ERP System Selection Assistance Project

Implementation Planning Document

Version 3

May 18, 2017

Prepared for:
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Table i: Version History of the Report

Version	Delivered Date	Update Reason
Draft 1	September 2, 2016	Draft 1 provided to the City Project Management Team for review
Draft 2	September 12, 2016	Draft 2 updated based upon Kronos contract updates and internal project planning
Version 1	September 30, 2016	Version 1 updated with additional Project Team feedback
Version 2	April 26, 2017	Version 2 updated based upon Tyler Technologies contract updates and internal project planning
Version 3	May 18, 2017	Version 3 updated with additional Project Team feedback

1.0 Introduction

This section describes the background of the project, the format of the report, work performed in the development of the report, and commonly used terms and abbreviations.

1.1 Project Background

The City retained Berry Dunn McNeil & Parker (BerryDunn) in 2015 to provide consulting services to conduct a comprehensive evaluation of the various applications currently in use throughout the City against business needs and best practices in municipal agencies. The focus of this project was to identify, define, evaluate, and plan for the replacement of the existing system software as well as for applications that support related business processes. The City desired an assessment of the current environment to determine City needs in a future system as well as the development of a strategy document to guide the system selection process.

The City is currently using JD Edwards EnterpriseOne ERP system modules to manage functions including General Ledger, Accounts Payable, Accounts Receivable, Budget, Purchasing, Inventory Management, Fleet Maintenance, Payroll, User Account Management, limited Workflow and Transactions Processing in some functional areas, limited Employee Time Entry, and Position Control. The City is currently using SunGard H.T.E. system modules to manage functions including Planning, Permitting, Inspections, Business Licensing, and Code Enforcement.

There are five major tasks included with this project:

1. Current Environment Fact-Finding and Analysis
2. Request for Proposals (RFP) Development
3. System Selection
4. Contract Negotiation Assistance
5. Implementation Planning

During the execution of these tasks, BerryDunn has conducted on-site fact-finding activities including meetings with City staff, developed a strategy document, presented the strategy document to City leadership, developed functional and technical requirements, developed an RFP document, and assisted with the evaluation and selection of vendors. BerryDunn is currently assisting the City with the fourth task noted above by facilitating the contract negotiation process with the City's preferred vendors: Kronos, Munis, and EnerGov. This system selection project will conclude following the development of this Implementation Planning Document.

1.2 Document Format

The approach for this project follows Project Management Institute (PMI) and Project Management Body of Knowledge (PMBOK) accepted best practices and tools for project management. This document will be finalized as the system selection project nears its close and more variables become finalized regarding the implementation. This document has been prepared primarily for the implementation of the Kronos timekeeping software, but will serve as a relevant artifact that can be adapted for the subsequent Enterprise Resource Planning (ERP), Community Development, and

Utility Billing phases of the project. The Implementation Planning Document is comprised of the following seven sections:

1.0 Introduction. This section describes the background of the project, the format of the report, work performed in the development of the report, and commonly used terms and abbreviations.

2.0 Project Governance Framework. This section identifies the anticipated stakeholder roles that will be required for a successful implementation, and proposes a governance structure for making project-related decisions.

3.0 System Deployment Framework. This section summarizes the City's deployment plan as it relates to the newly selected software system. This section also includes phasing and timelines as it relates to implementing the selected systems.

4.0 System and Software Testing Framework. This section documents high-level processes related to the vendor's anticipated testing and proposes additional testing tasks for the City, including the identification of entrance and exit criteria.

5.0 Knowledge Transfer Framework. This section identifies processes related to end-user training, and identifies anticipated vendor deliverables in contrast with the City's expected tasks for successful knowledge transfer and retention.

6.0 Organizational Change Management Framework. This section summarizes proactive steps the City may consider taking following the system selection project, as it prepares for implementation activities with the selected vendors.

7.0 Next Steps in the Project. This section describes the next steps in the project.

1.3 Project Objectives

The City is currently using Oracle's J.D. Edwards EnterpriseOne ERP software to support business functions, including: General Ledger, Accounts Payable, Accounts Receivable, Budget, Purchasing, Inventory Management, Fleet Maintenance, Payroll, User Account Management, limited Workflow and Transactions Processing in some functional areas, Limited Employee Time Entry, and Position Control. The City is currently using SunGard's H.T.E. system modules to manage functions including Planning, Permitting, Inspections, Business Licensing, and Code Enforcement. The City has identified an opportunity for greater operational efficiency through the acquisition of an up-to-date and integrated ERP software system. As a result, the City contracted with BerryDunn to provide the following system selection services:

- Conduct a business process review and develop an ERP strategy document;
- Define functional and technical requirements for a new ERP system;
- Develop an RFP for a new ERP system;
- Assist in the evaluation of vendor proposals and the selection of a replacement system;
- Negotiation of a vendor contract for the preferred system;

- Provide ongoing project and change management assistance through the system selection process; and
- Develop a formal ERP implementation plan

As the City nears the conclusion of the system selection project, the City's focus will begin to shift towards preparing for the implementation of the selected software products: Kronos, Munis, and EnerGov. The City desires the following outcomes to be realized at the conclusion of the system selection and implementation projects:

- Eliminate the City's reliance on outdated technology
- Evaluate, select, and implement modern software systems on time and within budget
- Identify, select, and implement functionality similar or better than that provided by current legacy systems

1.4 Functional Areas of the System Selection Project

The scope of the implementation project is represented by the functional areas identified in the City's ERP RFP issued in January 2016 as well as the Community Development RFP issued in May 2016, and which are also represented here in Table 1.1.

Table 1.1: Project Functional Areas

Project Functional Areas		
No.	**Functional Area**	**City's Requested Functions**
1	Accounts Payable	Accounts Payable/Vendor Self-Service
2	Accounts Receivable and Cashiering	Accounts Receivable
3	Budgeting	Budget/Personnel Service Budgeting
4	Fixed Assets	Fixed Assets
5	Fleet Maintenance	Fleet Maintenance
6	General Ledger and Financial Reporting	General Ledger
7	Human Resources	Hiring
		Automated Personnel Action Forms
		Applicant Tracking
		Training/Certification Tracking
		Risk Management
		Employee Benefits
8	Inventory Management	Inventory Management
9	Payroll, including Time Entry	Payroll
		Position Budget Control
		Leave Request and Approval

Project Functional Areas		
No.	**Functional Area**	**City's Requested Functions**
		Time Reporting
10	Project Accounting and Grant Management	Project Accounting and Grant Management
11	Purchasing	Purchasing
12	Planning	Planning Case Management
13	Permitting	Permitting
14	Inspections	Inspections
15	Business License	Business License Application and Renewal
16	Code Enforcement	Code Enforcement
17	General and Technical*	User Account Management
		Workflow and Transactions Processing
		Business Rule Orchestration
		Employee Self-Service
		Management Self-Service
		E-Government capabilities

**The General and Technical functional area is identified in the functional and technical requirements as those overarching requirements that must apply across all functional areas.*

The list of functional areas identified in the table above includes those functions that were identified as being required in a future ERP system which was a key component of the City's RFP. BerryDunn has developed this table as a crosswalk to help identify the ways in which the City's current and future functionality may be grouped together by module in a future system.

1.5 Commonly Used Terms and Abbreviations

For purposes of clarity when discussing this project, the terms and related definitions shown on the following page will be utilized. When appropriate, definitions for project management terms were adopted from the PMI and PMBOK.

Table 1.2: Project Terms and Abbreviations

Term	Definition
City	The City of Santa Fe
BerryDunn	Berry Dunn McNeil & Parker, LLC
ERP System	Enterprise Resource Planning System
Functional Area	A functional area of City business processes, such as Payroll, Budgeting, etc.

Term	Definition
Issue	A point or matter in question or in dispute, a point or matter that is not settled and is under discussion, or a point or matter over which there are opposing views or disagreements
PMT	Project Management Team
RFP	Request for Proposals
Risk	An uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives.
Scope	The sum of the products, services, or results to be provided by the project.
SME	Subject Matter Expert
Triple Constraints	The most commonly known project constraints of cost, schedule, and scope. The implication of the Triple Constraints is that when any one of the three is impacted, there is a direct impact on the remaining two.
Watch List Item	Watch List items are thoughts and concerns that are not yet considered to be Risks or Issues.

2.0 Project Governance Framework

This section identifies the anticipated stakeholder roles that will be required for a successful implementation, and proposes a governance structure for making project-related decisions.

2.1 Stakeholder Roles

Project stakeholders include any person or entity with an interest in the outcome of a project. Key project stakeholders are stakeholders whose understanding and buy-in is critical to the successful achievement of project goals and objectives. To assist the City with the planning for City staff resources to be allocated to the project, an analysis of each City stakeholder role has been provided here that profiles the typical escalation role, responsibilities, desired attributes, and estimated involvement of each stakeholder group that have proven successful during other implementations. Please refer to each vendor's proposal for additional information on the roles and responsibilities of vendor staff during implementation.

