery models rests on the City of Winnipeg's overarching goals and mission. See Appendix C: Alternative Project Delivery: Procurement and Delivery Methodologies Analysis in the Project Management Manual.

Create Project Delivery Plan [PDP]: The PDP is a comprehensive document that deals with all aspects of the delivery, including project management. With the initial PDP, the PM presents their project understanding and approach to the Project Sponsor. By reviewing and approving the PDP, the Project Sponsor accepts the delivery approach and resource requirements. After approval, the PDP becomes the roadmap for carrying out, monitoring, controlling, and reporting on the work.

Create Issue Log: Tabulate and track all project issues and resulting decisions on the project communications.

Create Commissioning Strategy: A Commissioning strategy may not be applicable to all projects, however commissioning requirements may be product-specific, and the PM should

communicate with the Business Owners and experts on a strategy so that assets can be transferred to operations, where coordination of a number of parties is required, including the Business Owner, Operator, Consultant, Contractors, trades people, utilities staff, suppliers, permitting agencies, and, potentially, third-party testing and commissioning firms.

Update Business Case/Plan: The phase gate approval process adopted for the Project Management Manual [PMM] requires the business case to be verified, updated or finalized at the early phases of the project, and benefits confirmed for the later phases.

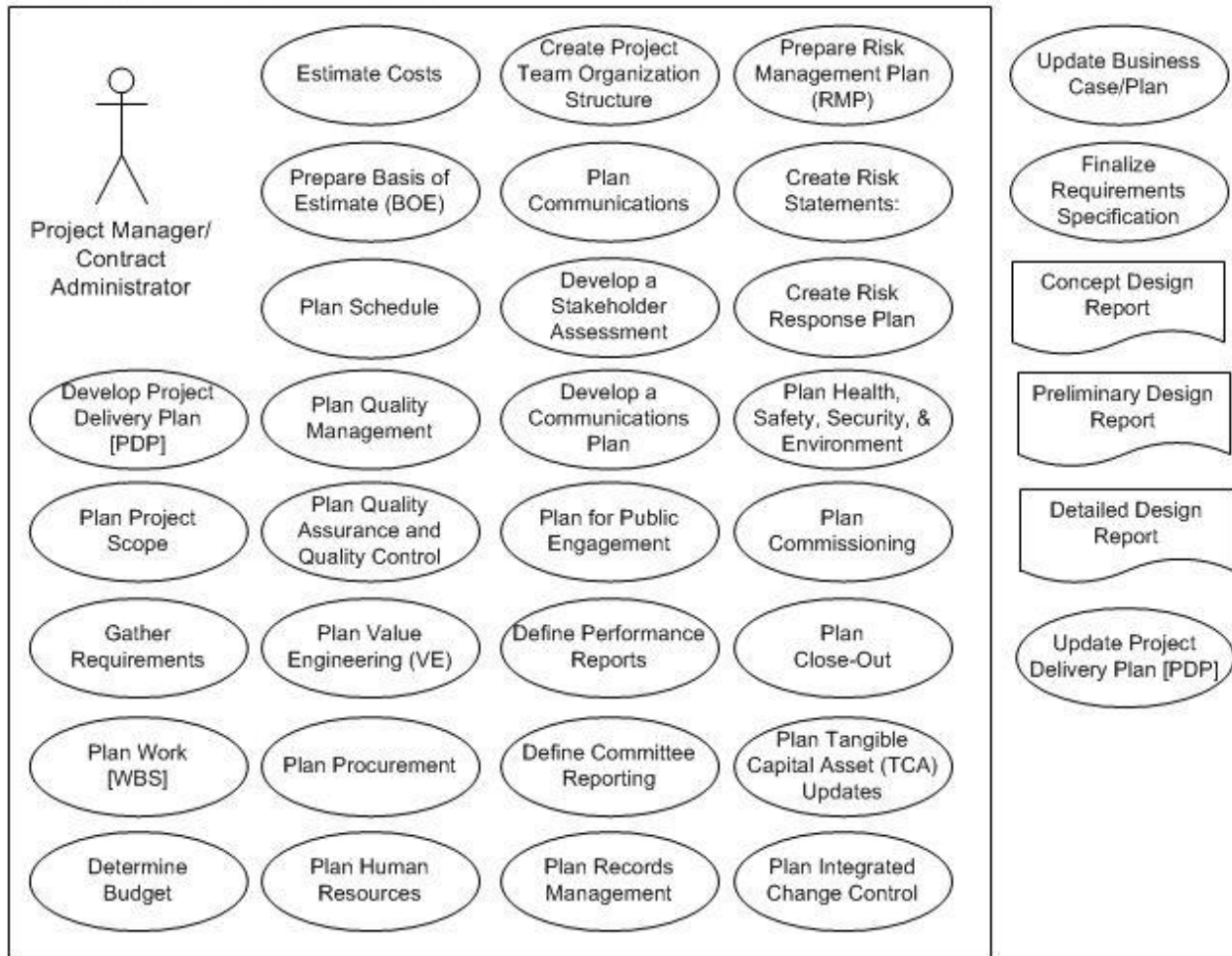
Endorse the Project Charter: The project charter gives the Project Sponsor's instructions for delivering the project to the PM, whose skills and expertise are used to develop the details, carry out the work, and fulfil the Project Sponsor's expectations. The Project Sponsor's endorsement of the project charter confirms the corporate/departmental expectations for the project and commits the resources needed for completion.

Start New Phase of the Project: Prior to starting the planning sub-phase of the project delivery, the following should be completed / in place.

- Project Sponsor in place
- Project Manager in place
- Committee (if required) appointed and in place
- Project Charter - completed and signed by the Project Sponsor and Project Manager
- Key Stake Holder Analysis completed

8.2.2 Project Delivery Framework Execution Planning Sub Phase Use Cases

Project Delivery - Planning Sub Phase



Develop Project Delivery Plan [PDP]: The PDP applies to two project delivery approaches, either Consultant or in-house-delivered. In either case the PDP covers the City's project planning. With the consultant-delivered approach, the Consultant has a subproject within the City's project. The City's PDP defines the nature and extent of the consultant's services however the Consultant provides the details of the product planning and associated project management in a project execution plan (XP), which complements the PDP. With the in-house-delivered approach, the PDP includes product planning and delivery details. The PDP provides the PM, project delivery team, Project Sponsor, and stakeholders a common understanding of the work plan and planning requirements throughout the project.

Plan Project Scope: All project definitions begin with a scope statement. The scope statement is an overview that describes the project and its product. It provides a common understanding of what is included and what is not included in the project. The PM is responsible for developing details of the scope defined in the business case and project charter. The project charter describes the product, service, or result to be delivered, and may identify key project objectives

and deliverables. Further development includes identification of the delivery approach, project implementation phases, and support service requirements.

Gather Requirements: Gathering requirements is the process of determining “what” the project needs are. This process can vary depending on the nature of the work required; a new Water Treatment Plant has much different requirement than an IT desktop renewal initiative. The standard tools and techniques are employed to facilitate and document project requirements.

Plan Work [WBS]: Work planning involves development of a number of project management and product work plans for a defined scope. The work plan is a collection of all the project components, arranged according to a work breakdown structure (WBS). The work planning process requires hands on effort by the PM, expert judgement and preferably with the input from an experienced team.

Determine Budget: The total funds authorized to execute the project is termed the “budget.” The budget is critical for work planning, progress and performance reporting. All business cases proceeding to implementation are accompanied by an approved budget, which cannot be changed without further formal approval.

Estimate Costs: Estimating costs is the process of developing an approximate value of the monetary value needed to complete the project component. The initial cost estimate is provided from the Business Case (from the pre-project phase) and updated by the PM based on development of the PDP). As the project proceeds and additional information becomes available the PM will also be responsible for developing, updating, compiling and reporting a number of intermediate cost estimate updates at different phases of the project for input to approval processes.

Prepare Basis of Estimate (BOE): The BOE should clearly and concisely indicate the purpose and scope of the estimate, pricing basis, methodology, allowances, and classification of estimate, other assumptions and any deviations from standard practices. In addition to providing the background for development of the cost estimate it is intended to support review and validation of the estimate.

Plan Schedule: Every project must have at least one schedule. The schedule developed by the PM at the outset of the project and reported in the PDP is the master schedule for the entire delivery chain and encompasses all the project components whether in detail or rolled up. It must commence from the date the project charter is approved and continue to the end of the project close-out phase.

Develop Project Quality Management Plan (PQMP): The project quality management plan documents the quality requirements for the project and product, and how the project will achieve compliance.

The skills and qualifications of the resources providing services greatly affect planning for and delivering quality requirements. The quality management plan must therefore also specify selection of a suitable delivery team.

Plan Quality Assurance and Quality Control: The QA and QC processes are required for every project. The expectation is for the PM to use these tools to plan, arrange, monitor, and administer the project to a standard that meets the project quality requirements. The QA/QC plans and their monitoring may be assigned to a QA/QC manager or be undertaken by the PM. Reviews must be undertaken by someone other than the person who performed the work.

Plan Value Engineering (VE): Value engineering (VE) is a technique that can be used on most projects to increase value and should be considered for all large projects. VE identifies unnecessary costs for products and services that can be reduced, while still ensuring that quality, reliability, performance, and other critical factors meet or exceed customer expectations. It seeks to develop best-value solutions, not necessarily lowest capital costs.

Plan Procurement: Part of the business case development. The delivery method should be reviewed as part of the Planning phase and a more in-depth analysis may be warranted. Refer to Figure 5-7: *Process Decision Chart for Procurement Planning* in the [PMM](#).

Plan Human Resources: The human resources planning process includes identifying the organizational structure for the project, the resource requirements, and roles, responsibilities, and authority for project delivery.

Create a Project Team Organization Structure: A human resources plan is recommended for each project to define the specific organizational features and identify personnel assigned. The human resources plan includes the following components:

- An organization chart.
- A list of roles and responsibilities for the project positions.
- A resource matrix detailing the time allocations for each individual on a task-by-task basis.

Plan Communications: Communications planning is the process of determining the project information needs and defining the approaches to be used. The communications plan documents the project approach, with the information in a specific format, provided at the right time, and limited to only what is needed. The PM is responsible for the project communications plan.

Develop a Stakeholder Assessment: The stakeholder assessment is first developed in the Initiation phase and continues to develop.

Develop a Communications Plan: The core of the communication plan defines who will communicate with whom (stakeholder assessment) and who will receive what information when (communication plan). An essential output from the communication planning process will be defining a balance between too much or too little communication.

Plan for Public Engagement: Winnipeggers expect to be involved in the decisions that affect them and their city, including determining what is important to them and how their community grows and develops. “Public Engagement” encompasses the range of activities that support this relationship between the City and its community members.

Define Performance Reports: Once the communications plan has been established, the PDP must identify the reports and the reporting format for the project. The Project Management Manual identifies the specific performance reports that will be used in the City of Winnipeg.

Define Committee Reporting: FM-004 requires the administration to report to the Council quarterly on all Consultant contracts. A standard report is available from the City’s website at:

[Consultant Information Page](#)

FM-004 identified a report that must be submitted quarterly in the standard format with no exceptions on project > \$10 million. The PM must ensure the accuracy of reports as they pertain specifically to each Consultant assignment and project.

Plan Records Management: Projects must be managed in accordance with a comprehensive records management system managed by the owning business unit. The primary objectives for a system of this type are to:

- Provide an efficient and intuitive document identification system
- Store all related documents efficiently so they can be readily retrieved
- Record the history of each document including versions, approvals, and certifications
- Minimize the cost and time of records management
- Facilitate provision of records to stakeholders for all aspects of the project

For the City, the Freedom of Information and Protection of Privacy Act (FIPPA) and the Records Management By-law No. 86/2010 define a record as “any kind of recorded information that is created or received by, or in the custody or control of, the City regardless of its physical form or its characteristics.”

Prepare Risk Management Plan (RMP): The PM produces a RMP and manages it throughout the project. The RMP is regularly updated and reported to the project team, Project Sponsor, Project Advisory Committee or Major Capital Project Steering Committee.

