

**CITY OF LA VISTA
MAYOR AND CITY COUNCIL REPORT
JANUARY 19, 2021 AGENDA**

Subject:	Type:	Submitted By:
ADOPTION — IT STRATEGIC PLAN	◆ RESOLUTION ORDINANCE RECEIVE/FILE	KEVIN L. POKORNY DIRECTOR ADMINISTRATIVE SERVICES

SYNOPSIS

A resolution has been prepared to adopt the Information Technology Strategic Plan as prepared by Berry Dunn.

FISCAL IMPACT

N/A

RECOMMENDATION

Approval.

BACKGROUND

The City's first Information Technology (IT) Strategic Plan was adopted in November 2011. Most all of the recommendations included in the plan have been achieved and as a result, it has become necessary to develop a new strategy to identify and prioritize future investments in technology supportive of the City's evolving technology needs.

In March 2019, the City Council approved a contract with BerryDunn to provide consulting services for the development of a new long-range Information Technology Strategic Plan. After many months and several phases of this project attached is the recommended plan for FY22-FY27. The BerryDunn team will present the plan via Zoom and will be available to answer any questions that you might have.

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF LA VISTA, NEBRASKA ADOPTING THE INFORMATION TECHNOLOGY STRATEGIC PLAN.

WHEREAS, the Mayor and City Council recognize the importance and value of having a deliberate planning process to help guide all facets of city government; and

WHEREAS, the Mayor and City Council believe that it is essential to have an Information Technology Strategic Plan; and

WHEREAS, the Mayor and City Council included the creation of an Information Technology Strategic Plan as a part of their overall Strategic Plan for the City;

WHEREAS, the Information Technology Strategic Plan is developed as a collaborative effort between BerryDunn Consultants, the IT Committee, consisting of representatives from each department; management staff and all employees.

NOW THEREFORE, BE IT RESOLVED that the Mayor and City Council of the City of La Vista, Nebraska, do hereby adopt the Information Technology Strategic Plan as presented at the January 19, 2021 City Council meeting.

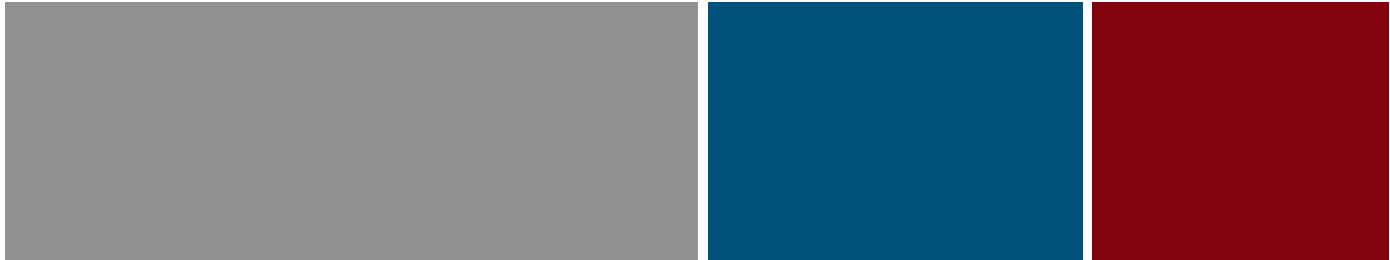
PASSED AND APPROVED THIS 19TH DAY OF JANUARY 2021.

CITY OF LA VISTA

Douglas Kindig, Mayor

ATTEST:

Pamela A. Buethe, CMC
City Clerk



City of La Vista

Information Technology Strategic Planning Project



Information Technology Strategic Plan

December 22, 2020

Prepared for:
City of La Vista, Nebraska
8116 Park View Blvd.
La Vista, NE 68128



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Table i: Version History of the Report

Version	Delivered Date	Description
Draft 1	April 15, 2020	Draft 1 of the Information Technology (IT) Strategic Plan delivered for review by the City of La Vista
Draft 2	October 8, 2020	Draft 2 with revisions from the City incorporated
Draft 3	November 25, 2020	Draft 3 with Initiative "T" added
Final	December 22, 2020	Final version provided to the City

Acknowledgements

Berry Dunn McNeil & Parker, LLC (BerryDunn) would like to thank the employees of the City of La Vista (the City) for collaborating on this Information Technology (IT) Strategic Plan (Plan). Special thanks go to the City Project Team members listed below; their time and commitment were essential to the development of this Plan.