Table 2.1: Stakeholder Role Analysis – City Executive Sponsor

Stakeholder Role Analysis – City Executive Sponsor	
Proposed City Staff	City Manager and Deputy City Manager
Escalation Role	This role would be engaged when escalating issues that have been previously reviewed at the City Steering Committee level. This role would have decision-making authority to consider and act on recommendations from the Steering Committee or to make a final decision in the event that consensus cannot be reached at the Steering Committee level.
Responsibilities	- Provide visible and active executive-level support for the project - Provide overall direction and tactical vision for the project - Communicate strategic goals and objectives for the project to City staff - Commit resources to the project - Provide oversight for the project - Provide final decision-making authority for the project - Resolve strategic, tactical, and political issues that develop over the course of the project - Provide written and/or oral project updates to City Council, and stakeholders external to City staff as needed
Desired Attributes	- Respected and well-known as a leader within the organization - Executive-level position that has oversight of key departments involved in the implementation - Willing to promote and encourage changes in technology, business processes, and policies

Stakeholder Role Analysis – City Executive Sponsor	
	- Able to understand how the project's objectives contribute to the City's broader strategic vision, goals, and objectives - Able to make challenging decisions in the best interest of the organization - Able to employ conflict resolution principles when necessary - Commitment to the success of the project - Does not need to be directly involved with daily project tasks - Does not need to be a subject matter expert for the business areas represented by the project
Estimated Involvement	- Speaking roles and/or visible participation in project sessions for all affected users (typically bi-monthly or quarterly) - Providing project updates at City Council or executive-level staff meetings - Sending prepared written communications about the project to all affected staff - Participating in monthly status meetings - Participating in other meetings as needed for specific decision points

Table 2.2: Stakeholder Role Analysis – City Steering Committee

Stakeholder Role Analysis – City Steering Committee	
Proposed City Staff	City Manager Deputy City Manager Finance Director HR Director ITT Director Public Works Director Public Utilities Director Land Use Department Director Chief of Police City Attorney City Clerk Additional Department Leaders (Office of Economic Development, Fire)
Escalation Role	This role would be engaged when escalating issues that have been previously reviewed with the City Project Manager and the Project Management Team (PMT). This role would have decision-making authority to act on recommendations from the PMT or to make a decision in the event that consensus cannot be reached at the PMT level.

Stakeholder Role Analysis – City Steering Committee	
Responsibilities	- Provide overall direction and tactical vision for the project - Demonstrate positive leadership for the project through active and visible participation - Commit resources to the project - Provide oversight for the project - Provide decision-making authority for the project - Approve finalized list of key stakeholders - Attend Steering Committee Meetings - Assist with resolving escalated issues - Assist with reviewing project management vendor deliverables - Assist with the change control process, including the approval or rejection of change requests - Review and approve recommendations on business process and organization change decisions as needed - Review and approve recommendations on retaining third-party point solution applications as needed - Review and approve other recommendations from the City Project Manager and PMT as needed
Desired Attributes	- Respected and well-known as a leader within the organization - Executive- or mid-level position that has direct oversight of key departments involved in the implementation - Willing to promote and encourage changes in technology, business processes, and policies - Knowledgeable about the organization's historical practices - Able to make challenging decisions in the best interest of the organization - Able to employ conflict resolution principles when necessary - Does not need to be directly involved with daily project tasks - Does not need to be a subject matter expert for the business areas represented by the project
Estimated Involvement	- Speaking roles and/or visible participation in project sessions for all users in their functional area (typically bi-monthly or quarterly) - Asking for feedback and questions about the project among peers and direct reports, and providing those to the Project Manager for response - Sending prepared written communications about the project to affected users in their functional area - Participating in meetings to discuss changes to policies or processes in their functional area - Participating in monthly status meetings

Stakeholder Role Analysis – City Steering Committee	
	- Participating in other meetings as needed

Table 2.3: Stakeholder Role Analysis – City Project Manager

Stakeholder Role Analysis – City Project Manager	
Proposed City Staff	BerryDunn
Escalation Role	This role would be engaged in the day-to-day oversight of project tasks and activities. As such, this role works closely with the PMT to manage the project workload and make project-related decisions. In addition, this role is often brought into discussions to make decisions related to project management best practices or to facilitate decision-making among functional leads, subject matter experts, and the technical team.
Responsibilities	- Maintain overall responsibility for the project - Demonstrate leadership through active and visible participation in all key project tasks and activities - Main point of contact between BerryDunn and the City - Main point of contact between system vendor staff and the City - Proactively identify and resolve project risks and issues, and communicate decisions and reasons in a timely fashion - Lead the circulation of and participate in the review of project deliverables for City review and collect feedback - Lead recurring PMT status meetings - Represent the City in recurring vendor status meetings - Lead the development of recurring status reporting to other project stakeholder groups - Assist with the development and delivery of written and/or oral project updates to City Council and stakeholders external to City staff - Lead recurring meetings with the City Executive Sponsor - Lead recurring Steering Committee meetings - Lead other stakeholder meetings as needed - Assist with identifying and making recommendations on opportunities for business process and organizational change decisions - Assist with identifying and making recommendations on retaining third-party point solution applications - Assist with making other recommendations as needed - Lead the development of the Change Management Plan and Communication Plan - Communicate formal acceptance of vendor deliverables

Stakeholder Role Analysis – City Project Manager	
	- Manage vendor contracts associated with the project
Desired Attributes	- Previous experience with project management best practices and tools - Willing to promote and encourage changes in technology, business processes, and policies - Possesses strong written and verbal communication skills - Possesses organizational and time management skills - Able to identify decision points and relay available options to the appropriate stakeholders - Able to facilitate discussions relating to policy and process changes - Able to communicate with a variety of stakeholders, communication styles, and personalities - Able to employ conflict resolution principles when necessary - Does not need to be a subject matter expert for the business areas represented by the project
Estimated Involvement	- Daily management of project tasks - Oversight of and participation in vendor-led sessions - Coordination of project work sessions independent of vendor-led sessions - Leading recurring PMT meetings and monthly status meetings - Participation in recurring vendor status calls - Leading and/or participating in other meetings with PMT members, functional leads, subject matters experts, and the technical team as needed for specific decision points - Providing project updates in multiple forums including, but not limited to: City Council meetings, executive-level staff meetings, departmental staff meetings, all user meetings, and written communications

Table 2.4: Stakeholder Role Analysis – City Project Management Team (PMT)

Stakeholder Role Analysis – City Project Management Team (PMT)	
Proposed City Staff	Munis – Beck Casper, Vince Montoya, Andy Hopkins, Adam Johnson (Finance) Munis – Faustino Contreras, Debi Croney (ITT) Munis – Melinda Jagles Moquino, Aaron Martinez, Xavier Anderson (HR)
Escalation Role	This role would be engaged when escalating issues or decision points that have been identified in project sessions or have garnered discussion without resolution among functional leads, subject matter experts, or the technical team. This team is typically given a fair amount of autonomy to work with the

Stakeholder Role Analysis – City Project Management Team (PMT)	
	City Project Manager and to make day-to-day decisions relating to project tasks. This team is also responsible for making recommendations to the Steering Committee in matters of changes to scope, schedule, or budget.
Responsibilities	- Assist the Project Manager with daily coordination of project tasks - Assist in the review of project deliverables - Assist in identifying key stakeholders - Assist with circulating project deliverables for City review and collect feedback - Participate in the review of project deliverables - Participate in recurring PMT status meetings - Participate in recurring vendor status meetings - Assist with identifying and making recommendations on opportunities for business process and organizational change decisions - Assist with identifying and making recommendations on retaining third-party point solution applications - Assist with making other recommendations as needed
Desired Attributes	- Knowledgeable about the functional areas represented on the PMT - Respected and well-known as a leader within their functional area - Mid-level position within the functional areas most impacted by the project - Able to commit significant portions of time to project tasks - Knowledgeable about the organization's historical practices - Able to collect and synthesize stakeholder feedback about the project and relay that to the City Project Manager - Able to make challenging decisions in the best interest of the organization - Willing to promote and encourage changes in technology, business processes, and policies - Able and willing to promote the project's objectives among project stakeholders
Estimated Involvement	- Participation in vendor-led sessions - Participation in project work sessions independent of vendor-led sessions - Participation in recurring PMT meetings and vendor status calls - Leading and/or participating in other meetings with functional leads, subject matters experts, and the technical team as needed for specific decision points - Leading and/or participating in meetings with end users to collect feedback and make project-related decisions - Visible participation in project sessions for all affected users (typically bi-monthly or quarterly)

Table 2.5: Stakeholder Role Analysis – City Functional Leads

Stakeholder Role Analysis – City Functional Leads	
Proposed City Staff	See Tyler Munis Project Assignments document
Escalation Role	This role would be engaged when analyzing existing business processes and policies, learning software functionality, and discussing changes to the future environment. This role would have autonomy to make setup and configuration decisions after discussion with subject matter experts, making recommendations to the City Project Manager and PMT as appropriate for decisions that have not reached consensus, have significant impacts on stakeholders beyond the functional lead and subject matter experts, or need additional input.
Responsibilities	- Lead the City's preparation for and participation in vendor-led sessions for the represented functional area - Lead the City's preparation for and participation in project-related meetings for the represented functional area - Documentation and review of business processes, rules, and requirements - Review of project documents and deliverables - Planning and execution of project tasks and action items at the direction of the City Project Manager - Identify and make recommendations on opportunities for business process and organizational change decisions - Identify and make recommendations on retaining third-party point solution applications - Assist with the review of testing materials - Lead the City's participation in administering testing for the represented functional area - Identification of Subject Matter Experts (SMEs) to participate in project activities - Lead the City's participation in testing, including participation in review of test materials, execution of test scripts, and issues detection/troubleshooting - Lead the City's participation in the development and delivery of system training as prescribed by the Training Plan and as directed by the City Project Manager
Desired Attributes	- Holds a certain level of ownership or oversight of daily operations in the functional area represented - In-depth knowledge about the business process functions and historical practices of the functional area represented - Willing to make changes in technology, business processes, and policies

Stakeholder Role Analysis – City Functional Leads	
	- Able to examine current processes and policies and identify solutions available in the future environment - Able to commit significant portions of time to project tasks - Knowledgeable about the organization's historical practices
Estimated Involvement	- Participation in vendor-led sessions - Leading and/or participating in other meetings with subject matters experts and the technical team as needed for specific decision points - Assist with preparing and proofing legacy data to be converted - Leading and/or participating in meetings with end users to collect feedback and make project-related decisions - Visible participation in project sessions for all affected users (typically bi-monthly or quarterly) - Preparing training materials and administering end-user training - Work with vendor staff to troubleshoot, test, and resolve open issues - Supporting end users during live use of the software