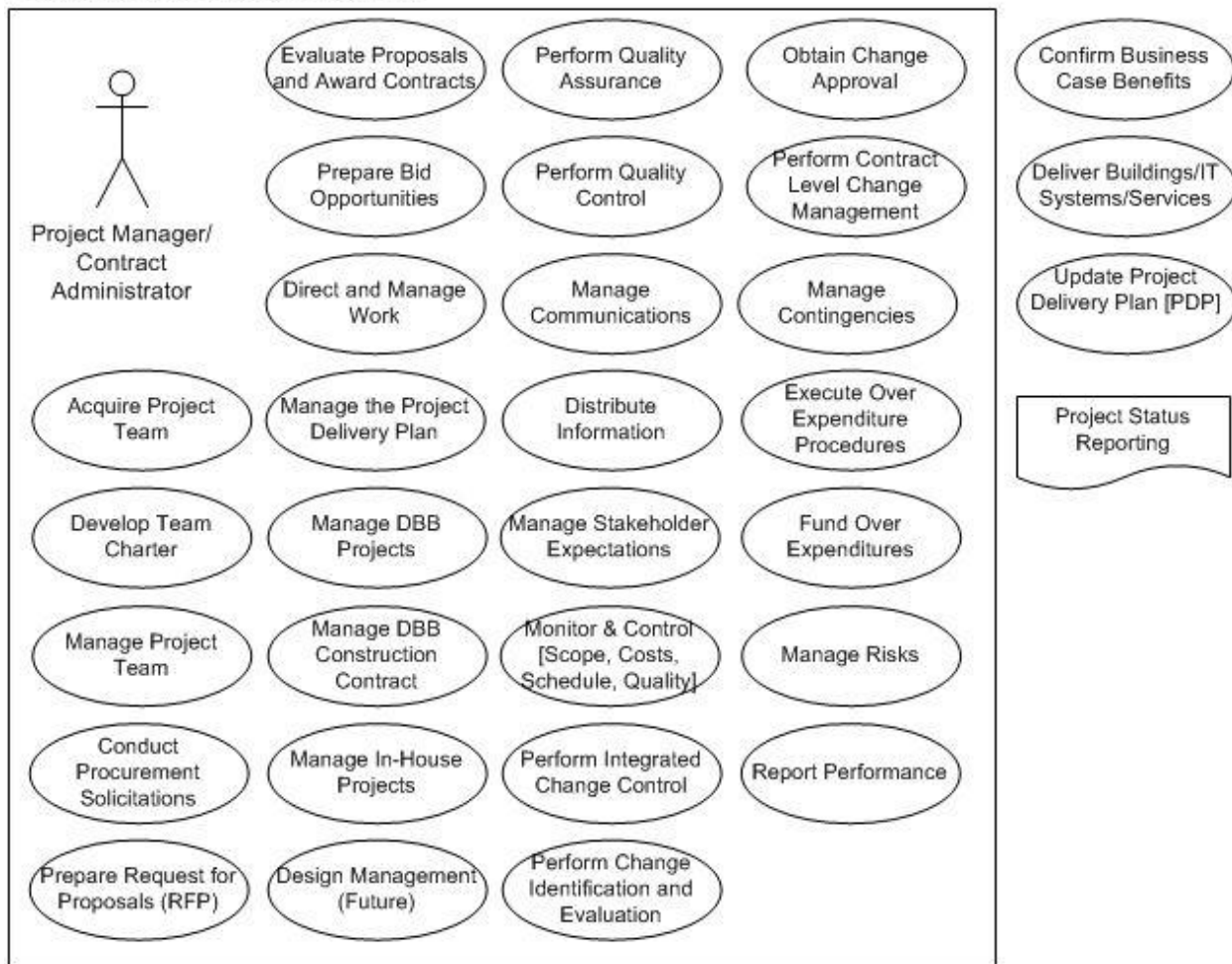
Create Risk Statements: Properly structured risk statements aid in developing and tracking the responses. A template for the Risk Management Plan is provided in Appendix B of the [PMM](#).

Create Risk Response Plan: Risk responses are developed after the risk events have been identified and prioritized. Not all risks require formal risk response plans. The level of effort to identify response strategies and follow-up risk management depends on the level of risk.

Plan Health, Safety, Security, and Environment: The Manitoba Workplace Safety and Health Act (WHSa) require employers to develop workplace safety and health criteria to evaluate, select and monitor contractors working at the workplace. Details can be found on the City’s website at [Safety & Health](#).

8.2.3 Project Delivery Framework Execution Delivery Sub Phase Use Cases

Project Delivery - Delivery Sub Phase



Acquire Project Team: The PM, in consultation with the Project Sponsor, is responsible for identifying candidates to fill the roles identified on the project organization chart. For senior positions and most support functions, the roles are filled by personnel who already have organizational responsibility for a related function, and a candidate selection process is not required.

Develop Team Charter: The project team uses the process of team chartering to define itself. Team chartering takes place early in the project, however, after the PDP has been developed and approved and the team members have been selected. The main goal of team chartering is to increase the probability of success.

Manage Project Team: Managing the project team is the process of engaging and communicating with team members, developing the team, building relationships, fostering teamwork, motivating the team, coordinating input and feedback, resolving issues, and celebrating successes.

Conduct Procurement Solicitations: Most procurement for large projects will be through solicitation of competitive offers.

Prepare Request for Proposals (RFP): An RFP is an invitation for bidders to submit proposals to the City to perform specific work, while the vendor's proposal in response to the RFP is an offer of the services. The first step in preparing an RFP is to access the City's website for up-to-date documents. The PM is responsible for RFP preparation, including identifying requirements, preparing the document, coordinating selection team input, issuing the request, and communicating with bidders.

Evaluate Proposals and Award Contracts: Competitive proposals received from bidders must be treated equally and evaluated fairly in accordance with the evaluation criteria and methods stipulated in the RFP. The proposals are evaluated by an Evaluation Committee, which must commit to proposal review, scoring (individual and consensus) and attendance at interviews, if applicable.

Refer to Figure 6-2: Procurement – Solicitation: Bid Approval and Figure 6-3: Procurement – Solicitation: Award of the [PMM](#).

Prepare Bid Opportunities: The City uses a formal bidding process to solicit offers for a wide variety of purchases, in addition to offers of consultant services. These offers include bids for construction contracts, services, and the supply of goods. All these purchases fall under the Materials Management Policy and are subject to the additional conditions stipulated under Administrative Standards. Refer to Figure 6-1: Procurement- Solicitation: Bid Solicitation, Receipt of Bids of the [PMM](#).

Direct and Manage Work: Directing and managing work involves a variety of activities, such as managing the team, directing project communications, reviewing project deliverables, making decisions, and generating and providing project data. Contract administration for Consultants, Construction Contractors, and third-party Contractors is similar. Each is a type of vendor that has a contract with the City, and contract administration for any of the three involves managing the work provided in accordance with the terms and conditions of the contract.

Manage the Project Delivery Plan: The project management work is defined in the PDP is based on an overarching plan for project management and delivery, encompassing the entire

project delivery chain to be managed by the PM. The PM is responsible for acquiring a project team and directing their work assignments, including scope of services, level of effort, and expectations. The PM confirms that the services are being provided and delivered as required to meet the objectives of the business plan.

Manage Design-Bid-Build (DBB) Projects: For consultant delivered DBB projects, the CA (Note: per section 5.6 the role is designated as “contract project manager”) must administer the Consultant’s contract. Maintaining focus on the unique product, service, or result is of paramount importance, since the project is undertaken to achieve a benefit as defined in the business case.

Manage DBB Construction Contract: These contracts are the most common method of delivery for construction projects and are used for consultant and in-house delivery. They also have unique contractual arrangements for the construction contract. For consultant delivered DBB contracts the Consultant usually provides resident and non-resident contract administration services with authority for Contract Administration granted to the Consultant by the City under the General and Special Conditions. The GCs define the Contract Administrator as “the City’s representative throughout the duration of the contract” and state that the administrator “shall have authority to act on behalf of the City to the extent expressly provided for in the contract.” The person or firm filling the role is identified in the SCs of the bid opportunity.

Manage In-House Projects: The project management processes for in-house delivery are the same as for consultant projects, using the planning processes and outputs described in Section 5 of the [PMM](#). The main difference is that City staff takes on the technical role and produce services, results, or product deliverables such as conceptual designs, detailed designs, and drawings and specifications for construction projects.

Design Management: Refer to Appendix E of the [PMM](#) for information on Design Management Quality procedures.

Perform Quality Assurance: Quality Assurance is performed in accordance with the PDP quality plan. QA is an inherent requirement of the PM. The expectation is for the PM will develop the PDP according to the [PMM](#).

Perform Quality Control: Quality Control (QC) involves preparing and following the plans identified in the PDP and carrying out the QC methods and techniques defined in the quality management plan.

Manage Communications: Managing communications is the process of distributing information, carrying out stakeholder communications, and managing stakeholder expectations. The execution follows the detailed communications plan listed in the PDP.

Distribute Information: The “distribute information” process involves carrying out the communications defined in the PDP communications plan. New data are produced continually during project execution and the data and information must be reported and distributed as identified in the plan.

Manage Stakeholder Expectations: Managing stakeholder expectations involves planned and unplanned communications with stakeholders to minimize their concerns and influence their expectations. The objective is to increase the likelihood of project success; goals are to resolve issues, build trust, increase buy-in, and overcome resistance to change.

Monitor and Control [Scope, Costs, Schedule, and Quality]: Once the baseline plan has been developed and execution is underway, the PM manages any variance to the baseline. Controlling scope is the process of monitoring the status of the project scope and managing changes. Controlling costs is the process of monitoring the financial status of the project and managing changes. The PM must proactively monitor and manage costs, reviewing the project routinely to confirm that costs and expenditures are as planned. Controlling the schedule is the process of monitoring the project and product schedules and managing changes. The schedules are defined in the PDP and in the consultant and construction contracts. It is the PM’s responsibility to proactively monitor and forecast the schedule. Quality Control is performed throughout the project, and is monitored and recorded to assess performance and recommend changes. Quality standards are used for the monitoring and controlling processes.

Perform Integrated Change Control: The [PMM](#) identifies a comprehensive change process applicable to the entire project delivery chain. Refer to Figure 7-3: Integrated Change Control—Project Change Control Process Chart.

Perform Change Identification and Evaluation: In the identification and evaluation stage, the source and type of the change must be recorded in the request for information (RFI) log, which is used to manage all identified issues and track their disposition. Changes can be triggered by a variety of sources, including contract changes, or from stakeholder or Business Owner requests.

Obtain Change Approval: The approval hierarchy for each project may be different and should be defined in the PDP. According to FM-002: [FM-002](#), the revision notice cannot be approved unless sufficient funds exist for the change. Therefore, the PM must decide when to process the revision notice considering funding availability and the need for the change to proceed.

Implement Change: If funding has been obtained, the revision notice can be formally approved. Once approved, it becomes a change order that can be entered into the change log and cost tracking systems. If the change is for a contract, the PO will need to be increased.

Perform Contract Level Change Management: Refer to Change Management Process - Contract Level section and Figure 7-5: Integrated Change Control—Contract Level Change Control Process of the [PMM](#).

Manage Contingencies: Changes are recognized as a reality in project delivery, and the change process is an industry accepted practice. Most projects are setup with contingency budgets to accommodate moderate changes.

Execute Over Expenditure Procedures: Procedures for over expenditures and the delegated authority to approve them are set out in Appendix 7 of Administrative Standard FM-002.

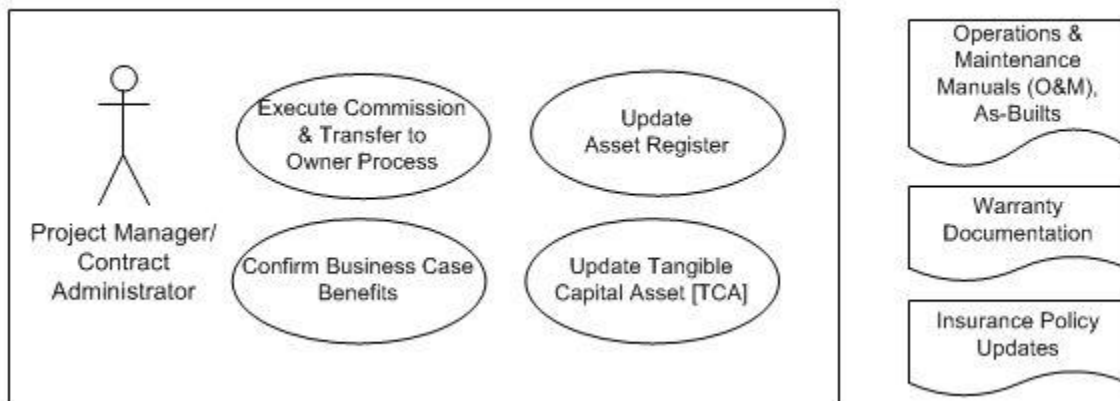
Fund Over-Expenditures: FM-004 authorizes departments to transfer funds from a non-specified capital account to cover over expenditures.

Manage Risks: Monitoring and controlling risks is the process of implementing risk response plans, tracking identified risks, and identifying new risks. Risk management must be carried out according to the RMP schedule, which at a minimum includes reporting to the Project Sponsor, Major Capital Project Steering Committee and/or Project Advisory Committee at the start of all new project phases or as defined in the PDP.

Report Performance: Report performance is the process of collecting and distributing performance information, including measurements, status reports, and forecasts. Routine project management activities include collecting information such as reports and logs that can be used for tracking and evaluating performance. The PDP defines standard reports generally required for every project and ad-hoc reports required for specific projects.

8.2.4 Project Delivery Framework Execution Transfer Sub Phase Use Cases

Project Delivery – Transfer Sub Phase



Confirm Business Case/Plan: The business case contains specific information and metrics that are unique to each project. The business case is updated by applying new information to the existing information, such as actual costs, and refined benefit estimates. It is important that the updates be based on the same baseline metrics to enable meaningful and credible comparisons.

Execute Commission & Transfer to Owner Process: Many projects have special procedures that must be completed to provide the Business Owner with the information it needs to successfully take ownership of the operation and maintenance of the work. The PM coordinates with the Business Owner in planning and preparations for the information transfer, commissioning, and start-up of new work. Operating budgets are established and operational staff is trained to take over, operate and maintain the product or service. Refer to Appendix A: Procedures and the Transfer / Commissioning Phase - DBB procedure in the [PMM](#).

Update Asset Register: The Asset Management Manual requires asset information to be captured in an asset register. If maintenance management systems are used, the asset information must also be recorded in the system and the operations and maintenance procedures must be documented. This function may be carried out by the Contractor, the Consultant, or the City, with the approach pre-established and identified in the PDP.