Kevin Pokorny	PJ Biodrowski
Chris Solberg	Ryan South
Jean Hurst	Mitch Beaumont
Stacia Burt	Pam Buethe
Crystal Larson	Trish Robey
Tommy Prouhet	Ray Crane
Brian Stolley	

Not only did each representative participate in the planning process, but each department also valued the opportunity to participate and demonstrated an understanding that a successful IT strategic plan is as much about participating in the process as it is about the final plan. BerryDunn truly appreciates the level of cooperation, support, and feedback received from the employees of the City and Sarpy County.

Executive Summary

In May 2019, the City retained BerryDunn to assist in the assessment of the current IT environment and the creation of a comprehensive plan guiding the allocation of IT resources to a prioritized set of technology initiatives over the next five years. The City's Information Technology Department supports their customers by providing responsive, efficient, and forward-thinking information technology services aligned with the City's strategic commitments. The City desired to create dynamic initiatives as the needs of the organization change. There were four phases to conduct the project.

During the first phase, BerryDunn conducted initial project-planning activities and finalized a Project Work Plan and Schedule. In Phase 2, BerryDunn conducted fact-finding activities that included a review of existing documentation, survey administration, and staff interviews. In Phase 3, BerryDunn conducted a detailed analysis and developed preliminary documentation of Strategic IT Issues and Opportunities identified by City staff and in BerryDunn's analysis.

An on-site meeting to review the identified Strategic IT Issues followed, which allowed BerryDunn to confirm findings and collectively prioritize the Strategic IT Issues discovered. City staff and BerryDunn collaborated to develop a list of projects and initiatives that should be incorporated as part of the final plan. Following the prioritization of the projects and initiatives, Phase 4 involved the development of the IT Strategic Plan (Plan). The Plan will serve as a roadmap toward the City's overall technology goals and will provide a repeatable methodology in order to verify progress, address new issues, and make updates to the plan as necessary.

Section 4.0 of the Plan provides detailed descriptions for each initiative, identifies which strategic issues and opportunities are addressed by the initiative, estimated budgets and timing for the initiative, action items to implement the initiative, and anticipated benefits of the initiative. The table below summarizes the budget estimates for the recommended initiatives presented in this Plan. The timeline provides a framework for budgeting project costs and for planning implementation timeframes over a five-year planning horizon. The timeframes and costs presented are estimates and will vary based on the City budget, competing technologies, the availability of support resources, and the specific technical approach used to undertake an initiative.

Instead of attempting to determine exactly when a particular project would be undertaken, this table is intended to identify the year(s) that a project should be initiated. If a year has a zero presented for the initiative cost, this signifies no budget amount is expected to complete the initiative. A dash symbol indicates that there are no planned activities for the initiative during the respective year.

Table 1: Strategic Project and Initiative Budget and Timeline Matrix

ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
K	Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions	\$30,000	\$20,000	\$0	\$0	\$0	\$50,000
N	Develop a business continuity plan	\$60,000	\$0	\$0	\$0	\$0	\$60,000
A	Develop a mobile device and connectivity strategy for the City of La Vista (City) staff working in the field	\$30,000	\$30,000	\$0	\$0	\$0	\$60,000
B	Develop and implement policies, procedures, and performance metrics	\$0	\$0	\$0	\$0	\$0	\$0
O	Develop a standardized password management policy	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$30,000
P	Upgrade or replace the City backup system	\$55,000	\$5,000	\$5,000	\$5,000	\$5,000	\$75,000
M	Assess and update the City's E-Government services and website	\$25,000	\$5,000	\$5,000	\$5,000	\$5,000	\$45,000
E	Implement security controls at all City facilities	\$20,000	\$10,000	\$10,000	\$10,000	\$10,000	\$60,000
D	Improve the City's technical oversight and guidance	\$80,000	\$83,200	\$86,528	\$89,989	\$93,589	\$433,306
R	Implement standard collaboration tools for City staff	\$38,000	\$38,000	\$38,000	\$38,000	\$38,000	\$190,000
T	Create an enterprise asset management (EAM) plan	\$110,000	\$55,000	\$25,000	\$25,000	\$25,000	\$240,000
J	Create and implement a hardware standardization plan	-	\$0	\$0	\$0	\$0	\$0

ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
C	Create and implement a conference room technology upgrade and replacement plan	-	\$27,000	\$11,000	\$11,000	\$11,000	\$60,000
L	Update the City's intranet	-	\$15,000	\$0	\$0	\$0	\$15,000
Q	Upgrade, expand, and segregate the City public Wi-Fi network	-	-	\$14,000	\$6,000	\$6,000	\$26,000
H	Conduct a review of system roles and permissions for each department	-	-	\$0	\$0	\$0	\$0
T	Identify methods to better communicate and exchange information across City departments	-	-	\$0	\$0	\$0	\$0
G	Formalize end-user technology training	-	-	\$48,000	\$8,000	\$8,000	\$64,000
F	Improve the data governance framework at the City	-	-	-	\$78,000	\$0	\$78,000
I	Develop an inventory of approved software	-	-	-	\$0	\$0	\$0
U	Identify and implement a standardized enterprise scheduling solution	-	-	-	\$0	\$0	\$0
S	Identify software to document employee training and certifications	-	-	-	\$20,000	\$20,000	\$40,000
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total Plan Initiatives Budget		\$454,000	\$342,200	\$248,528	\$301,989	\$227,589	\$1,526,306

BerryDunn recommends that the City begin implementing the projects and initiatives contained in this Plan during FY22. The Plan is not intended to be a static document and does not include support and maintenance activities associated with projects or systems not specifically identified in this document. As new projects are identified, BerryDunn recommends that projects be selected and prioritized based upon the return on investment, funding and resource needs, overall benefits to the City, and takes into consideration current projects.

BerryDunn anticipates that new projects will be identified throughout the year. Some of these projects may be the result of new State mandates or other unexpected events that create the need for a new project. The IT Committee should be responsible for assessing new projects as they are identified, and determine how they can be incorporated into the Plan.

BerryDunn recommends that the City review and update the Plan at minimum twice a year, or when significant change occurs. The review process should be managed by the IT Committee. The review meetings should address the following:

- The first update of the year should be to track the progress made against the initiatives.
- The second update during the year should focus on reassessing upcoming projects and reprioritizing the order of projects for the upcoming fiscal year. Although individual department input is important, the overall decision to reprioritize initiatives should be made by the IT Committee. As part of this update, the IT Committee should meet with department representatives to obtain their input and communicate plans for the upcoming year.

The City can use the methodology and tools provided during the development of this Plan by identifying and prioritizing critical issues impacting the City's needs and selecting new projects to be added to the Plan based on the number of issues the project addresses, in addition to the factors and benefits provided by the new projects.

1. Introduction

This section describes the background of the project leading up to the Plan, the format of the Plan, and the work performed in the development of the Plan.

1.1 Project Background

In May 2019, the City retained BerryDunn to assist in the assessment of the current IT environment and the creation of a comprehensive plan guiding the City by leveraging a prioritized set of technology initiatives over the next five years. The City utilizes IT resources from the Sarpy County Information Systems Department (County IT) to support its operations, and there is a County IT representative that is a member of the City IT Committee, who has participated in the plan development. As part of the IT Strategic Planning Project, the City desired to assess its IT environment and develop a citywide strategic technology plan to prioritize technology investments and promote an environment supportive of the evolving needs of citizens and the IT objectives of the City. In contracting with BerryDunn to support this

objective, the City agreed to use the proposed format and structure provided by BerryDunn to create the plan that would guide technology initiatives. The City worked with the BerryDunn team to establish project deliverables to guide this initiative. This project consisted of four phases:

Figure 1: Project Phases



In Phase 1, BerryDunn conducted initial project planning activities and finalized a Project Work Plan and Schedule. In Phase 2, BerryDunn conducted fact-finding activities that included a review of existing documentation, survey administration, and staff interviews. In Phase 3, BerryDunn conducted a detailed analysis and developed preliminary documentation of strategic IT issues and opportunities identified by City staff and in BerryDunn's analysis.