Table 2.6: Stakeholder Role Analysis – City Subject Matter Experts

Stakeholder Role Analysis – City Subject Matter Experts	
Proposed City Staff	See Tyler Munis Project Assignments document
Escalation Role	This role would be engaged when analyzing existing business processes and policies, learning software functionality, and discussing changes to the future environment. This role would contribute to discussions about setup and configuration decisions based on their knowledge of the functional area and the organizational context.
Responsibilities	- Assist with the City's preparation for and participation in vendor-led sessions for the represented functional area - Assist with the City's preparation for and participation in project-related meetings for the represented functional area - Documentation and review of business processes, rules, and requirements - Review of project documents and deliverables - Planning and execution of project tasks and action items at the direction of the City Project Manager - Identify and make recommendations on opportunities for business process and organizational change decisions - Identify and make recommendations on retaining third-party point solution applications

Stakeholder Role Analysis – City Subject Matter Experts	
	- Participation in system testing, including participation in the review of test scripts, execution of test scripts, and issues detection/troubleshooting - Participation in the development and delivery of system training as prescribed by the Training Plan and as directed by the City Project Manager
Desired Attributes	- In-depth knowledge about the business process functions and historical practices of the functional area represented - Willing to make changes in technology, business processes, and policies - Able to examine current processes and policies and identify solutions available in the future environment - Not required to be directly involved with daily project tasks
Estimated Involvement	- Participation in vendor-led sessions - Participating in other meetings with functional leads and the technical team as needed for specific decision points - Assist with preparing and proofing legacy data to be converted - Visible participation in project sessions for all affected users (typically bi-monthly or quarterly) - Preparing training materials and administering end-user training - Work with vendor staff to troubleshoot, test, and resolve open issues - Supporting end users during live use of the software

Table 2.7: Stakeholder Role Analysis – City Technical Team

Stakeholder Role Analysis – City Technical Team	
Proposed City Staff	See Tyler Munis Project Assignments document
Escalation Role	This role would be engaged when analyzing existing business processes and policies, learning software functionality, and discussing changes to the future environment. This role would have autonomy to make system administration decisions, discussing with functional leads and subject matter experts as needed, and make recommendations to the City Project Manager and PMT as appropriate for decisions that have not reached consensus, have significant impacts on stakeholders beyond the technical team, or need additional input.
Responsibilities	- Provide advisory-level assistance and project oversight to ensure compliance with IT Department standards, rules, and regulations - Participate in technical meetings to provide information related to current hardware and software standards, City infrastructure, security standards, staffing and training information, etc.

Stakeholder Role Analysis – City Technical Team	
	- Lead the City's participation in system administration-related tasks and sessions - Participate in system testing, as determined by the testing plan. Responsibilities may include oversight and execution of load/stress testing, technical support, hardware set-up and support, and user security - Assist in identifying integration needs with other City systems and developing associated interfaces - Assist with retrieving, preparing, and proofing legacy data to be converted - Work with vendor staff to troubleshoot, test, and resolve open issues - Identify other technical staff resources as needed for project activities
Desired Attributes	- Willing to promote and encourage changes in technology, business processes, and policies - Knowledgeable about the organization's historical practices - Able to make technical decisions that support the project's objectives - Does not need to be a subject matter expert for the business areas represented by the project
Estimated Involvement	- Participation in vendor-led sessions as needed - Participating in other meetings with functional leads and subject matter experts as needed for specific decision points - Supporting the Project Team during testing and end-user training sessions - Participation in the data conversion effort - Troubleshooting and testing open issues - Supporting end users during live use of the software

2.2 Governance Structure

The governance structure of a project provides a useful framework for making project-related decisions. The efficacy of a governance structure can directly impact the project's ability to remain on schedule, in scope, and within budget. Having staff in the proper roles and providing each stakeholder group with an appropriate balance of oversight and autonomy can prepare a solid foundation on which to make well-informed decisions in a timely and cost-effective manner, while considering all available options. A proposed governance structure has been identified below in Figure 2.1.

One of the most impactful factors for determining a project's success is the level of active and visible sponsorship that is provided to the project. The Executive Sponsor is considered most influential to the project's success, followed by the Steering Committee and Project Manager. These roles, particularly the Executive Sponsor, set the strategic direction for the project, and have been noted in bold lettering in Figure 2.1 below. The Executive Sponsor is the prime sender of messaging that communicates the project's objectives, as well as how these objectives relate to the City's overarching strategic vision, goals, and objectives. These roles typically also hold the most influence when

committing staffing and financial resources to the project. For these reasons, consistency in these roles across all phases can positively influence the success of the project. It is recommended that the same individuals remain in these roles for the full term of the project.

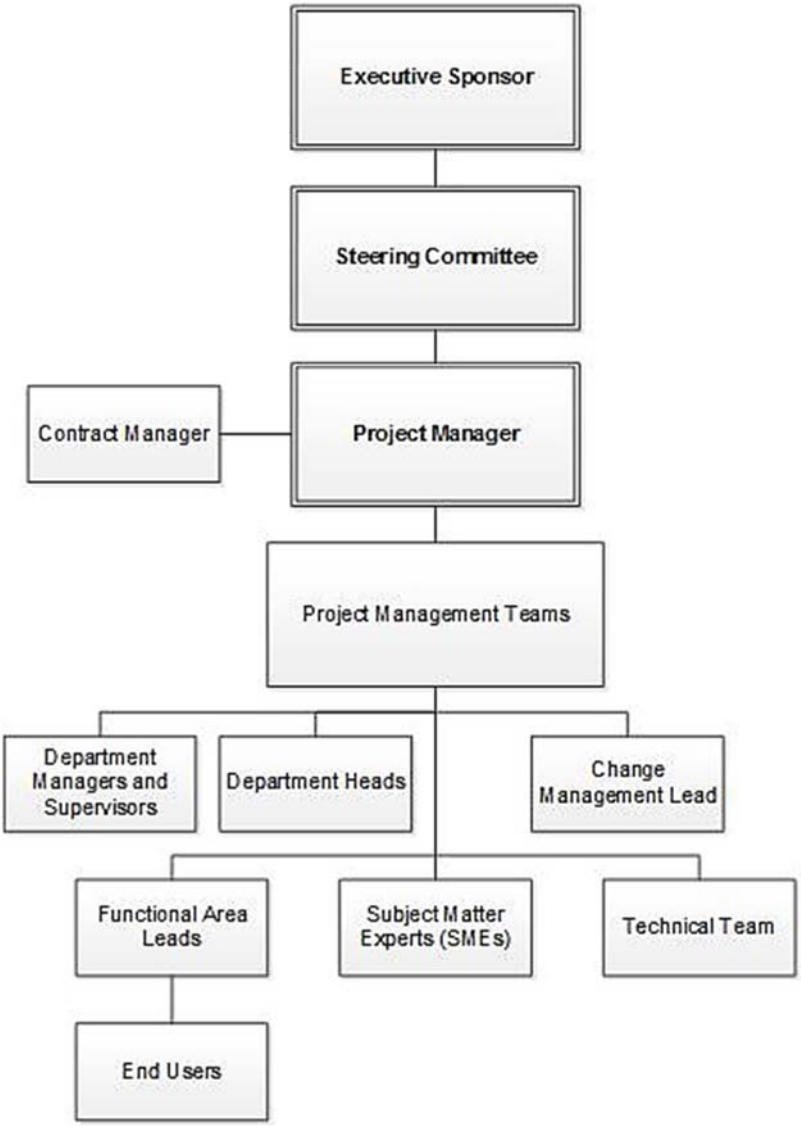
Based on previous experience with similar projects, BerryDunn recommends that the City establish one Project Management Team (PMT) for each vendor: Kronos, and Tyler Munis and EnerGov. There are several reasons that this approach would be preferred in contrast to the use of one PMT for the project. Each vendor will assign its own Project Manager, whom typically serves as the City's primary vendor contact. This role is tasked with managing the vendor's responsibilities during the project and serving as a liaison to other vendor staff. As a result, each vendor Project Manager will interact and communicate routinely with the City Project Manager and the PMT. Because each vendor will adhere to a unique scope, schedule, and budget, it can be advantageous to structure the PMT accordingly. In addition, the scope of such a project can be a significant undertaking when added to staff's daily operational job duties, especially for lean organizations. Given the scope of the project, this approach can be seen as a more efficient use of staff time and a way to potentially disseminate the implementation workload among a greater number of City staff.

The approach of using multiple PMTs can also allow for a more specialized handling of the different challenges and opportunities that each product brings in terms of such variables as managing vendor staffing, software functionality, training, communications, and change management. This specialization creates the level of focus and attention needed for each vendor. However, with this approach, it is important to note that structured and frequent communication between PMTs will be necessary for certain tasks where two products must interface, or share portions of the same business process. Utilizing one City Project Manager for all implementation phases can create a sense of consistency that allows for these conversations to occur at the appropriate times, thus minimizing the risks associated with a lack of this type of communication. Perhaps the most important factor to consider here is that each PMT should be comprised of staff that provide a focus specialized enough to deal with the specific challenges of each vendor engagement, but who can also speak to the larger organizational and historical context in which the project is operating.

The project's technical team is typically comprised of the staff that provide technical support to the legacy applications in use today. However, projects of this nature can provide an opportunity to cross-train technical staff on multiple applications, allowing them to learn each product from the ground up. This also strengthens the back-up support that is available for each software system, should technical staff eventually leave City service or transition to other roles within the organization. For these reasons, individuals on the technical team may participate in the implementation of multiple phases, at varying degrees.