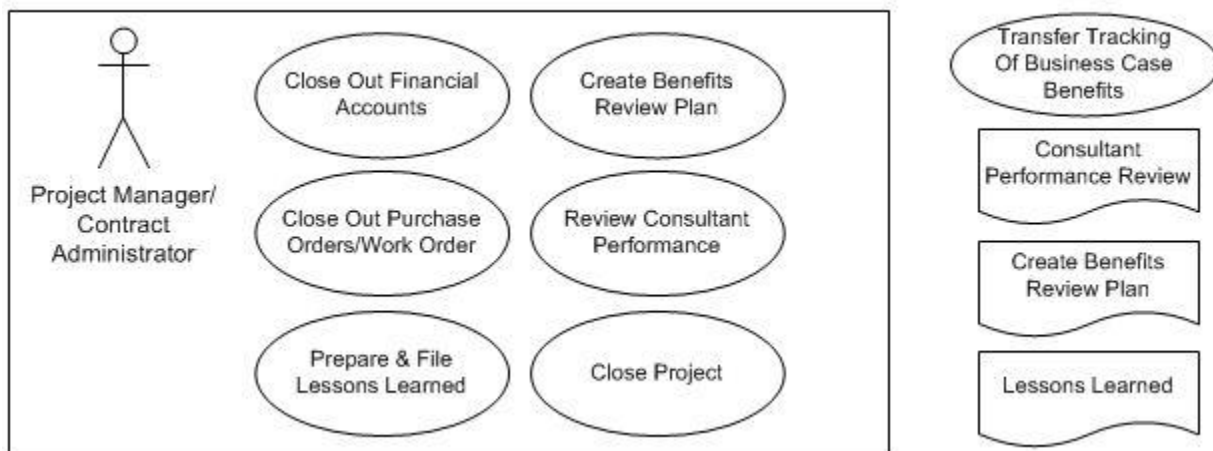
Update Tangible Capital Asset: The City maintains a register of its tangible capital assets consistent with public sector accounting requirements that must be updated with any additions or deletions that would typically occur during capital projects.

Warranty Documentation: Ensure warranty information is delivered and filed.

Insurance Policy Updates: Ensure insurance policies are updated and filed.

8.2.5 Project Delivery Framework Close-Out Phase Use Cases

Project Delivery – Close Out Phase



Close-Out Financial Accounts: Perform the necessary PeopleSoft tasks to close the project financially.

Close-Out Purchase Orders/Work Orders: Perform the necessary Contract Administration and PeopleSoft tasks to close any Purchase Orders/Work Orders.

Review Consultant Performance: FM-002 states that Consultant performance evaluations should occur at least annually and that the review should be kept on file. The evaluation process identifies and quantifies the City's expectations of the consultant's service.

Prepare & File Lessons Learned: Identifying lessons learned is an important part of the continual improvement process for both the Consultant and the City. The process identifies the causes behind the aspects that worked well during the project and those that did not. Once enough lessons learned information has been gathered, recommendations can be made for changes, and the PMM is updated to capture the improvement.

Benefits Review Plan: Create a Benefits Review Plan to transfer responsibility of benefit tracking to the appropriate parties.

Close Project: In the "close project" phase, all activities across the project management process groups are finalized to formally complete the project phase. A PDP status report summarizing project delivery is prepared along with either the business case update or benefit validation. The final process is to close the project. Final closure can be extended well beyond commissioning and start-up because of deficiencies, finalization of manuals and as-built drawings, transfer of documents, and administration of the warranty period.

9 Process Flow Overview – TO BE SYSTEM

The process flow overview depicts the core high level process flows that involve the PPMS solution.

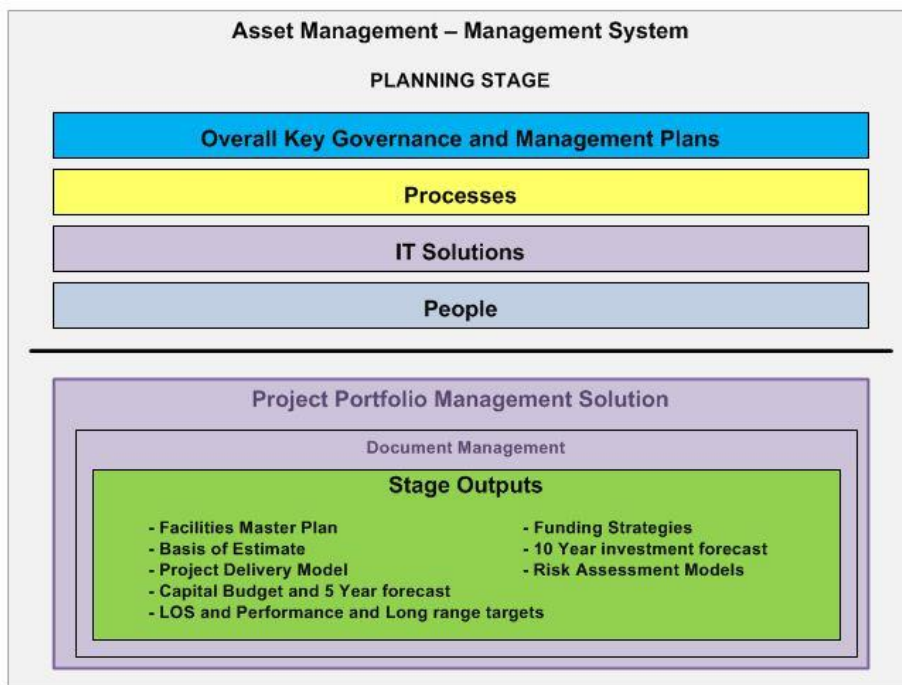
9.1 Asset Management System: Planning Stage

The Asset Management – Management System is divided into the four phases of the asset lifecycle:

1. Planning
2. Project Delivery
3. Operations and Maintenance
4. Decommissioning & Disposal

Each of these phases is governed by a number of core documents, guidelines, and administration manuals and standards, guiding the policies and principles related to Asset Management. Procedures governing the management of city-owned assets are being implemented within responsible business units. These processes generate a number of outputs, such as plans, reports, contracts, asset registers, etc., used to drive concrete actions focused on the planning, delivery, maintenance, operation and decommissioning of assets under their control.

The proposed PPMS scope with respect to the Asset Management Planning Stage is to manage the final documents that are produced by the Asset Management and Investment Planning processes and used in creating the Capital Investment Plan and the Annual Budgeting Process.



9.2 Investment Planning Processes

This process involves each department performing asset management tasks to support their investment planning activities. The resultant defined levels of service, performance management metrics, and asset management plans, will influence department capital budget development and long-range investment planning.

The “to be” process involves each department performing their respective investment planning and creating the resultant departmental investment planning artifacts to guide asset management and long-range planning. To obtain the artifacts, departments are to implement the Asset Management Investment Planning Framework components [See [Investment Planning Process](#) Section].

9.2.1 Level of Service To-Be Process

1. State of Local Infrastructure Report Creation

The State of Local Infrastructure report provides an up to date view of the Department’s current asset portfolio. The high-level information requirements can be broken in to three components:

1. Details of the Asset Inventory – What does the City own?
2. Valuation of the Asset Base (Replacement Value) – What is it worth?
3. Condition/Performance of the Asset Base – What Condition is it in?

The State of Local Infrastructure contains detailed information on the asset base managed by the department, including inventory data, condition and levels of service, replacement and book value, average remaining life, etc. for key assets.

State of Local Infrastructure Report



Refer to the [Asset Management Plan Framework & Guideline](#) for guidelines in developing State of Local Infrastructure artifact.

2. Level of Service Definition Process

A Level of Service framework links technical measures to customer outcomes and corporate business goals, establishing meaningful performance measures with which to evaluate and track service levels, and quantify gaps and risks to delivery. Across the City, the Asset Management Investment Planning process ties infrastructure needs to service outcomes, and develops and prioritizes effective investments based on their impact to service and other priorities, and their value to the City.

- The Investment Planning Framework primarily focuses on relating infrastructure investments to tangible Customer Level of Service outcomes.
- Clearly defined Levels of Service are defined and used to evaluate infrastructure’s current performance relative to established goals.

The Customer Level of Service Development process consists of five sub-processes, which are described below.



The Investment Planning Manual provides a detailed methodology for developing a comprehensive suite of Level of Service indicators. Refer to the [Investment Planning Manual](#).

9.2.2 Level of Service Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Investment Planning Level of Service process.

#	Section	Requirement Narrative	Category
001	Level of Service Process	Should support the capability to provide a repository and the supporting document management functions to host Departmental Documents\Artifacts related to Investment Planning including but not limited to: <ol style="list-style-type: none"> 1. State of Local Infrastructure Report. 2. Levels of Service Definitions. 	Document Management

The City of Winnipeg Investment Planning Manual is supported by the following Templates:

- Service Level Agreement Template - [Service Level Agreement](#)

9.2.3 Strategic Planning To-Be Process

1. Asset Management Plan Creation

An Asset Management Plan (AMP) documents an organization’s strategy for meeting defined service objectives through strategic infrastructure investment and business change over time. The City of Winnipeg is still in the process of developing formal business processes for:

- Strategic Asset Management Plan (future – the plan to create Departmental Asset Management Plans is scheduled to complete in 2016.)

Asset Management Plan Creation

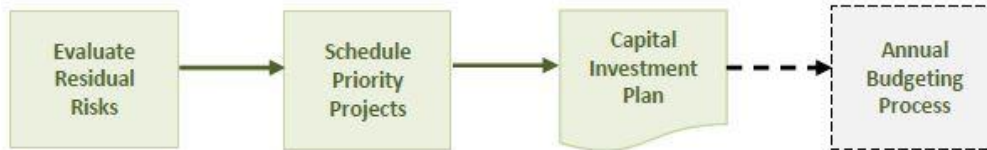


Refer to the [Investment Planning Manual](#).

2. Investment Planning Process

The Investment Planning process involves each department’s identifying an investment need, determining the best whole-cost solution (BC), and developing a prioritized Investment Plan. This process involves the Multi-Criteria Prioritization (MCP) model, the assessment of residual risks, the application of appropriate mitigation measures, and the development of a prioritized Capital Investment Plan (CIP), which provides direction for the City’s Annual Budgeting Process.

The following process guides the development of a Capital Investment Plan which is used to feed the City’s Annual Budget Process.



Refer to the [Investment Planning Manual](#).

3. Annual Budgeting Process

The Annual Budgeting process is responsible for providing a sound annual and longer term financial resource plan to the City of Winnipeg. At a high level, the public is consulted on their opinion of where budget dollars should be allocated, as well as provided a satisfaction survey to gather additional public information. This information is used in conjunction with departmental plans to create an initial [submission] budget. The budget is reviewed by Standing Policy Committees as well as the Executive Policy Committee and recommendations are offered. Recommendations are finalized by the Executive Policy Committee and forwarded to Council who debate, amend, and then adopt the operating and capital budgets received from the Executive Policy Committee.

Annual Budgeting Process



Budget Process is referred to in: [2015 Adopted Budget Operating and Capital - Volume 2](#)

4. Performance Management Measurement Creation

This process documents the measures that have been established to track the Investment Planning Framework application and the value realized through its application. The City’s

performance measurement framework uses three types of measures including historical data for trending purposes:

Service Level Statistics

- Provides an indication of the service/activity levels, by reflecting the amount of resources approved by City Council or the volumes of service delivered to residents.

Effectiveness Measures

- Measures the quality of service delivered relative to service standards or the customer's needs and expectations.

Efficiency Measures

- Compares the resources used to the number of units of service provided or delivered. Typically this is expressed in terms of cost per unit of service.

Performance indicators are being used as a tool to:

- Enhance accountability to citizens of Winnipeg.
- Improve service delivery.
- Assist in sharing of better practices with other municipalities.

The City of Winnipeg participates in is the Ontario Municipal Benchmarking Initiative (OMBI). OMBI is a collaboration of 16 municipalities from Ontario, Alberta and Manitoba, led by Chief Administrative Officers and City Managers, which fosters a culture of service excellence in municipal government by measuring, sharing and comparing performance statistics and operational practices.

Performance Management Measurement



Refer to the 2016 Budget: [Community Trends and Performance Report - Volume 1](#)

9.2.4 Strategic Planning Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Investment Planning Strategic Planning process.

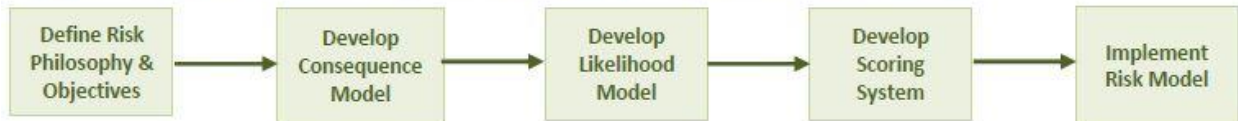
#	Section	Requirement Narrative	Category
001	Strategic Planning Process	Should support the capability to provide a repository and supporting document management functions to host Departmental Documents\Artifacts related to Investment Planning including but not limited to: <ol style="list-style-type: none"> 1. Transportation Master Plan 2. Library Master Plan. 	Document Management

9.2.5 Asset Risk Assessment To-Be Process

1. Needs Assessment Process

Evaluate service risks and opportunities to identify investment needs.

The process below is intended to guide the development of a Risk Assessment model.



Refer to the [Investment Planning Manual](#).

9.2.6 Asset Risk Assessment Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Investment Planning Asset Risk Assessment process.

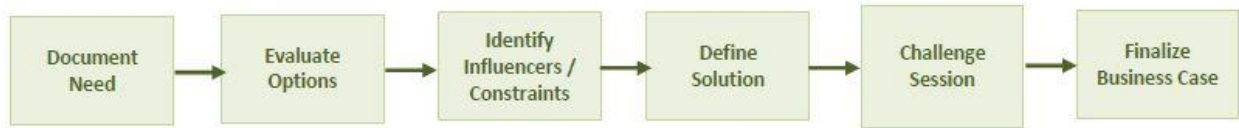
#	Section	Requirement Narrative	Category
001	Asset Risk Assessment Process	Should support the capability to provide a repository and the supporting document management functions to host Departmental Documents\Artifacts related to Investment Planning including but not limited to: <ol style="list-style-type: none"> 1. Asset Risk Assessment Models (Strategic, system and Asset risk assessments) 	Document Management

9.2.7 Business Case Evaluation To-Be Process

1. Business Case Evaluation Process

Business Cases are meant to serve as a consolidated information source for each investment, documenting needs, evaluating options, identifying influencers and constraints, and defining the solution.