An on-site meeting to review the identified strategic IT issues followed, which allowed BerryDunn to confirm findings and collectively prioritize the strategic IT issues discovered. City staff and BerryDunn collaborated to develop a list of projects and initiatives that should be incorporated as part of the final plan. Following the prioritization of the projects and initiatives, Phase 4 involved the development of the first draft of the Plan. The Plan will serve as a roadmap toward the City's overall technology goals, and will provide a repeatable methodology in order to verify progress, address new issues, and make updates as necessary.

1.2 Report Format

This report is comprised of an executive summary, five sections, and three appendices. The five sections of the report are described below:

- 1. Introduction.** This section describes the background of the project leading up to the Plan, the format of the Plan, and the work performed in the development of the Plan.
- 2. Mission, Vision, and Goals.** This section contains the City and IT Committee's mission, vision, and goals, and describes how they relate to objectives of the Plan.
- 3. Planning Framework.** This section describes the prioritized strategic IT issues and opportunities, the prioritized strategic projects and initiatives, the weighting of each

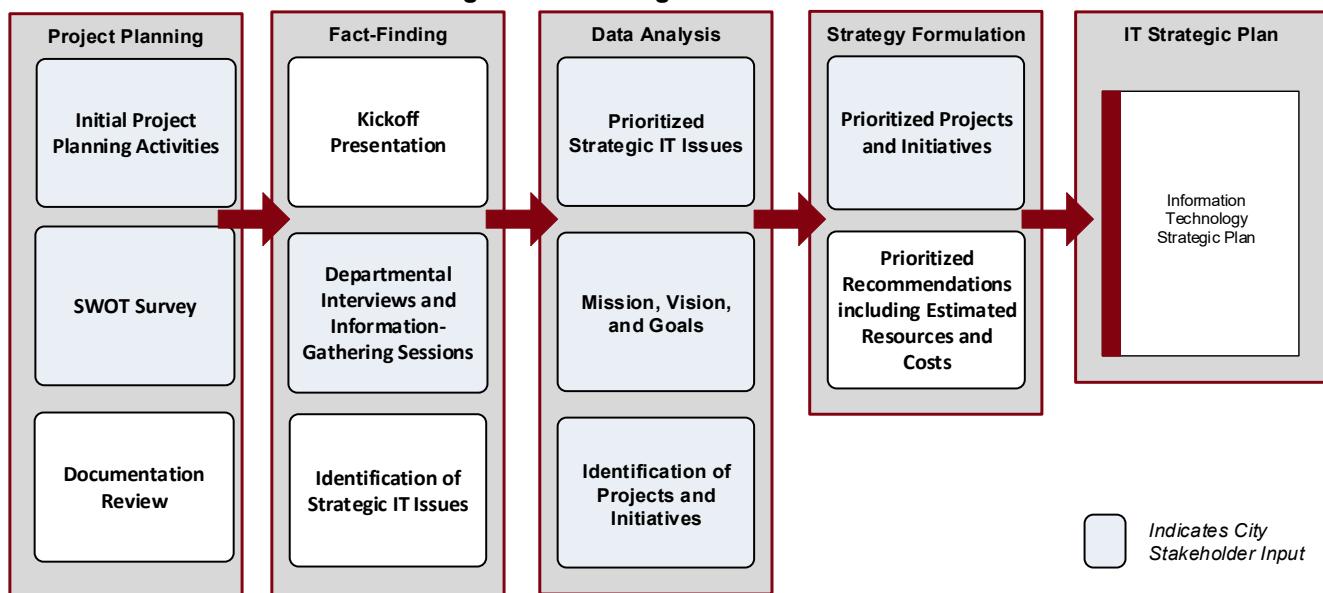
prioritized strategic project and initiative, and the format of the strategic project and initiative summaries.