The Contract Manager role can be filled by one staff person for the duration of the project, or by a distinct staff resource for each vendor contract, depending on the City's existing procurement structure and preferences for such contracts. The department heads, managers, and supervisors that are engaged during the course of the project will vary according to phase, as will the functional leads, subject matter experts, and end users. Please refer to Section 6.0 for information on the role of the Change Management Lead.

Figure 2.1: Proposed Project Governance Structure



3.0 System Deployment Framework

This section summarizes the City's deployment plan as it relates to the newly selected ERP system. This section will also include phasing and timelines as it relates to implementing the selected systems.

In its RFP, the City expressed interest in considering alternate deployment methods in addition to a locally-hosted (on-premise) method. The system deployment approach for the Kronos product is currently being discussed following Kronos' proposal of a Software-as-a-Service (SaaS) method. The additional software systems may also utilize this deployment method.

Update: The City has completed negotiations with Kronos and has selected a SaaS method for system deployment, and included TeleStaff as a component to the implementation. The City has completed contract negotiations with Tyler Technologies for the MUNIS ERP system and the EnerGov land use software system. Each of these Tyler products will also be deployed in a SaaS method.

3.1 Module Phasing

Based on the project schedule for Kronos, and the negotiated statements of work for Munis and EnerGov, the City will follow a phased approach to the implementation of the selected software systems. The anticipated start and go-live dates for each phase of work has been documented in Table 3.1

Table 3.1: Implementation Phasing and Durations

Implementation Phasing and Durations				
No.	**Functional Areas**	**Vendor**	**Phase Start**	**Phase(s) Go-Live**
1	Time and Attendance	Kronos – Workforce Central	November 1, 2016	June 1, 2017
2	Advanced Scheduling	Kronos – Telestaff	February 2017	April 2018
3A	Core Financials	Tyler Technologies – Munis	July 15, 2017	January 2, 2019
3B	Human Resources & Payroll	Tyler Technologies - Munis	January 1, 2018	January 2, 2019
3C	Work Orders/Asset Management	Tyler Technologies – Munis	October 1, 2018	April 1, 2019
4	Community Development	Tyler Technologies - EnerGov	October 1, 2017	June 2019

3.2 Software Deployment Approach

Kronos has proposed a SaaS solution that would meet the City's desires to utilize a cloud-based deployment method. As proposed by Kronos, this SaaS method would represent a larger financial investment from the City, as the monthly fees are greater, and additional operational costs would be a factor. In some cases, these fees will be offset by reduced infrastructure investment needed in the

City's data center, reduced timeline to procure such hardware and also in reduced personnel support requirements. Please see Attachment 6 of the Kronos proposal for additional information.

As the City completes the contract negotiation process with Kronos, important factors for a SaaS deployment have been considered including Service Level Agreements (SLA), availability guarantees, disaster recovery services, as well as the City's network and ability to maintain a high-performing connection via the City's Internet Service Provider (ISP).

Update: The City has completed contract negotiations with Tyler Technologies for SaaS deployment models of MUNIS and EnerGov, leveraging the Kronos negotiation focus areas as the starting point with Tyler – such as client remedies and the Tyler SLA.

3.3 Hardware Deployment

Kronos has proposed the installation of time clocks in multiple City locations to facilitate the capture of time for all departments. To prepare for the deployment of this hardware, staff can begin by taking inventory of the physical space that will host each time clock. Conducting this assessment will allow the City to make any needed accommodations for the physical installation of the hardware associated with the Kronos implementation by addressing questions such as:

- Does the location have sufficient surface space to accommodate the time clock?
- Does the location have the appropriate utility infrastructure, such as electrical wiring and Internet bandwidth, to supply the time clock?
- Will additional hardware or materials be required to mount the time clock that has not already been included in the scope of the Kronos proposal?
- Will the ratio of employees to each time clock be low enough in comparison to the available space to prevent potential overcrowding caused by staff waiting to utilize the time clock, or other safety hazards?
- Will the location be able to meet any applicable Americans with Disabilities Act (ADA) accessibility requirements?

As the City completes the contract negotiation process with Kronos, the estimate of needed time clocks has been included. BerryDunn recommends that the City include incremental pricing as additional clocks may be needed. In addition, the City learned through reference checks that other users of Kronos time clock hardware do not pay for the hardware maintenance/warranty as the hardware is reportedly very stable and reliable.

Update: The City has completed negotiations with Tyler for a SaaS deployment model of both the EnerGov and Munis software solutions. In the scope of the contract, certain third-party hardware has been included to support bar code scanning functionality for fixed assets, fleet, and inventory management, as well as cash receipting operations and check printing. Beyond the scope of the hardware listed in the contract, the City is also considering replacement of certain hardware used within the land use department, in order to maximize the use of EnerGov. This includes new personal computers, larger computer monitors, as well as mobile devices. A discussion was held with EnerGov to discuss the timing of purchasing mobile devices, taking into consideration the implementation start

date of October 2017, as well as the types of mobile devices the City might wish to consider. The key elements of that conversation are bulleted below:

- EnerGov started supporting iPads for mobile apps and recently moved to partially support the use of Microsoft Surface tablets. EnerGov mobile consists of two apps, IG Inspect and IG Enforce. IG Inspect is used for inspections tied to plan and permit applications. IG Enforce is used for code enforcement inspections. iPads support both IG Inspect and IG Enforce. Microsoft Surface tablets only support IG Inspect (IG Enforce is unavailable).
- EnerGov indicated that iPad minis are a popular device choice because they are large enough to easily enter information and small enough to easily transport. Rugged cases with hand straps/hand holds are available and are frequently used. Another reason iPads are popular is the native speech-to-text function allowing inspectors to enter notes directly into IG Inspect and IG Enforce using the iPad's speech-to-text function.
- Not all devices would need to be purchased at the start of the implementation. Tyler recommends discussing the appropriate timing to purchase devices with the EnerGov Implementation Project Manager once assigned.
    - From BerryDunn's past experience, purchasing a small number of devices for power users (three or four) to use early in the implementation and then purchasing the remainder of the devices just prior to User Acceptance Testing has worked well. As far as budget planning, this would put the need for three to four iPads in FY18 with the remaining iPads likely to be needed in FY19.
- Use of EnerGov apps (IG Inspect and IG Enforce) is not available on Android devices.

At this time, it is not anticipated that additional hardware will be required for the operation of Munis, though there may be a need to purchase approved peripheral items to support the use of Munis, such as printers or scanners.

3.4 Additional Considerations

In addition to the considerations identified in the preceding subsections, there are additional considerations related to the implementation that may be planned for and contemplated at this time.

- Testing and Training Facilities: The planned phasing of the Munis and EnerGov implementations are such that the City will have cross-functional phasing occurring at certain points in the process. At the height of activities, this will include the EnerGov phase overlapping with the Munis Financials and the Munis Human Resources/Payroll phases. Onsite activities contemplated under the Tyler SOWs include an average of three days of onsite sessions at a time – which may present possible physical resource scheduling conflicts should there be overlapping sessions between phases. The City has recently constructed a new training facility to accommodate a classroom-style approach to the implementation process, allowing up to 12 attendees to be present. It is recommended that the City work to identify a second location, and possibly a smaller third location, for training and testing to occur in the event concurrent sessions are held during the implementation process.
- Competing City Technology Initiatives: The scope of the implementation schedule for this project spans 29 months and is expected at times to compete for City resources from within

the IT Department over this duration. More specifically, City staff will be tasked with balancing core job responsibilities with the tasks associated with this, as well as other City IT projects. These projects include, but are not limited to, the IT Service Management software project, the data center modernization project, the public safety land mobile radio system replacement project, as well as the ongoing activities related to the utility billing system replacement. As priorities shift during the course of carrying out these complex and intensive initiatives it will be important to closely monitor project schedules and individual staff members' workloads to prevent project fatigue.

4.0 System Testing Framework

This section documents high-level processes related to the vendor's anticipated testing and proposes additional testing tasks for the City, including the identification of entrance and exit criteria.

4.1 Vendor Testing

System testing is a necessary component of any implementation in order to confirm that the desired future state of functionality has been achieved. It is advised that the City follows a testing approach that tests the system in the exact manner that it will be used by the City to support business needs on a day-to-day basis. Therefore, the testing effort should take a comprehensive approach to validate that the software meets functional and technical requirements by performing a full replication of the business processes to be performed in the live environment across all functional areas. In addition to base functionality available in each module, the vendor's proposed testing effort should also address the testing of any business processes that cross system modules, as well as user roles, security, workflow, and reporting. Testing should also confirm that all setup and configuration activities are complete, any interfaces are operating correctly, and that any converted legacy data has been accurately and fully converted.

Kronos has proposed to conduct the four types of testing identified in Table 4.1.

Table 4.1: Proposed Kronos Testing

Proposed Kronos Testing		
No.	**Testing Type**	**Purpose**
1	Unit Testing	Testing and validation of configured data or elements of the solution to ensure it meets the requirements documented in the respective design documents
2	Integration Testing	Testing of the solution to ensure that data is exchanged and integrates correctly with accompanying Kronos products or third-party systems
3	Operational Testing	Testing that the solution operates correctly in performing the automated business processes for which it was designed, through a full operational cycle
4	Validation Testing	Validation that the complete solution meets the unit, integration, and operational requirements documented in the Solution Design and as previously tested, but at a production level of operation across the entire organization in readiness for production

Tyler has proposed the following specific testing types. It should be noted that both statement of work documents identify continuous user testing throughout the implementation process, to validate business process design and system configuration.