The following process details the Business Case development and validation process.



Refer to the [Investment Planning Manual](#).

9.2.8 Business Case Evaluation Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Investment Planning Business Case Evaluation process.

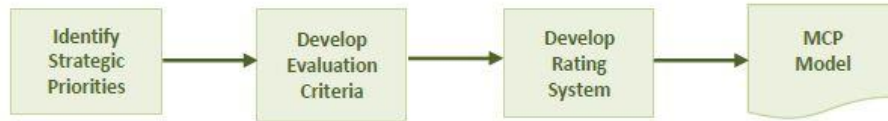
#	Section	Requirement Narrative	Category
001	Business Case Evaluation Process	Should support the capability to provide a repository and support document management functions to host Departmental Documents\Artifacts related to Investment Planning such as [but not limited to]: <ol style="list-style-type: none"> 1. Business Case/Plan. 2. Needs Assessment. 3. Basis of Estimate. 4. NPV and Benefit calculation Template 	Document Management
002	Business Case Evaluation Process	Should support the capability to capture specific Business Case information (text and financial) that will support project evaluation, prioritization, and execution. Such as but not limited to the attributes contained in the: NPV and Benefit calculation Template: <ul style="list-style-type: none"> • NPV Option. • Total NPV. • Cash Flow Year • Cash Flow Amount. 	Project Data
003	Business Case Evaluation Process	Must support the creation of Investment Requests. All investment requests will be assigned a unique ID and Investment Request information to support the initiation and development of an Investment Plan for years 1 – 10.	Project Data

004	Business Case Evaluation Process	<p>Should support the capability to capture specific Basis of Estimate information (text and financial) that will support project evaluation, prioritization, and execution. Such as but not limited to the attributes contained in the Basis of Estimate Template:</p> <ul style="list-style-type: none"> • Project Name. • Estimator(s). • Estimate Description. • Estimating methodology and cost basis. • Assumptions. • Classification of Estimate. • Basis for Contingency and Allowances. 	Project Data
005	Business Case Evaluation Process	<p>Should support the capability to capture of Business Case/Project Cost/Benefit information. Such as but not limited to the attributes contained in the Business Case Evaluation Template:</p> <ul style="list-style-type: none"> • Project or Program Name • Business Case ID [<i>supporting the form: BC_department_business_unit_year_sequential#; e.g. BC_WWD_AM_2014_0014</i>] • Department/Division/Branch 	Project Data
006	Business Case Evaluation Process	<p>Should support the capability to set constraint levels on minimum/maximum funding allocation (e.g. for a Project, Business Unit, Department. Etc.).</p>	Project Data
007	Business Case Evaluation Process	<p>Should support the capability to capture Capital Forecast and Projection information/data Such as but not limited to the attributes contained in the Long-Term Capital Projections Template.</p>	Project Data
008	Business Case Evaluation Process	<p>Should support the capability to capture and track multi-year project budgets. Such as but not limited to:</p> <ul style="list-style-type: none"> • Total Authorized budget • Forecasted Budget • Approved Budget in subsequent years. 	Project Data

9.2.9 Investment Plans Prioritization To-Be Process

1. Multi Criteria Prioritization (MCP) Model Creation

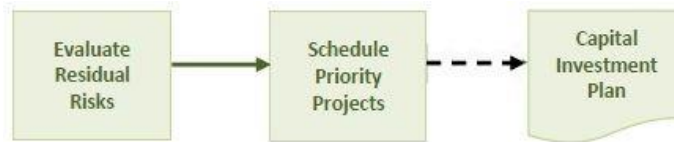
A Multi Criteria Prioritization (MCP) approach is used to evaluate a project’s contribution to a range of service and business priorities. By comparing these benefits to the project’s costs, its relative efficiency can be assessed. Ranking projects based on their respective cost-benefit ratio identifies the best-value Investment Plan for a given level of funding.



Refer to the [Investment Planning Manual](#).

2. Apply MCP Prioritization Process

The Departmental Investment Planning process involves the application of the previously defined MCP prioritization model, assessment of residual risks and application of appropriate mitigation measures are used to develop prioritized capital investment plan for the department.



Refer to the [Investment Planning Manual](#).

9.2.10 Investment Plans Prioritization Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Investment Planning Investment Plans Prioritization process.

#	Section	Requirement Narrative	Category
001	Investment Plans Prioritization Process	Should support the capability to prioritize projects at multiple organizational levels (business unit, division, department, etc.).	Project Data
002	Investment Plans Prioritization Process	Should support the capability to manage/note and maintain investment/project dependencies.	Project Data
003	Investment Plans Prioritization Process	Should support the capability to perform prioritization scenario modelling. Support modelling based on but not limited to: <ul style="list-style-type: none"> • The combination of approved budgets. • The forecasted spending amounts. • Uncommitted (available funding) where such budgets and funding may result from one or many funding sources. 	Scenario Modelling

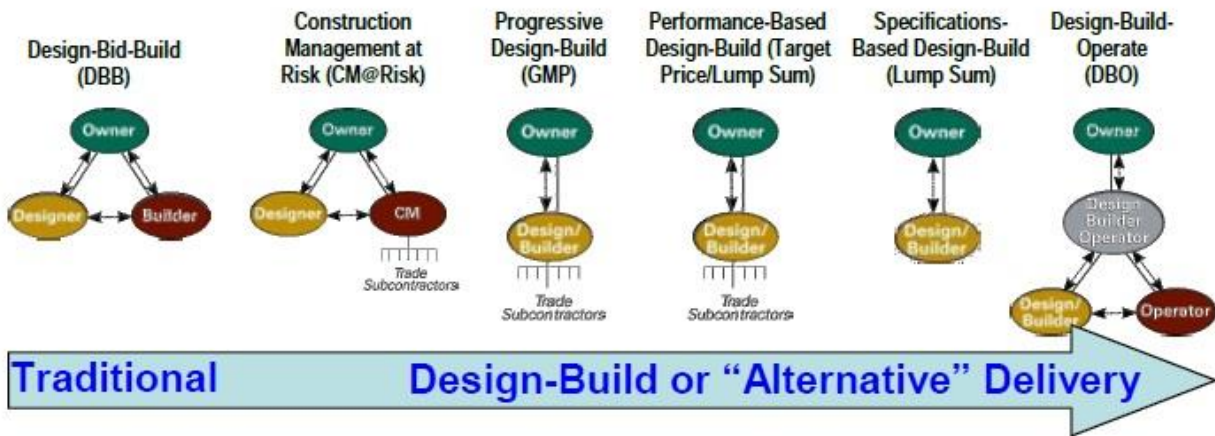
004	Investment Plans Prioritization Process	Should support the capability to allow the user to make scenario adjustments and have the solution report on the resultant impact of changes to project prioritization.	Scenario Modelling
005	Investment Plans Prioritization Process	Should support the capability to save and compare funding scenarios.	Scenario Modelling
006	Investment Plans Prioritization Process	Should support the capability to Optimize\Recommend funding allocations across funding sources.	Scenario Modelling
007	Investment Plans Prioritization Process	Should support the capability to combine and order "sets of projects" together based on a criteria, to perform scenario modelling against.	Scenario Modelling
008	Investment Plans Prioritization Process	Should support the capability to Warn/Alert users when project risks or gaps are found due to prioritization scenario modelling.	Scenario Modelling
009	Investment Plans Prioritization Process	Should support the capability to generate "what-if" scenario reports during prioritization scenario modelling.	Scenario Modelling
010	Investment Plans Prioritization Process	Should support the capability to manually override priority rankings during prioritization scenario modelling and audit\track any changes made.	Project Data
011	Investment Plans Prioritization Process	Should support the capability to identify all projects that have a significant IT or HR-related component, even if they are not initiated in Corporate Support Services.	Project Data
012	Investment Plans Prioritization Process	Should support the capability to provide a workflow process that will ensure Risk Management is engaged in the initial steps of Investment Planning to provide input into evaluating the Total Cost of Risk.	Workflow
013	Investment Plans Prioritization Process	Should support the capability to establish a parent-child (dependency) relationship between proposed projects (future years) and in-flight projects (current year).	Project Data

014	Investment Plans Prioritization Process	Should support the capability to identify cross department dependencies of proposed projects e.g. impacts of a planned water-main renewal project to the street/road improvement plans.	Project Data
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9.3 Project Delivery Methodology To-Be Process

As per the [Project Management Manual](#) Appendix C: Alternative Project Delivery, implementing an effective project procurement and project delivery system for a complex infrastructure project requires an understanding of a wide spectrum of proven contracting methodologies and accompanying insight to how varying methodologies can align with specific project needs and risk allocations. Appendix C provides an overview of these procurement and delivery methods.

Exhibit 1: Project Delivery Spectrum



9.3.1 Project Delivery Methodology Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Planning Stage: Project Delivery Methodology process.

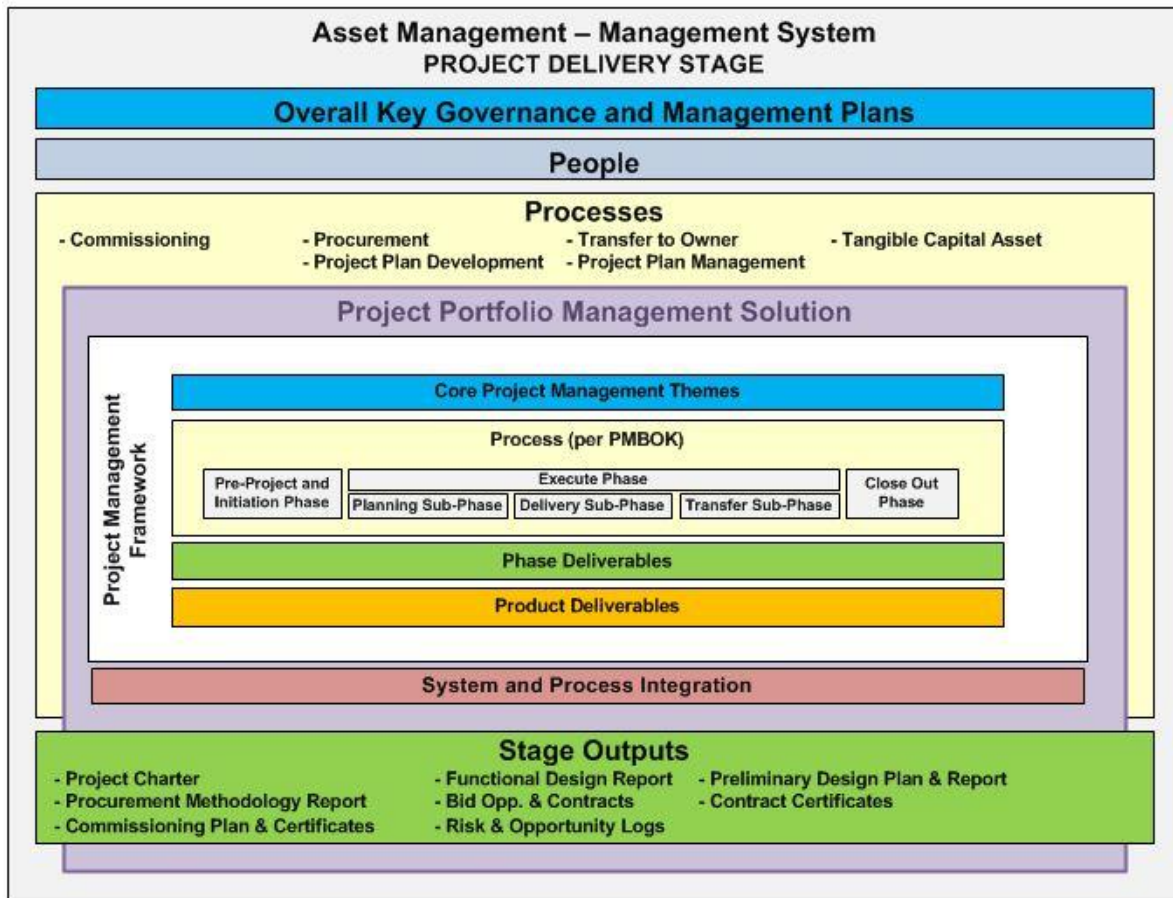
#	Section	Requirement Narrative	Category
001	Project Delivery Methodology Process	Should support the capability to provide project categorization using the "Alternative Project Delivery Methods" e.g. DBB, referenced by the PMM Appendix C: Alternative Project Delivery.	Project Data

002	Project Delivery Methodology Process	<p>Should support the capability to capture data attributes that are distinct for each “Alternative Project Delivery Methods”. Such as, but not limited to:</p> <ul style="list-style-type: none"> • Owner • Engineer • Contractor • Guaranteed Maximum Price (GMP) • Scope of Services • Over-head Costs. 	Project Data
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9.4 Asset Management: Project Delivery Stage

The Asset Management - Management System makes an important distinction between a product life cycle and a project life cycle. The product life cycle extends from creation (investment planning) through to retirement and final disposal. Products may be in various forms, such as roads, bridges, buildings, or sewer assets.

The project life cycle is depicted by the Project Delivery Stage and is implemented via the Project Delivery Framework of the Project Management Manual and can be referenced in this document in the [Project Delivery Framework](#). The Project Delivery Stage addresses the implementation of projects for products or service where an asset (product) is physically created.



The two key integration points within the product life cycle for the Project Delivery Stage are with the adjacent Planning Stage and with the Operations and Maintenance Stage. The integration points in the Planning Stage are the business case and budget approval processes. The integration point in the Operations and Maintenance Stage is the formal transfer of defined documentation, such as instructions for operations and maintenance of the completed product or service.