4. **Strategic Projects and Initiatives.** This section contains the detailed descriptions of each strategic project and initiative.
5. **Implementing the Plan.** This section contains the budget and timeline for the weighted prioritized Plan initiatives, identifies funding considerations for the Plan, and describes the approach to ongoing governance of the Plan.

1.3 Work Performed

In June 2019, BerryDunn conducted on-site fact-finding meetings with all City departments, as well as with members of the County. During these meetings, BerryDunn facilitated discussion of each department's business processes and the challenges in the City's current technology environment. BerryDunn, in collaboration with City stakeholders, conducted an iterative process to develop the Plan, starting with initial project planning and fact-finding. Figure 2 provides a visual representation of the planning framework.

Figure 2: Planning Framework



Assessment activities and meetings also included discussions about potential technologies that could improve business processes. Additionally, BerryDunn reviewed with County IT representatives the contracted services supporting the City's IT operations to gain an understanding of the roles and responsibilities of City staff, and to better understand the City's current technology environment.

BerryDunn reviewed the information collected through fact-finding efforts and developed a Preliminary List of Strategic IT Issues and Opportunities based on feedback provided by project

participants. A strategic IT issue is a challenge or problem the City faces that relates to the use and/or management of technology.

BerryDunn facilitated a work session to review, revise, and confirm the Preliminary List of Strategic IT Issues and Opportunities with the IT Committee members. BerryDunn then facilitated a prioritization effort, asking each IT Committee member to rank each of the strategic IT issues and opportunities. As a result, the IT Committee created the Prioritized List of Strategic IT Issues and Opportunities. It is important to note that the IT Committee is comprised of representatives from all City departments; thus, the prioritized issues and opportunities represent the consensus of all City departments. The Prioritized List of Strategic IT Issues and Opportunities is contained in Table 2 and Appendix A of this plan.

Immediately following the strategic IT issue and opportunity prioritization work session, BerryDunn asked department representatives to complete and submit project planning worksheets to document projects that would address the strategic IT issues and opportunities. BerryDunn developed projects, and IT Committee members developed projects, which allowed a variety of perspectives to contribute to the combined list of projects that formed the foundation of this Plan.

BerryDunn consolidated BerryDunn- and City-submitted projects into one comprehensive list: the Preliminary List of IT Projects and Initiatives.

BerryDunn then facilitated another work session on December 2, 2019, allowing IT Committee members to discuss, confirm, and score each project and initiative. Collaboration and involvement of the IT Committee (representing all departments) was a key ingredient to the success of this effort and resulted in the prioritization of projects within the Plan. The information gathered from City stakeholders—as well as the results of work sessions, research activities, and existing documentation—was used to create this Plan. Active involvement on the part of the IT Committee membership will be necessary in continually updating and refining the Plan in the coming years.

1.4 Common Terms, Acronyms, and Abbreviations

The following table contains a selection of the common terms, acronyms, and abbreviations used throughout this Plan, along with the related definitions and explanations.

Table 2: Common Terms, Acronyms, and Abbreviations

Common Terms and Abbreviations		
No.	Term/Abbreviation	Definition/Explanation
1	BerryDunn	Berry Dunn McNeil & Parker, LLC.—the consulting firm retained by the City to assist with this project
2	City	City of La Vista, Nebraska
3	County IT	Sarpy County Information Systems Department