Table 4.2: Proposed Tyler Testing

Proposed Tyler Testing		
No.	**Testing Type**	**Purpose**
1	Static Environment Testing (Munis) / Initial Operational Testing (EnerGov)	The Munis Static Environment Test (SET) is designed to test and prove the process decisions made. This test is completed on a clean database with a subset of hand entered (not converted) data provided by the City. This ensures that City staff is familiar with the data being tested and is able to verify the processes as the test is conducted by Tyler staff. After the SET is complete, implementation activities such as conversions, core user training and testing will begin. The EnerGov initial operational test is performed to ensure that Tyler has the information and configurations necessary to complete data conversions; to ensure that the City has the information and configurations necessary to complete report development; and to confirm basic system configuration to ensure proper operation
2	User Acceptance Testing (Munis and EnerGov)	User Acceptance testing is conducted both leading up to and following end-user training. Tyler supports incremental user acceptance testing through trial run processing in Financials and parallel processing in Payroll and Human Resources.
3	Verification and System Acceptance Testing (EnerGov)	Test and signoff on each delivered business process, suite, or component based on criteria and scope. The system is ready for production and promoted to a production and/or training environment.

4.2 Testing Roles and Responsibilities

The Kronos approach to testing includes oversight and support responsibilities for the Kronos Project Team and the City Project Manager, and proposes that a City Testing Team is assembled to lead the execution of testing. The following testing roles and responsibilities have been proposed by Kronos. Because testing should reflect the desired state of live operations, it is most effectively conducted by the functional leads and subject matter experts who have been trained on the system and will be using the system on a daily basis in the live environment.

The City can begin to prepare for this portion of the implementation by first identifying stakeholders to participate as members of the City Testing Team that could fulfill the following responsibilities listed in Table 4.2.

Table 4.2: Proposed Kronos Testing Roles and Responsibilities

Proposed Kronos Testing Roles and Responsibilities	
Role	**Responsibilities**
City Testing Team	- Understanding the Solution as documented within the design documentation (Architecture Design, Product Design(s), Interface Design(s), and Custom Development Design) in order to accurately assess testing scenarios. - Participating in the Testing Requirements activity to ensure an understanding of the Kronos testing process. - Identify and document test case scenarios based upon business processes and solution use cases. Kronos will provide pre-configured tools to assist in this activity. - Clarification / resolution of any issues identified by Kronos consultants during the configuration of the product or through Kronos Unit Testing. - Performing the User Acceptance Testing in accordance with the Testing Strategy and test case scenarios documented in the Solution Validation Workbook(s), and prioritizing and communicating issues and results to the Kronos Project Team. - Performing the Deployment Validation testing in accordance with the Testing Strategy, and any requirements documented in the Solution Validation Workbook(s), and prioritizing and communicating issues and results to the Kronos Project Team. - Regression testing the resolution of the issues and documenting the results within the Solution Validation Workbook.
City Project Manager	- Overall management of the activities of the Customer Testing Team. - Resolving issues between expected testing outcomes and the agreed Solution Design. - Managing the resolution of changes to the agreed Solution Design resulting from testing activities with the Kronos Project Manager through standard Kronos change control procedures. - Reviewing the outcomes of User Acceptance Testing, and co-coordinating the sign-off of the Solution Acceptance Milestone.

Proposed Kronos Testing Roles and Responsibilities	
Role	**Responsibilities**
Kronos Project Team Project Manager	- Overall management of the activities of the Kronos Project Team. - Identifying proposed changes to the agreed Solution Design resulting from testing activities, communicating these to the Customer Project Manager and resolving outstanding issues through standard Kronos change control procedures. - Reviewing the outcomes of User Acceptance Testing, and managing the sign-off of the Solution Acceptance Milestone by the Customer Project Manager.
Kronos Project Team Application/Solution/Technical Consultants	- Setting up the Test Environment with the configured solution. - Transferring knowledge of the Testing Strategy, Testing Criteria Document, Solution Validation Workbook and overall testing approach to the Customer Testing Team. - Pre-configuring Testing Criteria Document and Solution Validation Workbook with any known use cases prior to handing over the Customer. - Providing scheduled support for all testing activities, as well as support for collaborative configuration of product features which were not able to be configured during the Solution build.

Tyler has indicated in its proposal to the City that the City may choose to assign a Test Coordinator who will work with the Tyler Project Team. The core responsibilities of this individual would be:

- Working with Tyler Project Team to oversee all functions of the testing process. Monitoring the quality and timeliness of the overall testing effort.
- Facilitating testing completion by maintaining momentum during process. Checking that tests are completed in the order necessary to thoroughly sign-off on process.
- Ensuring that all reports of issues are submitted to the Tyler and the City Project Manager in a complete and timely manner.
- Review scenario processes and modify as necessary to align with any changes to policies and procedures.

As the City plans for the Munis and EnerGov phases of work, if the decision is made to utilize a Test Coordinate, the City may wish to consider identifying separate individuals for the two software products to leverage subject matter expertise. It would be beneficial to ensure that information, including lessons learned, are shared across the two processes whether one or more City staff fulfil this role. Additional information about the roles and relationship between the City team and Tyler, as it relates to the proposed testing approach, are bulleted below:

- Tyler will work with the City Project Team to create a Testing Outline that details step by step procedures for testing data integrity across all application processes.

- Tyler will work with the City Project Team to identify Project Team members, and functional leaders, to define roles and responsibilities in performing scenario processing.
- Both the City Project Team and Tyler Implementation Team will provide results of all testing to the City Project Manager. In addition, tracking of all issues and their resolution will be maintained in an Issues Tracking Register.
- The City's Project Team will identify and communicate to select Tyler Product Specialists the assigned testing scenarios to be executed with assistance from Tyler Implementation Staff.
- The City's Staff and Tyler Project Team will review and assign priorities for response to identified program or procedural issues that result from completed testing scenarios.

4.3 Recommended Testing Entrance Criteria

To ensure that testing is conducted at the appropriate stage of the implementation, it is recommended that entrance criteria be established, which serve as gateway requirements to be satisfied before proceeding into testing. Below is a list of recommended minimum entrance criteria that should be documented in the testing plan developed by the City, and the vendor teams within each phase of the implementation process.

Table 4.3: Recommended Testing Entrance Criteria

Recommended Testing Entrance Criteria	
No.	**Entrance Criteria**
1	Development and City approval of a Testing Plan
2	Preparation of supporting printed materials, including testing schedules, scripts, instructions, and any necessary sample documentation
3	Acknowledgement from the vendor that all functionality has been configured as defined by the City's requirements
4	Acknowledgement from the vendor that all interface design and building tasks are complete
5	Communication with the testing team and other key project stakeholders to explain the testing process and each stakeholder group's associated responsibilities
6	Development of and City approval of detailed, task-level written testing materials for each functional area
7	Acknowledgement from the City that the testing team has been sufficiently trained on the functionality and are prepared to execute testing
8	Acknowledgement from the City that the final pass of converted data has been loaded in the appropriate environment for use during testing
9	Acknowledgement from the City that user roles, security, and workflow have been properly set up
10	Resolution of any user access issues that may prohibit testing activities
11	Confirmation of any vendor resources scheduled to be on-site during testing activities

Recommended Testing Entrance Criteria	
No.	**Entrance Criteria**
12	Acknowledgement from the vendor that they will address any system-related issues that may arise as a result of testing

4.4 Regression Testing

Within the written testing materials provided by the vendor should be a forum for documenting any issues identified, the issue's severity, and the issue's resolution. This information will be needed to remedy any issues produced during testing. Upon confirmation of an issue's correction, it is recommended that the City conduct a second round of testing to confirm the corrections have been applied and ensure that such fixes have not impacted other areas of the system. This is commonly referred to as regression testing, and should be accounted for when developing the project schedule and the testing plan with the vendor. Regression testing should be performed before the City exits the testing phase.

4.5 Recommended Testing Exit Criteria

Similar to entrance criteria, there should be structured criteria for determining when the City can consider all testing complete and thus formally exit the testing phase of the implementation. Below is a list of recommended minimum exit criteria that should be documented in the testing plan developed by the City for each phase of the implementation process.

Table 4.4: Recommended Testing Exit Criteria

Recommended Testing Exit Criteria	
No.	**Exit Criteria**
1	Successful completion of all test scripts
2	Satisfactory resolution of all critical defects, as identified by the City
3	Presentation of all unresolved, non-critical defects to project leadership for review
4	Approval from project leadership to proceed with subsequent implementation activities

5.0 Knowledge Transfer Framework

This section identifies processes related to end-user training, and identifies anticipated vendor deliverables in contrast with the City's expected tasks for successful knowledge transfer and retention.

5.1 Training Objectives

Regardless of the division of duties between the City and a vendor, the City's Project Team should collectively agree on the objectives of end-user training sessions. Identifying these objectives will assist to ensure that training plans, materials, and class sessions are prepared and executed in a manner that realizes the City's short-term and long-term goals for use of the software. If clear objectives are not defined, the training provided to end users may not fully equip them to operate successfully in the new environment.

Deploying a systematic approach to end-user training allows staff across the City to consistently and accurately utilize the software to perform their daily tasks upon go-live in a manner that makes the transition between systems as smooth as possible. While the functionality of each software product will vary, the end-user training approach for each phase will likely incorporate similar objectives. Here are some common objectives of end-user training that go beyond the high-level objectives provided in the sample Kronos Education Strategy Plan and the Tyler statement of work documents:

- Identify and deliver the necessary conceptual, procedural, and software application training to end users prior to go-live
- Train City personnel on how to interact with the full range of software modules in order to perform tasks specific to their respective job functions
- Offer end users hands-on experience in the use of the software prior to go-live
- Communicate changes to City business processes and policies
- Provide each end user an overall understanding of how an ERP system functions
- Convey the project's strategic value to the organization and the advantages of transitioning away from current systems and processes
- Provide end-user training documentation that will serve as desk references in the post go-live environment

These objectives represent the knowledge transfer that would occur in order to best prepare end users for use of the new software, as well as the context of the project's value, changes to business processes, and updates to City policies. In order to accomplish the above objectives, it may be necessary to supplement the end user instruction proposed by Kronos and/or Tyler.