There are 6 high level processes within the Asset Management - Management System Project Delivery Stage that will be addressed in subsequent sections:

1. Project Plan Development
2. Project Management

3. Procurement
4. Commissioning
5. Transfer to Owner
6. Tangible Capital Asset

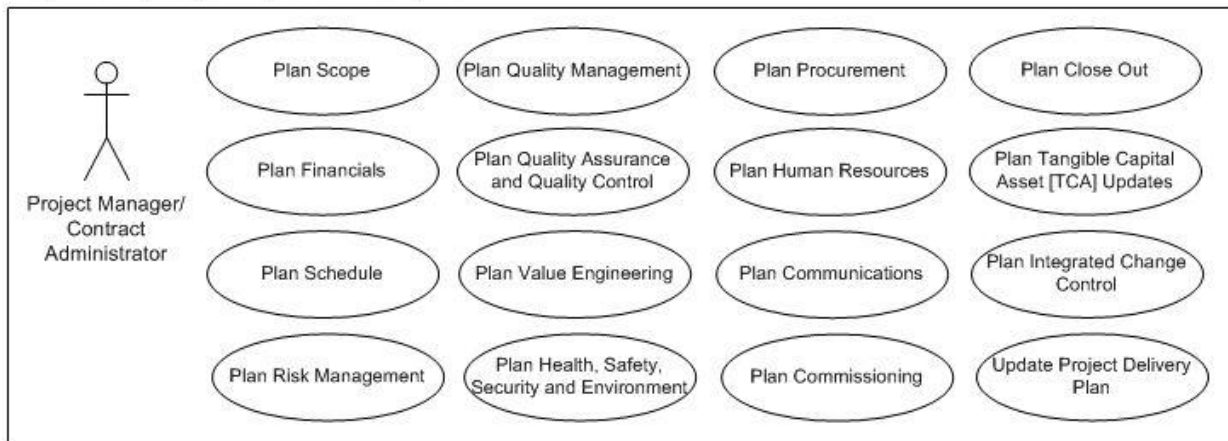
There is 1 high level process within the Project Delivery Framework that will be addressed in subsequent sections:

1. Project Management Book of Knowledge (PMBOK) Processes

9.4.1 Project Plan Development To-Be Process

Project Plan Development Process

Project Delivery Stage - Project Plan Development



9.4.2 Project Plan Development Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Project Plan Development process.

#	Section	Requirement Narrative	Category
001	Project Plan Development Process	Should support the capability to provide a repository and enable Project document management functions to host Project Delivery Framework Documents\Artifacts for each Phase such as [but not limited to]: <ol style="list-style-type: none"> 1. Business Case 2. Project Charter. 3. Project Delivery Plan (PDP). 4. Defined Deliverables 5. Stakeholder Engagement 6. Insurance Policies and Updates 7. Operational and Maintenance Manuals [O&M] 8. Warranty Documents 9. Lessons Learned. 10. Consultant/Contractor Review. 	Document Management
002	Project Plan Development Process	Should support the capability to create Project Delivery Framework Documents\Artifacts using Solution templates.	Document Management
003	Project Plan Development Process	Should support the capability to create Project Delivery Framework Documents\Artifacts using City of Winnipeg templates.	Document Management
004	Project Plan Development Process	Must support the capability to provide a unique system ID assigned to the project at the time of creation in the system.	Project Data
005	Project Plan Development Process	Should support the capability to provide project "status" states, including but not limited to: Initiation, Authorized, Open, Closed, Stopped, Cancelled.	Project Data
006	Project Plan Development Process	Should support the capability to automate the Project Management process groups as per PMBOK. Such as, but not limited to: Initiating, Planning, Executing, Monitoring and Controlling, and Closing process groups.	Project Management /PMBOK
007	Project Plan Development Process	Should support the capability to create and automate project Work Planning via a Work Breakdown Structure [WBS].	Project Management /PMBOK

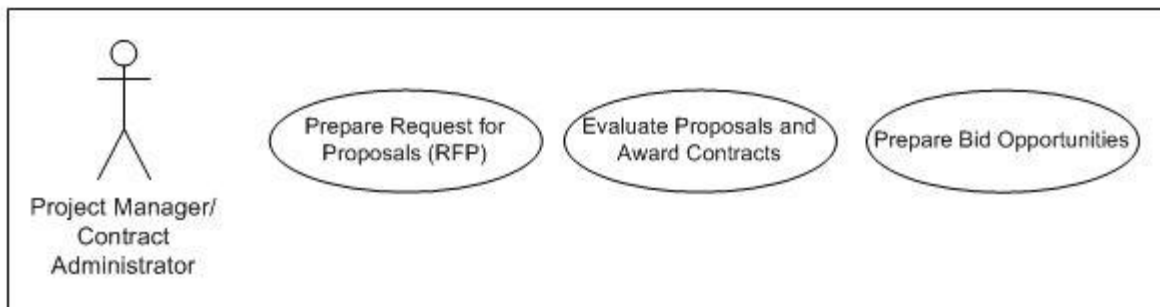
008	Project Plan Development Process	Should support the capability to provide project scheduling by Work Package, Phase, Deliverable, and Task.	Project Management /PMBOK
009	Project Plan Development Process	Should support the capability to provide project tracking by Work Package, Phase, Deliverable, and Task.	Project Management /PMBOK
010	Project Plan Development Process	Should support the capability to provide project resource pool management functionality (i.e. internal; consultants; vendors; suppliers), such as skill set, available hours, rates.	Project Data
011	Project Plan Development Process	Should support the capability to provide project resource planning, such as matching resource requirements with available resource options.	Project Data
012	Project Plan Development Process	Must support the capability to create and manage multiple portfolios.	Project Data
013	Project Plan Development Process	Must support the capability to roll-up multiples portfolios into combined/hierarchies of portfolios.	Project Data
014	Project Plan Development Process	Must support the capability to drill down into portfolio information to program/project levels to show detail.	Project Data
015	Project Plan Development Process	Should support the capability to establish and measure portfolio/program/project Key Performance Indicators (KPIs), based on user defined criteria.	Project Data
016	Project Plan Development Process	Must support the capability to organize two or more projects into a program.	Project Data
017	Project Plan Development Process	Should support the capability to build integrated multi-year end-to-end program plans.	Project Data
018	Project Plan Development Process	Should support the capability to identify rates for labour, material, equipment, etc. by resource sub-categorization (e.g. role, type, etc.).	Project Data
019	Project Plan Development Process	Should support the capability to identify costs for resources.	Project Data

020	Project Plan Development Process	Should support the capability to provide a method to perform project estimation.	Project Data
021	Project Plan Development Process	Should support the capability to estimate project costs depending on the project type (e.g. software development project, infrastructure project, etc.).	Project Data
022	Project Plan Development Process	Should support the capability to provide notification of Risk Management when consultants/contractors insurance policies are being revised and/or changed.	Notification

9.4.3 Procurement To-Be Process

Project Procurement

Project Delivery Stage - Procurement



As per the [PMM](#) all capital projects should have previously considered the project delivery method to be employed as part of the business case development. Considerations may have included:

- Public Private Partnership (P3)
- Design Build (DB)
- Construction Manager (CM)
- Design Bid Build (DBB)
- In-House

The City of Winnipeg normally procures infrastructure using the design, bid, build approach. As such, the City has standardized contracts in place for this model. Further, the City has established process and experience in administering of DBB contracts [Refer to F1-003: [Materials Management Policy](#)].

9.4.4 Procurement Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Procurement process.

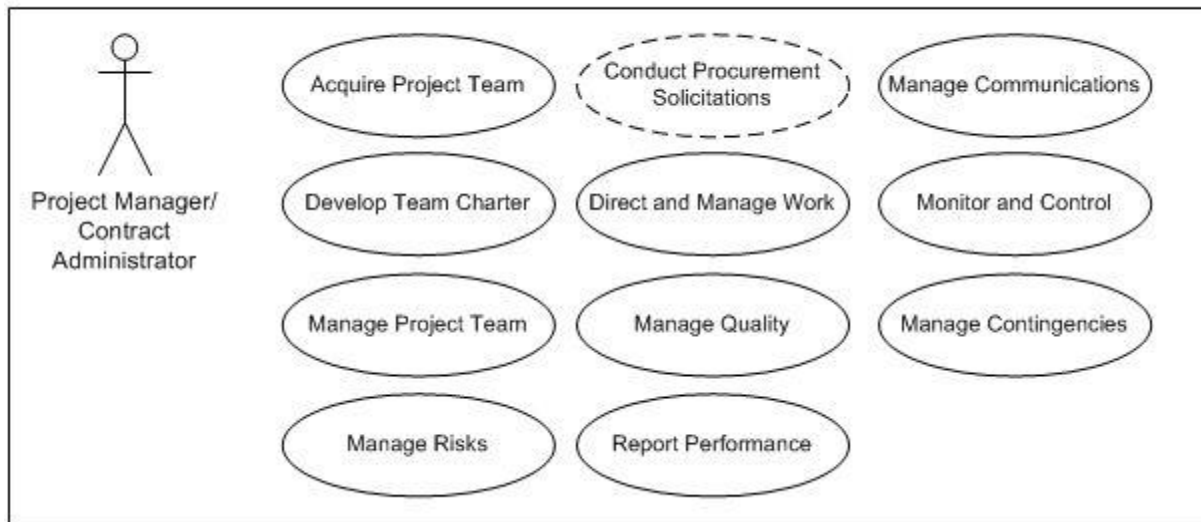
#	Section	Requirement Narrative	Category
001	Procurement Process	Should support the capability to manage multiple vendors with one to multiple contracts.	Project Data
002	Procurement Process	Should support the capability to manage multiple vendors [vendor details and performance rating/comments] with one to multiple contracts.	Project Data

9.4.5 Project Plan Management To-Be Process

As per the [PMM](#) many projects have special procedures that must be completed to provide the Business Owner with the information it needs to successfully take ownership of the operation and maintenance of the work. The Project Manager coordinates with the Business Owner in planning and preparations for the information transfer, commissioning, and start-up of new work. Operating budgets are established and staff is trained to operate and maintain the product or service.

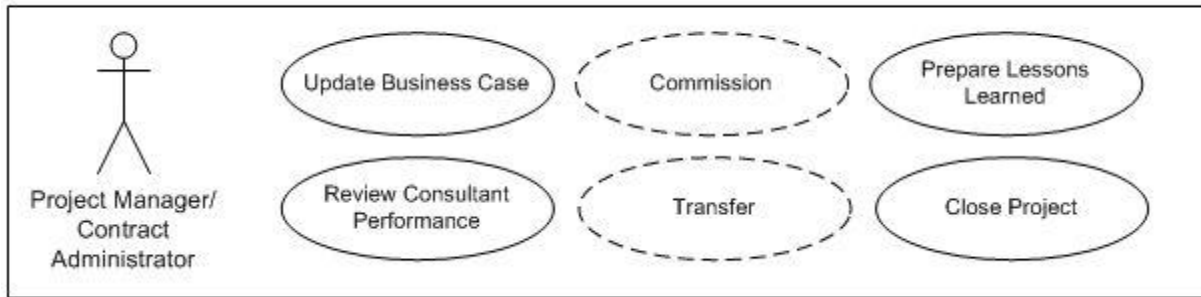
Project Plan Management

Project Delivery – Project Plan Management



The creation of the Project Delivery Plan [PDP] outlines the way the project will be delivered. During execution the Project Manager uses the plan to define tasks that are performed. The Project Plan Management use cases address getting the work done, managing risk, issues and quality, and monitoring and controlling delivery.

Project Delivery Stage – Close Out



As per the [PMM](#) all projects have a defined life, this phase defines the processes and activities that end the life of a project. All activities across the project management process groups are finalized to formally complete the project phase. The PM must confirm that all project phase work is complete and the phase objectives have been met. The PDP and work plan are used to determine whether the work has been completed and is ready for closure. All deliverables and transfers must be complete before a phase can be closed.