Common Terms and Abbreviations		
No.	Term/Abbreviation	Definition/Explanation
4	DR	Disaster Recovery
5	FTE	Full-Time Equivalent
6	GIS	Geographic Information System
7	HRIS	Human Resources Information System
8	IT	Information Technology
9	LMS	Learning Management System
10	O365	Microsoft Office O365
11	Plan	This IT Strategic Plan
12	PMBOK® Guide	<i>A Guide to the Project Management Body of Knowledge®</i>
13	PMI®	Project Management Institute®
14	Prioritized List of IT Projects and Initiatives	A list of projects and initiatives, prioritized by City stakeholders, for the City to implement in an effort to address the identified issues and opportunities at the City
15	Prioritized List of Strategic IT Issues and Opportunities	A list of technology issues and opportunities at the City, identified through staff interviews and a web survey and prioritized by City stakeholders
16	RFP	Request for Proposals
17	RTA	RTA vehicle maintenance system
18	SharePoint	Microsoft SharePoint
19	State	State of Nebraska
20	SWOT	Strengths, Weaknesses, Opportunities, and Threats
21	VDI	Virtual Desktop Infrastructure

2. Mission, Vision, and Goals

This section contains the City and IT Committee's mission, vision, and goals, and describes how they relate to objectives of the Plan.

In the process of developing this Plan, a critical concern was to determine the City's mission, vision, and goals, and to determine how the Plan's recommended initiatives support those elements. The City's mission statement is "The City of La Vista is dedicated to providing exceptional municipal services with the highest level of integrity, professionalism and excellence."

- In accordance with this philosophy, City leaders use the Plan as a tool to organize the current initiatives and to lead the City to where it wants to be in the future. Considered in the strategic planning process are decisions related to municipal operations, growth and development, and capital investment.

The IT Committee's vision is to:

- Proactively identify the technology needs that will facilitate operational efficiency and advance departmental goals to better serve the citizens.
- Develop a prioritized collection of technology initiatives and projects that the City can undertake over the next five years.
- Determine the capital requirements, both human and monetary, to meet the future technology needs of the City.

BerryDunn recognized the commitment of the City to provide exceptional municipal services to stakeholders and residents. The high level of participation and feedback contributed positively to the development of this Plan, and exemplifies the organization's commitment to serving the needs of the community and appropriately planning for technology initiatives.

Technology continues to be increasingly important in providing great customer service, and its role will continue to grow. The intent of this Plan is to provide the City with a structured and strategic plan that will help improve the use of technology within the organization to more effectively support the organization's goals.

3. Planning Framework

This section describes the prioritized strategic IT issues and opportunities, the prioritized strategic projects and initiatives, the weighting of each prioritized strategic project and initiative, and the format of the strategic project and initiative summaries.

3.1 Strategic Issues and Opportunities

In the first phase of the Plan development, BerryDunn created the Project Plan and coordinated tasks to conduct fact-finding activities, including conducting department interviews, issuing a web-based Strengths, Weaknesses, Opportunities, and Threats (SWOT) survey, requesting and reviewing documentation, and reviewing the City's prior IT strategic plan. This led to an understanding of the City's primary business processes; current technology applications, hardware, and support; and key themes identified in the SWOT analysis and requested documentation.

During the fact-finding meetings with staff from City departments, BerryDunn identified issues and opportunities related to technology. As a result of the meetings, BerryDunn created a Preliminary List of Strategic IT Issues and Opportunities.

BerryDunn has allocated each strategic IT issue and opportunity to one of three functional areas: management and operations, applications, and technical. The Preliminary List of Strategic IT Issues and Opportunities is organized based on these functional areas, which are further defined on the following page.

Figure 3: Functional Areas

Management and Operations (M):

Management and operations issues and opportunities are related to how the City manages and supports the technology tools and infrastructure in place, how technology is planned for and acquired, and how resources are positioned to support technology in the City.

Applications (A):

Applications issues and opportunities are related to the applications that are used to support City users in core business processes, including providing services to City providers.

Technical (T):

Technical issues and opportunities are related to the City's core technologies and how they are developed and maintained.

The Preliminary List of Strategic IT Issues and Opportunities was reviewed and discussed by the IT Committee as part of the strategic IT issue and opportunity work session facilitated by BerryDunn that included the City's IT Committee members. During the work session, the Preliminary List of Strategic IT Issues and Opportunities was discussed, confirmed, and prioritized.