5.2 System Training

The Kronos proposal indicates that Kronos staff will lead the development of an Education Strategy Plan, with participation from the City. A sample Education Strategy Plan has been provided in Appendix 3 of the Kronos proposal. Where possible, it is recommended that the training approach take into account any training best practices that may already be in use at the City. Being able to

capitalize on an existing training framework that is familiar to users can help to reduce user uncertainty and resistance during the education process.

City staff can begin to prepare for the creation of the Education Strategy Plan by evaluating the meeting space and technology resources that would be required to conduct end-user training. It appears that the City will be responsible for providing a training space in which to conduct the classes; clarification as to class size should be requested during the development of the Education Strategy Plan. The Kronos proposal also establishes minimum system requirements for the computers and audio equipment that will be used during training. Performing an inventory now to determine what equipment may be needed would allow for advanced planning, should resources need to be replaced or upgraded.

City staff can also begin preparing for the end-user training effort by working with Human Resources staff to identify lessons learned from City-led training. It could also be beneficial to review with Human Resources staff the basic structure and format of the proposed Kronos training, to anticipate possible challenges with the proposed approach. For example, the proposed approach would use a virtual classroom approach, with a remote resource leading the training in a web-based training setting. While some organizations might view this as a cost-effective method due to the lack of instructor travel, other organizations might prefer the in-person, live experience of hands-on assistance. Ultimately, the approach agreed to by Kronos and the City should be tailored to address such preferences, in order for the training experience to be as effective as possible.

As described in Tab 13 of the proposal, Kronos staff will deliver system end-user training, organized by job role and by skill level (introductory, intermediate, and advanced classes). During the development of the Education Strategy Plan, it will be useful to confirm the ownership of related tasks that may not yet be clearly identified, such as the:

- Administration of a project orientation session for all users prior to end-user training
- Creation of super-user training documentation
- Creation of supplemental end-user training documentation, such as quick reference guides or interactive recorded tutorials
- Administration of basic technology classes (as a pre-requisite to system-related training)
- Collection of end-user questions and feedback
- Post-live continuing and remedial classes

The above elements may not be included in the vendor's basic training approach, but can enhance the learning experience and increase the rate and speed of user adoption of the new software. Yet, if these deliverables will be owned by the City, they could represent a significant investment of staff time which will require advanced resource planning.

The Tyler project approach to training will utilize a train-the-trainer approach for both the Munis and EnerGov products.

During the initial stages of the Munis implementation, an Education Management Plan will be developed that identifies and confirms key information related to the training approach including decisions on the which system environments will be used; identification of the training facilities and accommodations; scheduling and staffing considerations, as well as the quality control approach. The City has begun planning for this process by constructing a new training facility and outfitting the room with new hardware in advance of the Tyler project kickoff. Any lessons learned through the Kronos implementation and training process should be incorporated into the approach for the Tyler implementation process, with the expectation that the training approaches will be different between the vendors – particularly in light of the number of end users that will be subject to training for Kronos.

In advance of Munis implementation work sessions, agendas will be made available that identify any prerequisites, such as training documentation to review or videos to be viewed. It will be critical that staff are made aware of any prerequisite work before attending sessions, and that they be provided the necessary login credentials to access the agreed-upon systems environment. Similarly, EnerGov will provide prerequisite training courses pre-implementation by providing access to the Tyler Online Training Center and identifying prerequisite courses per functional area and module to help staff prepare for the implementation process.

5.3 Business Process Education

It is important to note that the process of knowledge transfer will likely require additional elements beyond the proposed software training classes. The sample Kronos Education Strategy Plan addresses three types of training: product awareness, product training, and running custom interfaces. However, in addition to software training, there will likely be significant business process and policy changes that must be communicated to end users of all three software systems. These changes can be communicated in advance of software training or incorporated into the software training classes. In any event, software training classes should be tailored to reflect any ancillary process or policy changes previously communicated. Therefore, during the development of the Kronos Education Strategy Plan, the Munis Education Management Plan, the vendor's role in business process education should be clarified so that the appropriate expectations are set for City resources that might fully take on ownership of business process education, or assist with revising the standard Kronos software training approach to incorporate process and policy education into software training.

6.0 Business Process Analysis

This section summarizes recommended actions the City can take related to business process change analysis.

The implementation of new software will present new options for configuring business processes, given that modern systems typically offer a greater number of configuration options and can incorporate processes that may have previously been confined to manual and paper-based processes. The City hopes to realize efficiencies that were previously impossible due to system limitations. It will be important for City staff to actively engage in updating business processes during the replacement of software. The desire is to align the City's business processes to the selected system as much as possible to avoid customization.

6.1 Approaches for Business Process Changes

BerryDunn has experienced many strategies to promote changing business processes where it would benefit from the City. Some of the more effective strategies are highlighted below:

- **Identify Key Objectives:** At the onset of an initiative to review business processes it is important to first identify key objectives from City leadership. This will establish the guidance for the effort and serve as a basis for evaluating business process change opportunities. In addition, this will form a measure of success when business processes changes are implemented.

- **Retain Assistance from Experienced Resources:** Effectively analyzing business processes for change requires an experienced resource to provide insight into best- and smart-practices for similar organizations. Depending on the depth of internal resources with this knowledge, the City should consider selecting a software vendor that can offer this experience or utilize third-party professional services.

- **Plan Proactive Organizational Change Management:** Any amount of process change will impact City staff to some level, and a focused review of business processes will inevitably result in a larger impact. The City should plan change management to include regular communications and a feedback mechanism for stakeholders. Further, it is recommended that this plan is developed in line with a proven change management methodology, such as Prosci.

- **Diagram Processes as Needed:** For several processes it will be beneficial to collaboratively diagram the key elements of both the As-Is and To-Be states. This processes may be those that are particularly complex, involving many stakeholders, or generally not well understood. Business process diagramming can typically provide valuable clarity in these cases.

- **Documented Deferred Process Changes:** In BerryDunn's experience, many organizations set out to implement numerous business processes changes in the context of a system implementation but due to a number of factors may elect to defer some change to later milestones, such as after a Go-Live event. If the City reaches this point, it is recommended that deferred changes are documented to be revisited at a later time. Without a list of deferred items, the City may not ever revisit the items.

6.2 Potential Business Process Changes

The following table represents policies and business processes that may require revisions as a result of functionality identified and decisions made during the Kronos implementation. It should be noted that this is not an exhaustive list. This list serves as a starting point from which to begin examining how to best align policy and process changes with the implementation of the Kronos product. Because of the close potential association with functionality in an ERP system external to the Kronos product, it should be noted that decisions made during the Kronos implementation may impact how other software is subsequently implemented.

Update: The following table has been updated with potential policy and business process changes related to the Munis and EnerGov-related functional areas. Similar to the Kronos items, this list serves as a possible starting point for decision-making processes.

Table 6.1: Policy and Business Process Decision Points

Policy and Business Process Decision Points		
No.	**Decision Point**	**Module**
1	It should be determined whether all employees will be required to clock in and out using a time clock.	Time Capture
2	It should be determined whether employees will be required to clock in and out for breaks.	Time Capture
3	It should be determined whether any employees will be allowed to clock in from a mobile device.	Time Capture
4	It should be determined whether any employees will be allowed to clock in from a remote location.	Time Capture
5	It should be determined where employees will be able to view leave accrual balances.	Time Capture; Payroll
6	It should be determined whether any employees will be required to complete an electronic timesheet.	Payroll
7	It should be determined whether employees will be allowed to complete an electronic timesheet from a mobile device.	Payroll
8	It should be determined whether employees will be allowed to complete an electronic timesheet from a remote location.	Payroll
9	It should be determined whether any employees will be allowed to use an exception-based approach to time entry.	Payroll

Policy and Business Process Decision Points		
10	It should be determined whether electronic workflow can or will be leveraged to approve time captured.	Time Capture; Payroll
11	It should be determined whether department staff will be able to submit personnel action requests electronically.	Human Resources
12	It should be determined whether electronic workflow will be used to approve personnel action requests.	Human Resources
13	It should be determined whether a formalized performance appraisal process will be used across the City.	Human Resources
14	It should be determined whether paystubs will be delivered in paper-form, or made available via email or through employee self-service.	Payroll
15	The chart of accounts should be analyzed for improvement opportunities.	General Ledger
16	It should be determine what level of access will be granted for decentralized journal entry processing.	General Ledger
17	Timelines associated with GL imports from other systems should be established.	General Ledger
18	It should be determined how the budget development process will be systematized and decentralized.	Budget
19	It should be determined what workflow processes will be used for budget amendments.	Budget
20	It should be determined what workflow processes will be used for budget transfers.	Budget
21	It should be determined whether any processes will be used related to budgeting for outcomes or performance-based budgeting.	Budget
22	It should be determined whether any administrative or “overhead” costs will be applied to projects.	Project Accounting
23	It should be determined whether actual and/or “fully loaded” labor costs will be charged to projects.	Project Accounting
24	It should be determined whether the grant application process will be further centralized for coordination.	Grant Management
25	It should be determined whether any administrative or “overhead” costs will be applied to grants.	Grant Management
26	It should be determined whether actual and/or “fully loaded” labor costs will be charged to grants.	Grant Management
27	It should be determined whether the City will adopt the use of purchase cards.	Purchasing
28	It should be determined whether the contract management process will be systematized, and allow for staff to enter purchase orders against contracts.	Purchasing