9.4.6 Project Plan Management Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Project Plan Management process.

#	Section	Requirement Narrative	Category
001	Project Plan Management Process	<p>Should support the capability to track and store deliverables received from both internal and external parties. Such as but not limited to:</p> <ul style="list-style-type: none"> • Shop Drawings and Product Data • Designs • As-Built Drawings • Operations and Maintenance Manuals • Warranty • Training Materials 	Document Management

002	Project Plan Management Process	Should support the capability to store Safety and Environmental collateral. Such as but not limited to: <ul style="list-style-type: none"> • Monthly inspection reports • Incident reports • Audit reports • Applications to regulatory agencies • Permits and approvals 	Document Management
003	Project Plan Management Process	Should support the capability to provide project resource management.	Project Data
004	Project Plan Management Process	Should support the capability to provide correspondence tracking from project stakeholders. Such as but not limited to Councillors, sponsors, 3rd parties such as utilities, and public.	Document Management
005	Project Plan Management Process	Should support the capability to enter notes and comments for any aspect of a project.	Project Data
006	Project Plan Management Process	Should support the capability to provide electronic signatures of project approvals. Such as but not limited to: <ul style="list-style-type: none"> • Contemplated Change notice • Field Orders • Change Orders • Site Instructions • Requests for Information 	Project Data
007	Project Plan Management Process	Should support the capability to merge project schedules from 3 rd parties to create one overall project schedule.	Project Data
008	Project Plan Management Process	Should support the capability to manage sub projects of a program individually.	Project Data

009	Project Plan Management Process	Should support the capability to roll-up consolidated project information.	Project Data
010	Project Plan Management Process	Should support the capability to ensure Project Delivery Framework Stage Gates, Approval/Sign-offs, and Acceptance points are enforced.	Workflow
011	Project Plan Management Process	<p>Must support the capability to report on key project and program performance metrics. Such as but not limited to:</p> <ul style="list-style-type: none"> • Baseline budget, Approved budget, Approved + • Pending budget • Variances against Baseline • Forecast to Complete • Project Contingency • Cash Flow • Burn Rate • Budgeted vs. Actual Hours 	Reporting
012	Project Plan Management Process	<p>Must support the capability to provide live dashboards of portfolio & project actual and forecasted information for governance committees and executive including:</p> <ul style="list-style-type: none"> • Project description, roles & resources (i.e. Project Contact) • Project status (budget & time). 	Reporting
013	Project Plan Management Process	<p>Must support the capability to provide standard project reporting automatically generated at various intervals (monthly, weekly, etc.) and summarized to a higher level, i.e. program/portfolio. Such as but not limited to:</p> <ul style="list-style-type: none"> • Project Financial Status • Project Contract Reports • Project Contingency and Cash Flow Reports 	Reporting

014	Project Plan Management Process	Should support the capability to provide customized project reporting automatically generated at various intervals (monthly, weekly, etc.) and summarized to a higher level, i.e. Program/Portfolio. Such as but not limited to: <ul style="list-style-type: none"> • Time/Critical Path • Project Financial Status • Forecast. 	Reporting
015	Project Plan Management Process	Should support the capability to provide project metric reporting, such as but not limited to: <ul style="list-style-type: none"> • Projects Summary and Details by Department, Portfolio, Program, Business Unit • Project Resource Work load by internal; consultants; vendors; suppliers • Project accruals/commitments/budget spent/percent work complete/percent schedule complete 	Reporting
016	Project Plan Management Process	Must support the capability to provide a "Project Capital Budget Financial Status Report". Key project information contained in the report is: <ul style="list-style-type: none"> • Budget Amount • Funds Committed • Funds Expended • Unexpended Balance • Outstanding Commitments • Uncommitted Balance • Project ID [PeopleSoft] 	Reporting
017	Project Plan Management Process	Must support the capability to identify, link, and manage interdependencies between projects within a program and across programs.	Project Data
018	Project Plan Management Process	Should support the capability to create, view, and track financial transactions against the portfolio/program/project budget.	Project Data

019	Project Plan Management Process	Should support the capability to conduct portfolio/program/project performance analysis (e.g. earned value management).	Project Data
020	Project Plan Management Process	Should support the capability to identify, track and manage benefits throughout project/program lifecycle. (i.e. Benefits identified during Pre Project and tested at Closure).	Project Data
021	Project Plan Management Process	Should support the capability to resource level a project schedule for a portion of the WBS, for the project, program, or a specific Portfolio.	Project Data
022	Project Plan Management Process	Should support the capability to enter and maintain a program/project schedule without the use of an outside scheduling tool (e.g. MS Project).	Project Data
023	Project Plan Management Process	Should support the capability to have real time synchronized bi-directional integration with desktop project management tools (e.g. Microsoft Project).	Integration
024	Project Plan Management Process	Should support the capability to import and export data from/to desktop project management tools (e.g. Microsoft Project)	Usability
025	Project Plan Management Process	Should support the capability to manage project Purchase Orders.	Document Management
026	Project Plan Management Process	Should support the capability to track Purchase Orders and Change Orders.	Project Data
027	Project Plan Management Process	Should support the capability to track Purchase Order and Change Order invoices and payments in real time. Currently receipt of invoices and their entry into PeopleSoft for payment incurs a time lag. The GL does not reflect a real time view of P/O financial position, it is normally behind.	Project Data
028	Project Plan Management Process	Should support the capability to provide automated messaging to team members when Purchase Orders are 50%, 75% & 100% spent.	Notification

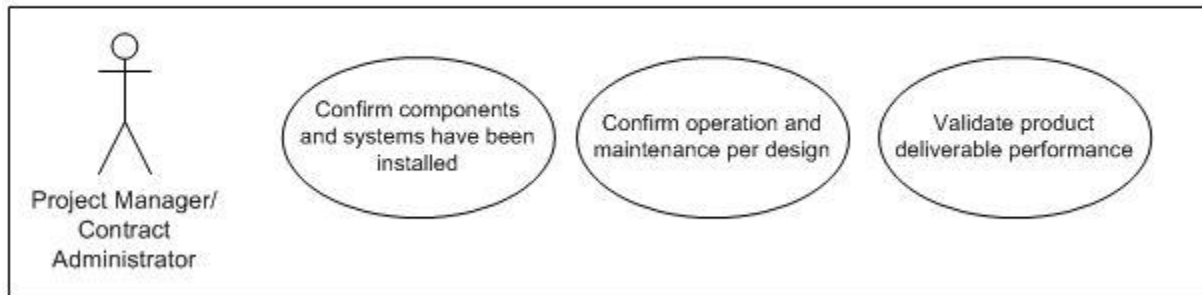
029	Project Plan Management Process	Should support the capability to manage contracts, including tracking changes throughout the lifecycle of the contract information, creating an audit trail of a contract's change and adjustment history. [Integrated change control]	Project Data
030	Project Plan Management Process	Should support the capability to configure workflows to support City defined processes (e.g. document approval, risk and issue escalation, change requests, etc.)	Workflow
031	Project Plan Management Process	Should support the capability to provide automatic notification when interdependencies between projects are impacted by schedule changes.	Notification
032	Project Plan Management Process	Should support the capability to categorize projects by internal, external, and geographic location.	Project Data
033	Project Plan Management Process	Should support the capability to provide a workflow process that will ensure Risk Management, Insurance Branch, is contacted to determine the appropriate coverage and limits for any planned work. [Refer to Project Management Manual 6.4.3.5 How to Specify Insurance].	Workflow
034	Project Plan Management Process	Should support the capability to provide notification to Risk Management when program/project scope changes occur.	Notification
035	Project Plan Management Process	Should support the capability to provide a method that will enforce the Stakeholder Communication Plan specifically the Public Consultation step, during the Close Out Phase of Project Delivery.	Notification
036	Project Plan Management Process	Must support the capability the capability to provide external resources (i.e. contractors/consultants) access to submit: <ul style="list-style-type: none"> • Estimates. • Schedules. • Costing data. 	Technology

037	Project Plan Management Process	Should support the capability the capability to submit updates (i.e. estimates, actuals, and status) via mobile device while in the field (both external and internal resources).	Technology
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9.4.7 Commissioning To-Be Process

Project Commissioning

Project Delivery – Commissioning



This is a process for confirming that the components and systems have been installed as specified and can be operated and maintained according to the design intent. Commissioning is a process for validating product deliverable performance and also facilitates orderly transfer of the product from the constructor to the Business Owner

9.4.8 Commissioning Process Requirements

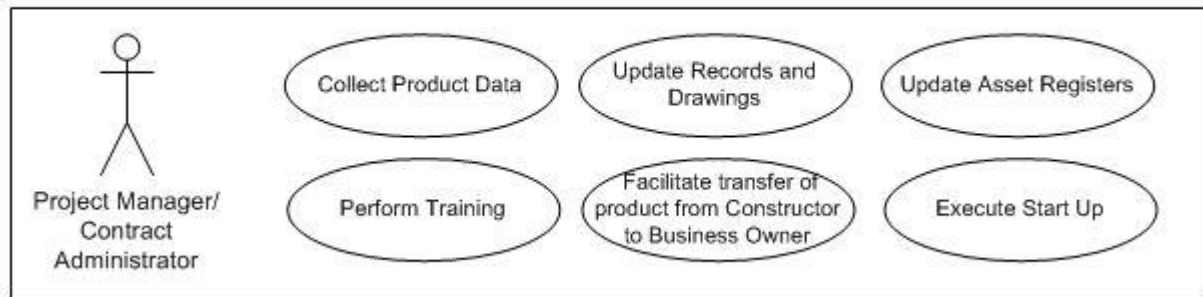
The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Commissioning process.

#	Requirement Narrative	Category
001	<p>Should support the capability to track and store deliverables needed for project Commissioning that may be received from both internal and external parties. Such as but not limited to:</p> <ul style="list-style-type: none"> • Commissioning Plan • All Risks Builders' Risk/Course of Construction Policy • Contractor's Equipment Insurance Policies • Installation Floater Policies • Product-specific and/or Customized manuals. • Operating documentation and supplies. • Training, operating supplies. • Testing. • Required temporary services. 	Document Management

9.4.9 Transfer to Owner To-Be Process

Transfer to Owner

Project Delivery – Transfer to Owner



As per the [PMM](#) the level of effort and work required in transferring the completed work to the owning and operating business unit (department) depends on the scope and nature of the work. The transfer includes all the project records and new information required for operation and maintenance

9.4.10 Transfer to Owner Process Requirements

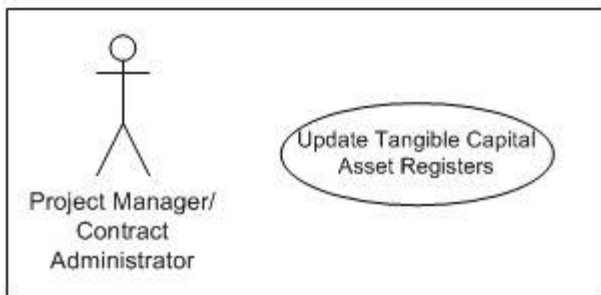
The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Transfer to Owner process.

#		Requirement Narrative	Category
001	Transfer to Owner	Should support the capability to track and store deliverables needed for the project Transfer to Owner stage that may be received from or delivered to both internal and external parties. Such as but not limited to: <ul style="list-style-type: none"> • Training Plans. • Operations and Maintenance Manuals (O&M). • As-built drawings. • Asset Register. • Tangible Capital Asset (TCA). • Benefits Review Plan. 	Document Management
002	Transfer to Owner	Should support the capability to enforce User Acceptance and formal hand-off/sign-off by users/operators during the Transfer Sub-phase of Project Delivery.	Workflow

9.4.11 Tangible Capital Asset To-Be Process

Tangible Capital Asset

Project Delivery – Tangible Capital Asset



Tangible capital assets are those such as property, plant, and equipment, that have physical characteristics or presence. The City of Winnipeg uses depreciation to allocate part of an asset's expense (value) to each year of its useful life, instead of allocating the entire expense (value) to the year in which the asset is purchased.

The TCA [Tangible Capital Assets] PeopleSoft module is used to track this information.

9.4.12 Tangible Capital Asset Process Requirements

The following are the documented requirements of the PPMS in support of the Asset Management Project Delivery Stage: Tangible Capital Asset process.

#	Section	Requirement Narrative	Category
001	Tangible Capital Asset	Should support the capability to link/associate a project with the tangible capital asset that is being affected or created.	Project Data
002	Tangible Capital Asset	Should support the capability to describe project tangible capital assets with enough detail to account for "complex" assets such as a water treatment plant, which consists of many different sub-asset-type components [plant, parking lot, roof etc.].	Project Data
003	Tangible Capital Asset	Should support the capability to enforce a standardized list of information needed for describing project tangible capital assets and sub-asset-types.	Project Data
004	Tangible Capital Asset	<p>Should support the capability to capture project asset data attributes to support the Tangible Capital Asset capitalization process, such as, but not limited to:</p> <ul style="list-style-type: none"> • Asset Cost • Asset Acquisition Date • Asset Useful Life • Asset Location • Amortization Rate • Asset condition • Estimated future maintenance and refurbishment costs • Estimated future replacement costs • Current sources of funding <p>Capitalization threshold</p>	Project Data
005	Tangible Capital Asset	Should support the capability to capture specific project financial transaction information (text and financial) that relates to the creation/enhancement of an asset and/or sub-asset type.	Project Data

006	Tangible Capital Asset	Should support the capability to capture specific project purchase order information (text and financial) that relates to the creation/enhancement of assets and/or sub-asset types. The Purchase Order often contains details of the work to be done on multiple assets. E.g. Different types of road work where a major refurbishment (asphalt overlay) may be performed on one road, and a minor refurbishment (thin bituminous overlay) is being performed on another road. The 2 types of work have differing amortization periods that must be accounted.	Project Data
007	Tangible Capital Asset	Should support the capability to provide notification when a project has reached 80% completion of work [to determine available for use date] to trigger the capitalization of the affected asset.	Notification
008	Tangible Capital Asset	Should support the capability to provide notification when an asset is being disposed.	Notification

10 Solution Requirements

The following are the documented requirements of the PPMS in support of overall solution requirements.