Policy and Business Process Decision Points		
29	It should be determined whether the City will utilize blanket purchase orders in the future systems environment.	Purchasing
30	It should be determined whether the City will continue the use of a two-way match for invoices and purchase orders, or whether a three-way match incorporating receiving documents/information will be used.	Accounts Payable
31	It should be determined whether the invoice entry process will be decentralized.	Accounts Payable
32	The number of cash collection points should be determined, as well as the tender types accepted at each location.	Accounts Receivable and Cash Receipts
33	Timelines associated with cash receipting imports from other systems should be established.	Accounts Receivable and Cash Receipts
34	It should be determined whether departments will share a single customer file or each have its own occurrence of customer files.	Accounts Receivable and Cash Receipts
35	It should be determined which fleet items will be tracked within the ERP system.	Fleet Management
36	It should be determined which costs areas will be captured on fleet work orders.	Fleet Management
37	It should be determined whether any “sensitive” assets will be tracked within the ERP system.	Fixed Assets
38	It should be determined whether alternative costing and depreciation methods will be used with the new fixed assets module.	Fixed Assets
39	It should be determined which inventory stores will be managed within the ERP system versus other inventory tracking systems.	Inventory
40	It should be determined how inventory levels will be adjusted with more efficient purchasing processes	Inventory
41	It should be determined whether online application submittal will be supported for all or a subset of application types.	Planning and Permitting
42	It should be determined whether full electronic plan submittal is possible or whether a paper copy of plans will be required.	Planning and Permitting
43	It should be determined whether BlueBeam or Adobe Pro will be used for electronic document review.	Planning and Permitting
44	It should be determined whether electronic copies of signatures will be sufficient for permits, certificates of occupancy, licenses, and other approval documents.	Planning, Permitting, Inspections, Business Licensing
45	It should be determined whether the existing inspection request cutoff time of 3:00 pm will be revised.	Inspections, Citizen Self Service
46	It should be determined whether copies of permits could be available for printing through citizen self-service or if applicants will be required to pick-up approved permits at the City.	Permitting, Citizen Self Service

Policy and Business Process Decision Points		
47	It should be determined whether inspection load balancing and maximum daily inspection thresholds will be utilized in EnerGov.	Inspections
48	It should be determined whether field printing of inspection results and notices of violation will be supported.	Inspections, Code Enforcement
49	It should be determined whether emails can replace letters for business license renewal applications.	Business Licensing

7.0 Organizational Change Management Framework

This section summarizes proactive steps the City may consider taking following the system selection project, as it prepares for implementation activities with the selected vendors.

7.1 Change Management Methodology

In BerryDunn's experience, organizations that select a proven change management methodology typically experience greater project success than those which develop and implement an internal methodology. One of the most widely used approaches for managing the human side of organizational change is the Prosci methodology. BerryDunn has found this approach to suit other organizations well due to its focus on managing change at the individual level. Prosci was founded in 1994 to provide a change management methodology and associated tools that could be utilized at every level within organizations undergoing significant change. Prosci published in 2014 that over 75 percent of Fortune 100 companies use its change management methodology.

A foundational tenet of the Prosci methodology is the ADKAR® model of individual change, described in the following table. It is important to note that the steps within this model cannot be skipped or reordered. After project staff understands how individuals navigate this chronological ADKAR process of accepting change, they can provide tools to individuals within the organization, such as communication, sponsorship, training, and coaching.

Table 7.1: ADKAR® Model of Individual Change, www.prosci.com

ADKAR® Model of Individual Change	
ADKAR® Element	**Factors Influencing Success**
Awareness of the need for change	- A person's view of the current state - How a person perceives problems - Credibility of the sender of awareness messages - Circulation of misinformation or rumors - Contestability of the reasons for change
Desire to support and participate in the change	- The nature of the change (what the change is and how it will impact each person) - The organizational or environmental context for the change (his or her perception of the organization or environment that is subject to change) - Each individual's situation - What motivates a person (those intrinsic motivators that are unique to an individual)
Knowledge of how to change	- The current knowledge base of an individual - The capability of this person to gain additional knowledge - Resources available for education and training - Access to or existence of the required knowledge

ADKAR® Model of Individual Change	
ADKAR® Element	**Factors Influencing Success**
Ability to implement required skills and behavior	- Psychological blocks - Physical capabilities - Intellectual capabilities - The time available to develop the needed skills - The availability of resources to support the development of new abilities
Reinforcement to sustain the change	- The degree to which reinforcement is meaningful and specific to the person impacted by the change - The association of the reinforcement with actual demonstrated progress or accomplishment - The absence of negative consequences - An accountability system that creates an ongoing mechanism to reinforce the change

It is recommended that the City select its chosen methodology for the course of the project and begin to plan for change accordingly by identifying change management stakeholders, developing a Change Management Plan, identifying the project's communication structure, and identifying policies and business processes that are likely to undergo significant change during the project.

7.2 Change Management Leadership

It is recommended that one person be appointed to lead the execution of the City's change management strategy. This role is typically known as the Change Management Lead, and can be filled by a different staff person for each phase. In fact, it is often recommended that this person is unique to each phase to ensure that the staff person selected is knowledgeable about the functional areas to be impacted and able to motivate and encourage staff to adopt changes resulting from the project. The role of the Change Management Lead is usually second only to the Executive Sponsor in terms of its impact on the project's change management success, so it is important to give careful consideration to the selection of this staff resource.

Table 7.2: Stakeholder Role Analysis – City Change Management Lead

Stakeholder Role Analysis – City Change Management Lead	
Proposed City Staff	To be determined
Escalation Role	This role would oversee the development and administration of the project's change management approach and would escalate issues or risks associated with change management to the City Project Manager and Project Management Team. This role is responsible for implementing action strategies and making recommendations to project leadership that can improve the successful adoption of policy and business process changes

Stakeholder Role Analysis – City Change Management Lead	
	brought about by the project, and notifying project leadership to take corrective action when resistance to change is encountered.
Responsibilities	- Establish a change management strategy in complement to project management best practices, and aligned with the vendor's implementation methodology - Advise the Project Management Team (PMT) on change management considerations - Coordinate and develop change management strategies to increase the likelihood of stakeholder engagement and change adoption - Proactively employ change management strategies to mitigate project risks and issues - Identify project stakeholders, including message senders and receivers, and communicate their role and responsibilities as change agents - Assist with identifying and making recommendations on opportunities for business process and organizational change decisions - Act as a liaison for City staff affected by the project, receiving user feedback and responding with the appropriate change management strategies - Communicate risk mitigation and issue resolution strategies to the appropriate staff - Lead the development of project communications to all stakeholder groups - Participate in meetings and work sessions to advise on change management considerations at the direction of the City Project Manager - Assist with the end-user training effort as needed
Desired Attributes	- Respected and well-regarded within the project stakeholder groups - Knowledgeable about the functional areas represented on the project - Able to commit significant portions of time to project tasks - Strong written and verbal communication skills - Knowledgeable about the organization's historical practices - Able to collect and synthesize stakeholder feedback about the project and relay that to the City Project Manager - Willing to promote and encourage changes in technology, business processes, and policies - Able and willing to promote the project's objectives among project stakeholders - Positive demeanor that can generate excitement for the project among users - Creativity

Stakeholder Role Analysis – City Change Management Lead	
Estimated Involvement	- Leading and/or participating in meetings with project stakeholders as needed for specific decision points - Generating written communications and speaking points for message senders - Leading and/or participating in meetings with end users to collect feedback and make project-related decisions - Visible participation in project sessions for all affected users (typically bi-monthly or quarterly) - Participation in project work sessions as needed - Participation in recurring PMT meetings and vendor status calls as needed

An effective change management approach for a project of this magnitude will require staff resources that are explicitly designated for change management tasks. However, the best practice is to consider all project stakeholders to be change agents to a certain degree. Some stakeholders will play a larger role than others in the project's change management approach, but each stakeholder can positively or negatively impact the rate of change adoption among their fellow staff. Other stakeholder roles and responsibilities should be detailed in a change management plan for the project, developed through collaboration among the City Steering Committee, Project Manager, and PMT.

7.3 Communication Strategy

The Communication Matrix below has been provided as a sample of the types of communication that can contribute to a successful change management approach. For each communication vehicle to be used during an implementation, its delivery method, frequency, owner, and audience has also been identified. This information provides the basis for crafting tailored messaging to unique stakeholder audiences and ensures the most effective senders are being used to send messages. Because each phase will have a unique blend of stakeholders, this matrix should be completed for each phase of the project.

Table 7.3: Sample Communication Matrix

Communication Type	Item	Description/Content	Delivery Method	Frequency	Owner	Audience	Meeting Duration (Estimate)
End User Communications	Phase Kickoff	Marks the beginning of each phase and provides end users with information about the schedule and scope of implementation activities.	In Person	Start of Each Phase	Project Manager; Vendor Project Manager	End Users; Functional Leads (FL); Subject Matter Experts (SME)	Variable
End User Communications	Executive Mandate	Demonstrates executive-level buy-in and support for the project; commits resources, emphasizes the project's importance for meeting organizational goals, and communicates the project's scope and purpose.	Memo	Start of Project	Project Manager	All Users	N/A
End User Communications	City Manager's Informational Meeting	Provide a brief five-minute project update at the quarterly all-employee meeting hosted by the City Manager.	In Person	Quarterly	Project Manager; Change Management Lead	All City Employees	Variable

Table 7.3: Sample Communication Matrix

Communication Type	Item	Description/Content	Delivery Method	Frequency	Owner	Audience	Meeting Duration (Estimate)
End User Communications	Department User Communications	Email and print communications to stakeholders about project status, completion of project milestones, upcoming process changes, and training information. Information will be provided to Administrative Assistants to distribute to their respective functional areas.	Email and/or print	As Needed	Change Management Lead	All Users	Variable
End User Communications	Executive Staff Meetings	Bi-weekly meeting for City Manager's Office staff and department directors. Provide high-level project updates and share upcoming process changes.	In Person	Monthly	Project Manager; Change Management Lead	Department Directors, City Manager's Office	Variable
End User Communications	Department Supervisor Meetings	Meetings for each department's supervisory staff to share project information and equip department managers/supervisors with the tools to	In Person	As Needed	Project Manager; Change Management Lead	Department Directors, Managers, and Supervisors	Variable

Table 7.3: Sample Communication Matrix

Communication Type	Item	Description/Content	Delivery Method	Frequency	Owner	Audience	Meeting Duration (Estimate)
		support the project among their staff.					
End User Communications	Department User Meetings	Meetings for each department's end users to provide project updates.	In Person	As Needed	Project Manager; Change Management Lead	Department Users	Variable
End User Communications	Informational Cards	Printed materials that summarize expected process changes by department.	Print	Once Per Phase	Change Management Lead	Department Users	N/A
End User Communications	Newsletter	High level, periodic project communication that summarizes upcoming project tasks, tasks completed, and FAQs, and celebrates project successes.	Intranet, Print	As Needed	Change Management Lead; FLs; SMEs	All Users	N/A
End User Communications	Blog	Periodic blog posts regarding project progress, expectations, useful knowledge, upcoming training, and training pre-requisites.	Intranet	As Needed	Change Management Lead; FLs; SMEs	To be determined based on information being communicated	N/A

Table 7.3: Sample Communication Matrix

Communication Type	Item	Description/Content	Delivery Method	Frequency	Owner	Audience	Meeting Duration (Estimate)
End User Communications	Videos	Periodic videos summarizing the project's progress and upcoming activities.	In Person; Intranet blog; City YouTube channel	As Needed	Change Management Lead; Public and Media Relations Office	All Users	N/A
End User Communications	FAQ Page	Used to document user-submitted questions and concerns related to the project.	Intranet blog	Continuous updates	Change Management Lead	All Users	N/A
End User Feedback	Change Readiness Assessment	Used to inform the Project Team of users' awareness, desire, and ability to change, as well as their knowledge of the project and how it will affect their daily operations.	Hyperlink on Intranet blog	As Needed	Change Management Lead	All Project Staff	N/A
End User Feedback	Surveys	Used to gauge user knowledge, interest, concerns, and questions related to the project.	Hyperlink on Intranet blog	As Needed	Change Management Lead	All Project Staff	N/A
End User Feedback	End User Questions Web form	A web form on the Intranet blog for submitting any questions and	Web form on Intranet blog	Continuous	Change Management Lead	All Project Staff	N/A

Table 7.3: Sample Communication Matrix

Communication Type	Item	Description/Content	Delivery Method	Frequency	Owner	Audience	Meeting Duration (Estimate)
		concerns related to the project. Administrative Assistants can add these for staff without PC access.					
Team Morale	Project Recognition	Celebration activities to recognize the work of project staff, usually upon completion of certain milestones or critical project tasks.	In person	As Needed	Change Management Lead	All Project Staff	Variable

7.4 Identification of Change Management Concerns

In September 2015, during the system selection project, a change management planning meeting took place. There were several objectives for this meeting, one of which was to identify initial concerns among City staff that could be mitigated with change management strategies. City staff identified the following concerns that can be positively impacted by the project's change management efforts. As the City approaches implementation, it is recommended that the Project Team gather to evaluate the current status of these concerns, and identify whether these concerns remain active and relevant for the implementation work ahead.

Table 7.4: Identified Change Management Concerns

Identified Change Management Concerns		
No.	**Concern**	**Mitigation Strategy**
1	There is an overall concern about setting expectations among users about available funding and functionality, especially where there may be a lack of funding. Specifically, the highest levels of concern are present among Human Resources staff due to past experiences.	Maintain staff expectations that no funding is guaranteed prior to City Council approval, but include Human Resources functionality during all project activities (i.e., fact-finding, functional and technical requirements) and include HR functionality as optional in the contract to pave the way for implementation if funded. To the extent that it is politically feasible, include all anticipated phases of the project in the initial funding request. Consider making a request of the City Council to approve the ERP strategy document and issue a resolution endorsing the deployment of new software for all phases of the project.
2	Inventory staff are concerned about how they will fit into the new system. It is unknown whether water utility inventory would be included in a single, new system or maintained in a separate system.	Use Fact-Finding and Joint Requirements Planning sessions to understand existing inventory practices and identify potential needs in a future inventory system. Conduct analysis to better understand the advantages of using multiple inventory systems versus one system.
3	Staff with long tenures of 10-15 years may find it more challenging to separate their established role from new possibilities and depart from the current state of operations. For example, the Land Use Department's process for accepting fee payments was identified as one that will likely need to be modified.	Distribute messaging from the project's executive sponsor, City leadership, and department management endorsing the project. These communications should also enumerate the business reasons for procuring new software and set an expectation that business processes will be changed as a result of the software implementation.
4	Gaining feedback from all affected work groups may prove challenging if users do not vocally participate in project sessions meant to elicit user feedback.	Create opportunities (such as the demo labs during vendor demonstrations) to engage staff individually about their concerns and expectations. These opportunities should be most available to staff who are most familiar with and impacted by the affected business processes.

Identified Change Management Concerns		
No.	**Concern**	**Mitigation Strategy**
5	Staff will need to be appropriately trained to use the new software.	Develop a training plan that identifies a training methodology, affected users, and staff's training roles and responsibilities.
6	Staff may find it challenging to communicate project updates to the public that are timely and contain the appropriate level of information.	Project updates can be provided to the City Council and published online occasionally to provide a high-level overview. It is appropriate that overviews are provided periodically around project milestones. Each overview should provide a brief background of how the strategic vision driving the project was formulated, a description of the City business needs and affected functional areas, and anticipated next steps.
7	Staff are looking for feedback from other implementations' process improvements to energize staff about potential improvements.	Invite a large cross-section of staff to participate in fact-finding, vendor demonstration, and Joint Requirements Planning sessions. The discussions in these sessions can provide insight into functionality available in modern ERP systems. During system selection, conduct extensive reference checks and site visits with current clients to validate vendor claims about process improvements.
8	New hardware may be needed to support the new software. This is especially of concern regarding electronic plan review.	Identify the scope of potential hardware needs during the procurement process, using the vendor's experience to inform the City's expectations about what may be needed. Include hardware cost estimates in the project's funding request.

As the City proceeds to implement its selected products, particularly the Kronos product, all City staff are likely to be impacted in some way by the various changes implemented. Whether it be the concerns previously identified or new concerns to be identified, change management and communication efforts can assist with mitigation efforts to increase buy-in, reduce uncertainty, clarify the City's strategic vision for the project, and increase the chance of project success.

7.5 Identification of Risks and Issues

Using the framework of the Issue and Risk Register and the Risk Watch List that were established during the system selection project, City staff should also conduct a similar exercise to evaluate open issues and risks, as well as risk watch items from the system selection project. Conducting a group exercise to confirm existing and identify new risks and issues will allow for continuity in the mitigation strategies for transferable issues and risks, as well as set the project up for success in proactively identifying potential challenges and associated mitigation strategies for the implementation project.

8.0 Next Steps in the Project

This section describes the next steps in the project.

8.1 Implementation Planning Action Items

The following table provides a summary listing of the recommended action items that have been addressed in this document. These action items are intended to provide a roadmap for initiating implementation project planning activities, and should be repeated in preparation for each system implementation. While this is not an exhaustive list of all project planning activities to be undertaken for a successful implementation, focusing staff time on these activities now can proactively prepare the organization for the coming implementation work. The recommendations and tasks within this document represent the work effort internal to the City and apart from vendor deliverables that will position the City for a smoother and more efficient transition from system selection into implementation.

Table 8.1: Recommended Implementation Planning Action Items

Recommended Implementation Planning Action Items		
No.	**Framework Area**	**Action Item**
1	Project Governance	Identify City staff to fill project stakeholder roles
2	Project Governance	Meet with each stakeholder group selected for the project to communicate stakeholder roles and confirm responsibilities
3	Project Governance	Establish the project governance structure
4	System Deployment	Conduct assessment locations to have time clocks installed
5	System Testing	Identify lessons learned from previous testing projects conducted by the City
6	System Testing	Develop testing plan with the vendor
7	System Testing	Identify City staff for membership on the City Testing Team
8	System Testing	Compile the City's desired testing entrance criteria
9	System Testing	Review the project schedule and testing plan to reserve time and resources for regression testing
10	System Testing	Compile the City's desired testing exit criteria
11	Knowledge Transfer	Identify best practices and lessons learned from previous City-led trainings
12	Knowledge Transfer	Confirm the City's desired objectives for end-user training
13	Knowledge Transfer	Take inventory of the available meeting space and technology resources to be used during end-user training
14	Knowledge Transfer	Clarify the vendor's role in end-user training tasks beyond core system training, including business process education

Recommended Implementation Planning Action Items		
No.	**Framework Area**	**Action Item**
15	Organizational Change Management	Select a change management methodology to follow for the course of the project
16	Organizational Change Management	Identify City staff to fill the role of Change Management Lead and any assisting change management roles
17	Organizational Change Management	Meet with the Change Management Lead(s) and other change management stakeholders to communicate stakeholder roles and confirm responsibilities
18	Organizational Change Management	Identify training needs for the Change Management Lead and other change management roles
19	Organizational Change Management	Develop a Change Management Plan
20	Organizational Change Management	Identify the project communication structure
21	Organizational Change Management	Review and update the previously generated list of change management concerns
22	Organizational Change Management	Review and update the previously generated Issue and Risk Register and Risk Watch List
23	Organizational Change Management	Identify policies and business processes that are likely to undergo significant change during the project

8.2 Implementation Planning Document Updates

This document has been updated following the completion of the Tyler contract negotiations for Munis and EnerGov, to reflect updates related to those phases of the project. As the Kronos implementation is mid-stream, the document has not been updated to reflect changes stemming from that phase of work. A Gantt chart has been provided here as Figure 8.1 to identify the planned implementation dates.

Figure 8.1: Implementation Gantt Chart