#	Section	Requirement Narrative	Category
001	Solution Requirements	Should support for automated workflow that supports the processes defined for Asset Management, Investment Planning and Project Management.	Workflow
002	Solution Requirements	Should support the capability to organize project documents based on metadata.	Document Management
003	Solution Requirements	Should support the capability to search within the contents of documents.	Document Management
004	Solution Requirements	Should support the capability to upload, check-in and assign meta-data attributes to a single file or multiple documents.	Document Management

005	Solution Requirements	<p>Must support the capability to provide a method to store City of Winnipeg data attributes, and be used as metadata on the project information within the solution.</p> <p>[The City of Winnipeg has defined Project IDs, Business Case IDs and Contract IDs that identify these entities and are important to replicate because of their use in the Investment Planning and Project Delivery lifecycle].</p>	Project Data
006	Solution Requirements	Should support the capability to provide “wizards” that guide users on using/completing the required investment planning and project delivery framework artifacts.	Workflow
007	Solution Requirements	<p>Should support a method to assist with enforcing Project Management Manual process standards. For example:</p> <ul style="list-style-type: none"> • Projects will have a set of “template” deliverables that are automatically created when the project is created. • Regulatory and legal requirements to be reviewed at each required phase gate including but not limited to: <ul style="list-style-type: none"> ○ Insurance (i.e. Initial Budget, RFP, Awards and before Construction begins). ○ Legal (i.e. contracts). ○ Administrative Standards (i.e. O/E reports, change orders). 	Workflow
008	Solution Requirements	Should support the capability to implement automated workflow for approval processes including but not limited to: Business Cases, Budget, Public Correspondence, and Change Orders.	Workflow
009	Solution Requirements	Should support the capability to enable various states of approval such as [Draft, Submitted, Approved, and Rejected].	Workflow
010	Solution Requirements	Should support the capability to send e-mail notices automatically as part of a work-flow process.	Notification

011	Solution Requirements	Should support the capability to enable authorized users to customize work flow appropriate to each process.	Workflow
012	Solution Requirements	Should support the capability to trigger events when actions are performed. For example: <ul style="list-style-type: none"> • Send a notification on: <ul style="list-style-type: none"> ○ Document upload. ○ Budget out of allowable variance. ○ Past due tasks. ○ Items awaiting approval. 	Workflow
013	Solution Requirements	Must support the capability to export data in non-proprietary and proprietary formats such as, but not limited to Excel, CSV, Open XML.	Usability
014	Solution Requirements	Must support the capability to upload Investment Planning and Project Delivery documents in a variety of file formats, including but not limited to: MS Office Files, PDF, Image/Video Files, Sound Files, GIF	Document Management
015	Solution Requirements	Must support compatibility with commonly used document types including Excel, Word, TIF, JPG, and PDF.	Usability

11 System Permissions and Security

11.1 Security and Access Requirements

The following are the documented requirements of the PPMS in support of user roles, and user authentication and access, as well as system security, permissions and authorizations.

#	Section	Requirement Narrative	Category
001	Security and Access	Must support the capability to provide general Role Based Access Control.	System Permissions and Security

002	Security and Access	Should support the capability to provide full administrative control of roles, authorizations and access (e.g. access rights and assigning users to roles, allowing rights to be assignable at the individual user or group levels, etc.).	System Permissions and Security
003	Security and Access	Should support the capability to provide full user administration functionality (i.e., user profile set, access and authorization, de-activation and re-activation).	System Permissions and Security
004	Security and Access	Should support the capability to maintain confidentiality of documents and data between departments and business units.	System Permissions and Security
005	Security and Access	Should support the capability to provide granular control of access rights including but not limited to: "create", "read", "update", "delete" (CRUD) and printing.	System Permissions and Security
006	Security and Access	Should support the capability to allow users to recover their username and password in situations where they have forgotten their username or password or both.	System Permissions and Security
007	Security and Access	Must support the capability to use Active Directory (AD) as the primary authorization and authentication repository [single sign-on] and make use of the AD defined users and groups.	System Permissions and Security
008	Security and Access	Must support the capability to administer security and access control at the group and individual user level. A user may be granted direct access through Active Directory AD [single sign-on], or through the use of a defined group.	System Permissions and Security
009	Security and Access	Should support the capability to meet and support privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA).	System Permissions and Security
010	Security and Access	Should support the capability to provide a FIPPA coordinator [special access user] with the capacity to search the solution repository.	System Permissions and Security
011	Security and Access	Should support the capability to hide/reveal functionality to the user based on security and authorization roles (internal and external).	System Permissions and Security

012	Security and Access	Should follow City of Winnipeg and industry security standards and best practices system installation and configuration of the solution.	System Permissions and Security
013	Security and Access	Must support the capability to control access to documents stored in the Cloud.	System Permissions and Security
014	Security and Access	Must support the capability to automatically provide audit, control, and record the identity of any user who accesses, views, alters, deletes, or uses solution information (e.g. IP address, MACID, user-id, timestamp, etc.).	System Permissions and Security
015	Security and Access	Should support the capability to automatically provide audit of any user who accesses (or attempts to access) the Solution. The audit information includes, but is not limited to the credentials and a date and time, number of attempts.	System Permissions and Security
016	Security and Access	Should support the capability to encrypt all data at rest with industry recognized and proven cryptographic standards equal to or stronger than AES 256.	System Permissions and Security
017	Security and Access	Should support the capability to encrypt all data in-flight/in-transit with industry recognized and proven cryptographic standards equal to or stronger than AES 256.	System Permissions and Security
018	Security and Access	Should support the capability to provide authorized users with Read-Only access to audit records via the solution user interface.	System Permissions and Security
019	Security and Access	Must support the capability to ensure audit records cannot be updated or deleted.	System Permissions and Security

12 Non-Functional Requirements

12.1 Accessibility

The following are the documented requirements of the PPMS in support of accessibility.

#	Section	Requirement Narrative	Category
001	Accessibility	Should support the capability to provide awareness to all authorized users on access to information requests under FIPPA of their responsibilities for maintaining effective access controls, particularly regarding the use of passwords.	Accessibility
002	Accessibility	Should support the W3C Web Content Accessibility Guidelines to fulfill the Universal Design policy passed by The City of Winnipeg City Council and is implemented on the City Website .	Accessibility

12.2 Records Management

The following are the documented requirements of the PPM solution in support of the City of Winnipeg records management requirements.

#	Section	Requirement Narrative	Category
001	Records Management	Support the capability to ensure the Records Management By-law No. 86/2010 is followed as per the Administrative Standard AS-006 Corporate Recordkeeping .	Records Management
002	Records Management	Should support the capability to provide date/time-stamped audit trail of all system actions including but not limited to Create, Read, Update, and Delete.	Records Management
003	Records Management	Should support the capability to archive records based on City of Winnipeg records management policies.	Records Management

12.3 Usability

The following are the documented requirements of the PPMS in support of solution usability.

#	Section	Requirement Narrative	Category
001	Usability	Should support the capability to enable data review, entry and edit via a user friendly interface.	Usability
002	Usability	Should support the capability to search by defined solution data and metadata in the system.	Usability
003	Usability	Should support the capability to sort and filter lists of displayed data in the solution. [Column\heading sort and filter capabilities].	Usability
004	Usability	Should support the capability to customize filters/sorting based on user preferences	Usability
005	Usability	Should support the capability to incorporate graphics (e.g., City of Winnipeg logo) on to templates, forms, etc.	Usability
006	Usability	Should support ease of navigation by minimizing the number of menu levels the user has to manually navigate through for functional use.	Usability
007	Usability	Should support ease of use by providing system functions and processes that are intuitive.	Usability
008	Usability	Should support user centric design that focuses on ease of use for non-technical users.	Usability
009	Usability	Should support the capability to provide the user interface via multiple screens with the capability to function on only one monitor if required.	Usability
010	Usability	Should support the capability to enable multiple resources to be able to access/view the documents in the system concurrently.	Usability
011	Usability	Should support compatibility with Apple iOS and Blackberry devices only.	Usability

12.4 Integration

The following are the documented requirements of the PPM solution in support of integration with City of Winnipeg systems.

#	Section	Requirement Narrative	Category
001	Integration	Should support the capability to integrate to with an enterprise content management solutions, for the storage of Investment Planning Documents\Artifacts.	Integration
002	Integration	Must support the capability to report on actual project costs based on the data resident in the master financial system [PeopleSoft].	Integration
003	Integration	Must support the capability to report on the cost breakdown structure based on the data resident in the master financial system [PeopleSoft].	Integration
004	Integration	Should support the capability to compare / reconcile financial information held in the solution against the PeopleSoft General Ledger and sub-ledgers.	Integration
005	Integration	Should support the capability to Import budget data from the Capital Budget process documents/artifacts.	Integration
006	Integration	Should support the capability to integrate with Geographic Information System (GIS) platforms.	Integration
007	Integration	Should support the capability to integrate with the current procurement system PURTRAC [Custom developed file management platform].	Integration

12.5 Performance and Availability

The following are the documented requirements of the PPMS in support of solution availability and system performance.

#	Section	Requirement Narrative	Category
001	Performance and Availability	Should support the capability to support access for up to 10 concurrent users, with a maximum of 100 total users.	System Performance and Availability
002	Performance and Availability	Should support the capability to scale to business, and employee loads of 30 concurrent users, with a maximum of 100 total users.	System Performance and Availability

003	Performance and Availability	Should support an estimated storage capacity increase of 75 GB per year as project and electronic content grows and not cause degradation in system response. [This estimate is based on the solution supporting 1000 projects of various complexities. Storage capacity requirements will start low and gradually increase as the City of Winnipeg transitions all departments onto the solution.].	System Performance and Availability
004	Performance and Availability	Should support the capability to provide a system response time of less than 3 seconds for 95% of system requests.	System Performance and Availability
005	Performance and Availability	Should support the capability to provide a system report response time of less than 5 seconds for 95% of system reports.	System Performance and Availability
006	Performance and Availability	Should support the capability to ensure Disaster Recovery and Data Loss Prevention measures are in place, such as redundancy and back-ups, in order to avoid or minimize business disruption and data loss.	System Performance and Availability

12.6 Technology

The following are the documented requirements of the PPMS in support of technology standards required by the City of Winnipeg.

#	Section	Requirement Narrative	Category
001	Technology	Should support the capability to provide thin-client, web-based access from standard web browsers (i.e., Internet Explorer 8.0 or higher, Chrome, Firefox, and Safari).	Technology
002	Technology	For cloud based solutions, must support the capability for the solution to be accessible to users through the web with a reliable cloud based solution hosted in Canada.	Technology

003	Technology	For cloud based solutions, must support the capability to ensure that files stored in Cloud are secured and data could be migrated by City of Winnipeg when desired.	Technology
004	Technology	Should support the capability to operate on Microsoft Windows Server environment used at the City of Winnipeg.	Technology
005	Technology	Should support the capability to operate on Microsoft IIS Web Server.	Technology
006	Technology	Should support the capability to use an Oracle or SQL Server database.	Technology
007	Technology	Should support the capability to alter solution functions and capabilities via configuration of parameters.	Technology
008	Technology	Should support the capability to access internal corporate and departmental templates via an intranet link.	Technology
009	Technology	Should support the capability to hyperlink to internet sites for external documents.	Technology
010	Technology	Should support compatibility with business intelligence tools such as Cognos.	Technology

12.7 Solution Support and Training

The following are the documented requirements of the PPMS in support operational support and Service Level Agreements for the solution.

#	Section	Requirement Narrative	Category
001	Solution Support and Training	Should support the capability to provide on-going maintenance and support.	Support and Training
002	Solution Support and Training	Should support the capability to provide knowledge transfer to City of Winnipeg internal operational support resources on an ongoing basis, as required by the City of Winnipeg.	Support and Training
003	Solution Support and Training	Should support the capability to provide a dedicated phone number for IT technical support.	Support and Training

004	Solution Support and Training	Should support the capability to provide operational support documentation that can be transferred back to City of Winnipeg internal resources when the project is completed.	Support and Training
005	Solution Support and Training	Should support the capability to provide product training and knowledge transfer during the implementation & transition phases to the City of Winnipeg internal resources.	Support and Training
006	Solution Support and Training	Must have the capability for maintenance and support to be provided either by the City of Winnipeg internal resources or via external resources.	Support and Training
007	Solution Support and Training	Must be supportable via a service level agreement model involving the Proponent or outsourced third party, as may be required by the City of Winnipeg Management and Application Maintenance policies	Support and Training

13 Appendix A: PPMS Phase 1 High Level Requirements

High Level Requirements gathered in Phase 1 of the PPMS project.

#	Improvement/Requirement	Benefits	Risk of Not Doing
1	Solution must allow integration to backend financial system (PeopleSoft - Capital/Cash Flow Reporting System).	<ul style="list-style-type: none"> Increased level of accuracy & efficiency View of Project Financials 	<ul style="list-style-type: none"> Unsupported & reactive decision making Increased # of errors Budget over runs Audit Negative publicity
2	Solution must be compatible with MS Project or provide comparable functionality.	<ul style="list-style-type: none"> Ease of use (resources familiar with MS Project) Increased efficiency 	<ul style="list-style-type: none"> Maintain and reference separate systems Reduced efficiency
3	Solution must be compatible with the Enterprise Content Management System (i.e. SharePoint).	<ul style="list-style-type: none"> Leverage core function of Enterprise Content Management System 	<ul style="list-style-type: none"> Multiple document versions Working from old/inaccurate info Efficiencies expended searching for documents
4	Provide external resources (i.e. contractors/consultants) access to submit, estimates, scheduling and costing data.	<ul style="list-style-type: none"> Real time & consistent report on actuals & projections Increased level of accuracy & efficiency 	<ul style="list-style-type: none"> Unsupported & reactive decision making Budget over runs Audit Negative publicity
5	Ability to submit updates (i.e. estimates, actuals, and status) via mobile device while in the field (both external and internal resources).	<ul style="list-style-type: none"> Real time & consistent report on actuals & projections Increased level of accuracy & efficiency 	<ul style="list-style-type: none"> Unsupported & reactive decision making Budget over runs Audit Negative publicity
6	Ability to make manage bid solicitation (i.e. electronic bids).	<ul style="list-style-type: none"> Increased efficiency 	

7	<p>Solution must support and enable the City of Winnipeg's Project Management Framework such as:</p> <ol style="list-style-type: none"> Business Case Management Gate Management (requirements/criteria at each gate phase) Lessons Learned (close out & input for new projects) Product Management (definition, status, acceptance criteria for closure) Stakeholder Management (identify, evaluate & manage i.e. sponsor, team) Change Control (initiation & impacts) 	<ul style="list-style-type: none"> Consistency in Project/Program Management activities Ensure continued justification of project/program Promote consistency at gating process Consistent program/project metrics available 	<ul style="list-style-type: none"> Inconsistent PM methods Inconsistent project/program results
8	<p>Provide enforcement of regulatory and legal requirements at each required gate phase including:</p> <ol style="list-style-type: none"> Insurance (i.e. Initial Budget, RFP, Awards & before Construction begins) Legal (i.e. contracts) Administrative Standards (i.e. O/E reports, change orders) Public Consultation/Communication Criteria (i.e. bylaws) 	<ul style="list-style-type: none"> Ensure legal requirements for project are met Ensure project/program insurance requirements are developed & met Ensure requirements for public consultation or communication are met 	<ul style="list-style-type: none"> Cost of Insurance errors/omission Legal ramifications Project Delays Audit Negative publicity
9	<p>Provide live dashboard of portfolio & project actual and forecasted information for governance committees and executive including:</p> <ol style="list-style-type: none"> Project description, roles & resources (i.e. Project Contact) Project status (budget & time) 	<ul style="list-style-type: none"> Snap shot of up-to-date info View of Project Financials Transparency & accountability Enable informed decision making at Corporate and Executive level (i.e. when to reevaluate) 	<ul style="list-style-type: none"> Limited understanding of Project Financials Unsupported & reactive decision making Budget over runs Negative Publicity
10	<p>Ability to link project product deliverables (Assets groupings) to align with Tangible Capital Assets (TCA) reporting requirement.</p>	<ul style="list-style-type: none"> Accuracy of Asset Financial Reporting Efficiency in reporting process 	<ul style="list-style-type: none"> Unsupported & reactive decision making Inaccurate TCA Reporting
11	<p>Ability to track current, historical and forecasted project/program information at an individual project/contract level, an overall program level and at a Corporate level including:</p> <ol style="list-style-type: none"> Financials (estimated, actual and forecasted expenditures) Change orders Approvals Milestones & status of activities Work packages and deliverables 	<ul style="list-style-type: none"> View of actual expenditures and forecasted expenditures Enables informed decision making at program and project level Provides transparency and forces accountability 	<ul style="list-style-type: none"> Limited understanding of financials and status Unsupported & reactive decision making Budget over runs Project delays Risk of Audit

12	Ability to generate project/program exception reporting.	<ul style="list-style-type: none"> Timely review of project/program exceptions 	<ul style="list-style-type: none"> Budget over runs Project delays Risk of Audit Negative Publicity
13	Ability to identify, track and manage benefits throughout project/program lifecycle. (i.e. identified during Pre Project and tested at Closure).	<ul style="list-style-type: none"> Understand value for investment Enable informed decisions at Corporate & Executive level (i.e. when to reevaluate) Increase stakeholder engagement 	<ul style="list-style-type: none"> Benefits lost (i.e. \$\$\$s) Limited stakeholder engagement
14	Manage project/program documentation for the purposes of knowledge sharing and communication.	<ul style="list-style-type: none"> Sharing consistent and up to date project information across the project team Increase effectiveness of communication Increase efficiency among project team 	<ul style="list-style-type: none"> Lost information Project Delays
15	Ability to incorporate workflow management based on business rules for processes such as: <ul style="list-style-type: none"> a. Approvals (i.e. Project Approvals, Change Orders) b. Change Orders (purchase orders/contracts date) c. Bid & Award Process d. Investment Requests e. Admin Standards f. Police Boards 	<ul style="list-style-type: none"> Timely approvals Effective communication Timely completion Teaching tool Increase efficiency among project team 	<ul style="list-style-type: none"> Project delays Missed work Missed opportunities Inefficiencies among resources
16	Align project/program funding information and pay out (i.e. city, province, and municipality) data (planned vs. actual).	<ul style="list-style-type: none"> Support revenue collection for payment 	<ul style="list-style-type: none"> Funding setup delayed Project delays Delays in collection & pay out Negative Publicity

14 Appendix B: Facilitation Framework

The following represents a “script” of questioning to facilitate the understanding of the current state and to provide insight into each department’s asset management and project management business processes and procedures, for the purposes of gap analysis with respect to the future state Asset Management – Management System. Each facilitation session used the framework to guide discussions and depending on responses regarding maturity with the Investment Planning Framework and Project Management Manual was adjusted accordingly.

1. Asset Management – Management System: Planning Stage:

a. Investment Planning:

- i. Are you currently using the Investment planning process? If not, what is your Investment planning process?
- ii. Levels of Service: Do you define Levels of Service? Are they defined and used to evaluate current infrastructure performance relative to established goals? Are there SLA’s created?
- iii. Needs Assessment - Evaluate service risks and opportunities to identify investment needs. Are Risks and Opportunities analyzed to determine investment needs?
- iv. Business Case Evaluation: Are Business Cases developed to weigh options and define effective solutions? As described in the Administrative Standard FM-004 Asset Management, do you:
 - a. Develop Business Cases to evaluate capital investment projects submitted for inclusion in the capital budget?
- v. Project Prioritization Process: Are the Business Cases evaluated relative to corporate values and priorities and ranked using a multi-criteria prioritization model? As described in the Administrative Standard FM-004 Asset Management, do you:
 - a. Utilize the Multi-Criteria Prioritization (MCP) model to prioritize capital investments submitted for inclusion in the capital budget?
- vi. Asset Management Plans: Are there Departmental Asset Management Plans that describe how assets are managed through their lifecycle in support of the delivery of services?
The plan to engage a consultant to lead the creation of Departmental Asset Management Plans resulted in this question not being pursued.

b. Project Delivery Methodology

- i. As Major Capital Projects involve large dollar amounts and risk, it important that the correct delivery method is selected an early stage of the project.

2. Project Delivery Framework: Pre-Project:

a. Receive Output of Asset Management – Management System: Planning Stage:

- i. How does your department receive and take on work? [Capital and Operational]

- ii. Who provides, what is provided, how are decisions made on what to take on?

3. Project Delivery Framework: Phase - Initiation:

a. Project Definition from Planning to Delivery

- i. Do you manage capital projects in accordance with all Council Policies, Administrative Standards and the Project Management Manual (PMM) and the supplementary Major Capital Projects Directives if required?
- ii. If the PMM is not being used, describe the current process for managing capital project within the department.
- iii. Contract Administration – Do Administrators follow the procedures documented in Appendix E of the Project Management Manual (PMM)?
- iv. If Appendix E of the PMM is not being used, describe the current process for Contract Administration projects within the department.

4. Project Delivery Framework: Phase - Execute Project/Program Planning:

a. Planning Sub-Phase: [to obtain Results, Products, or Services]

- i. Phase Deliverables: Team Charters, Contracts, Defined Deliverables, Project Delivery Plan, Vendor Performance Reviews, Stakeholder Engagement.
Are these currently being created, and if not what is being created?
- ii. Product Deliverables: Update business case, Finalize Requirements specification, Design Reports [concept, preliminary, detailed].
Are these currently being created, and if not what is being created?

b. Delivery Sub-Phase: [to deliver Results, Products, or Services]

- i. Phase Deliverables: Team Charters, Contracts, Project Delivery Plan Updates, Commissioning Plan, Quality Assurance/Quality Control Reports, Vendor Performance Reviews, Stakeholder Engagement.
Are these currently being created, and if not what is being created?
- ii. Product Deliverables: Confirm business case; Deliver [a building, an IT system, a service or services].

c. Transfer Sub-Phase: [of Results, Products, or Services to owner (operating business unit)]

- i. Phase Deliverables: Operational and Maintenance Manuals (O&M), Asset Register, Tangible Capital Asset, Benefits Review Plan.
Are these currently being created, and if not what is being created?
- ii. Product Deliverables: Confirm business case; Operational and Maintenance Manuals (O&M), Haz-Op and H&S manuals, As-Built drawings, Warranty Documents, Insurance Policy Updates.
Are these currently being created, and if not what is being created and how is the “hand-off” performed?
Does Operations perceive the current process as working well or are there items that could be improved, if so, what are they?

5. Project Delivery Framework: Phase - Close Out:

- a. Project/Program end of life
 - i. Phase Deliverables: Financial Account Close out, Purchase Order/Work Order Close Out, Consultant/Contractor review, Lessons Learned. Are these currently being created, and if not, what is being created?
 - ii. Product Deliverables: Transfer Tracking of Business Case Benefits.

Framework Facilitation Items for each:

1. If a department is not employing the Asset Management – Management System, what is preventing it from being adopted?
2. If a department is not employing the Project Managers Manual, what is preventing it from being adopted?

General Facilitation Items for each:

3. What people and processes are involved?
4. Is there process documentation available?
5. What systems and/or tools are involved? [IT systems, templates/documents/spreadsheets, workflow management, approval processes]
6. What workflow is required? Workflow documentation?

15 Appendix C: Asset Management Policy Notes

The FI-011 Asset Management Policy Effective Date January 28th, 2015; [F1-001 Asset Management Policy](#).

The purpose of the Policy is to align the actions of the Public Service in meeting the City's Asset Management Program (AMP) objectives.

The following **key strategic Asset Management documents**, in addition to the Long Range Financial Plans, form part of the City's overall approach to asset management:

- **Strategic Asset Management Plan**: This document defines Senior Management's commitment and approach to achieving Council's approved policy. This is approved by the CAO and submitted to Council as information.
Strategic Asset Management Plan (future)
- **Asset Management Administrative Standard**: This document establishes the Public Service's approach to managing the City's physical assets. This is approved by the CAO.
[FM-004 Asset Management Administrative Standard](#)
- **Customer Levels of Service**: This document defines the level to which front-line infrastructure supported services will be delivered. These are approved by Council.
- **Asset Management Plans**: Corporate and Departmental Asset Management Plans document how assets are managed (with multi-disciplinary management techniques; including technical and financial) through their lifecycle in support of the delivery of services. These are approved by Department Directors for all service areas.
- **State of the Infrastructure Report**: This document (which may be part of the Asset Management plan) provides information on the state of the City's physical assets for use in external reporting, and in the annual budget and the long range financial planning process. This report is approved by the CAO for all service areas and submitted to Council as information.

[Investment Planning Manual](#)

[Project Management Manual](#)

[Asset Management Plan Framework & Guideline](#)

16 Appendix D: Project Management Templates

Project Management Templates: [Project Management Templates Site](#).

#	Project Document:	Benefits of Document Creation:	Notes:
1	Business Case	Defines budget / financial baseline for project and benefits case.	
2	Project Charter	Provides authority to proceed for PM. Outlines initial project scope baseline	
3	Project Delivery Plan (PDP)	Outlines baseline scope, schedule and assumptions for project delivery.	This document should evolve/iterate during project delivery lifecycle.
4	Risk/Issue/Decisions Log	Identifies critical risks, issues and business decisions associated with project delivery.	This document should evolve/iterate during project delivery lifecycle.
5	Change Control Log	Provides a record of all approved project changes from current baseline.	This document should evolve/iterate during project delivery lifecycle.
6	Stakeholder Engagement Strategy/Plan	Outlines proposed approach for management of internal and external project stakeholders.	
7	Project Status Report	Provides regular progress information to project governance group and other interested stakeholders.	This may be produced on a weekly/bi-weekly/monthly or quarterly basis (depending on need).
8	Quality Management Strategy/Plan	Outlines how quality will be managed during the project lifecycle, including document standards.	
9	Vendor (Consultant/Contractor) Evaluation Form	Provides consistent evaluation metrics for vendor assessment.	Often specified in RFP document for vendor competition.
10	Lessons Learned Log	Identifies what aspects of project delivery went well and areas for improvement, which should be highlighted for future projects.	Improves knowledge management for City PMs and contract administrators.

#	Project Document:	Benefits of Document Creation:	Notes:
	Contract Administration Standard (<i>Reference Standard</i>)	Identifies how project contracts should be managed.	Majority of major City delivery projects use an external contract administrator for control purposes, therefore this is an important Quality Management Standard.

17 Appendix E: External Stakeholder Discovery Interview Agenda

Introductions:

- Round table introductions.
- Review Objectives of Project Portfolio Management Solution [PPMS].

Current State Assessment:

- Questions regarding existing People, Process, Templates, Workflow.
 - How does your company receive and take on work\projects from the City of Winnipeg [Capital and/or Operational]?
 - Discuss the advantages and shortcomings of the current processes.
- Questions regarding existing Technologies, Tools, Systems.
 - How/What do you use to bid on City of Winnipeg work?
 - What City of Winnipeg Project Management standards/methods are you asked to utilize during Project Delivery/Contract Administration?
 - Discuss the pros, cons, and shortcomings of their use in carrying out your work.
- Asset Management – Management System [City of Winnipeg Project Manager Manual]
 - Are you aware of the City of Winnipeg Project Managers Manual used in client departments/divisions?
 - If aware, discuss the pros, cons, and shortcomings of its use.
 - Are you aware of the City of Winnipeg Contract Administration Procedure contained in the Project Managers Manual used in client departments/divisions?
 - If aware, discuss the pros, cons, and shortcomings of its use.

Future State Requirements Facilitation:

- Identify and determine Requirements of a PPMS as it relates to:
 - Project Bid/Award Process.
 - Project Management [Tracking and Reporting]
 - Pre-Project/ Initiation Phase [Bid/Procurement stage]
 - Execution Phase
 - Execution Planning Sub-Phase
 - Execution Delivery Sub-Phase

- Execution Transfer Sub-Phase
- Close Out Phase

- General facilitation of Requirements regarding Process, Workflow, Information, People\Groups\Stakeholders.

External Stakeholder Questions:

1. Describe Contract Administrator role and the interaction with the City of Winnipeg counterpart.

2. The Contract Change Control Process:
 - a. How does it work today?
 - b. What documents are exchanged\approved? When? Why?
 - c. Field Instruction Process
 - d. Proposed Change Notice

1. What are your experiences using a PPMS tool?

2. Your interactions with Clients other than the City of Winnipeg – How? What?

3. Pain Points with the current City of Winnipeg relationship:
 - a. Procure/Bid
 - b. Execution
 - c. Financial Management
 - d. Close Out procedure

4. Future Requirements of a PPMS tool.