The priorities assigned provide high-level guidance for the City to determine when each issue should be resolved during the five-year planning horizon in the Plan. The City's IT Committee prioritized issues using the following three priority categories:

Figure 4: Priority Key

Critical

- Should be addressed during Year 1 of the Plan

High

- Should be addressed during Years 2 and 3 of the Plan

Medium

- Should be addressed during Years 4 and 5 of the Plan

Participants in the work session scored each issue based on the priority descriptions above, and assigned them a priority number. Critical issues were given a score of 3, high issues a score of 2, and medium issues a score of 1. The City's IT Committee members each voted during this process. Among the final scores, higher numbers represent higher-priority issues. The resulting

priorities are contained in Table 3. The Prioritized List of Strategic IT Issues and Opportunities, with summarized detail, is included in Appendix A.

Table 3: Prioritized List of Strategic IT Issues and Opportunities – Summary

Prioritized List of Strategic IT Issues and Opportunities – Summary		
No.	Issues and Opportunities Description	Score
M10	The City does not have a Business Continuity Plan.	31
M3	Online payment capabilities and ease of access to information on the City website is limited.	29
T3	Network and software security policies and procedures are not compliant with industry best practice.	29
A3	Some software applications are not fully implemented or fully utilized.	28
A2	The City does not have a system to manage assets.	27
T1	Mobile access to City applications from field personnel is limited.	27
A1	City staff would benefit from additional technology training.	27
M9	There is a need for improved password management.	26
M4	Standard collaboration tools for City staff are lacking.	24
T8	Security concerns exist within some City facilities.	24
M7	There is a need for additional technical guidance and oversight of technical enhancements to support all departments.	24
T7	Communications across the City is challenging for internal and external constituents.	23
M5	Department policies, procedures, and performance metrics need to be developed.	22
A6	Provisioning of user accounts is not consistent or centrally managed for all software applications.	22
T4	There are system latency and performance issues with various applications.	21
A4	There is no inventory of approved software application available to City staff.	21
T5	Hardware is not standardized to one platform across the City.	20

Prioritized List of Strategic IT Issues and Opportunities – Summary		
No.	Issues and Opportunities Description	Score
A8	Access to the City network and system privileges requires review.	19
T2	There is a need to determine standards and refresh cycles for conference room technology.	19
T9	There is limited Wi-Fi access for City staff working outside of a City facility.	18
M1	City departments rely significantly upon manual and paper-based processes.	17
M6	There is a need for improved data analysis and presentation capabilities.	17
M8	There is a need for a common scheduling solution that would serve all City users.	17
T6	There is a lack of system integration for data sharing and data reporting.	17
A7	There is a desire for a Learning Management System for tracking employee training and employee certifications.	14

3.2 Strategic Projects and Initiatives Development

Table 3 lists all initiatives developed following the strategic IT issue and opportunity prioritization work session.

Definition of a Project: According to the Project Management Institute® (PMI®) *A Guide to the Project Management Body of Knowledge® (PMBOK® Guide)*, a project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end. The end is reached when the project's objectives have been achieved, when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists.

Initiative: Some projects identified have components that are not temporary in nature. Instead, a project could become an ongoing operation after specific tasks have been completed. In order to include the ongoing operation components of projects developed, BerryDunn often refers to projects as *initiatives*. The term *project* and the term *initiative* are used interchangeably throughout this document.

The Preliminary List of IT Projects and Initiatives was collaboratively reviewed during the strategic IT issue and opportunity prioritization work session facilitated by BerryDunn. The City IT Committee members participated in the work session, during which each project or initiative was discussed.

Following a discussion of each of the preliminary projects and initiatives, BerryDunn facilitated a prioritization exercise. The City's IT Committee prioritized the projects and initiatives using the three priority categories (Critical, High, Medium) listed in figure 4. The City IT Committee members voted during this process. Among the final scores, higher numbers represent higher-priority projects and initiatives. Table 4 contains a summary of the Prioritized List of IT Projects and Initiatives. Appendix B contains the complete Prioritized List of IT Projects and Initiatives.

Table 4: Prioritized List of IT Projects and Initiatives – Summary

Prioritized List of IT Projects and Initiatives – <i>Summary</i>		
ID	Project/Initiative Name	Score
K	Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions	Critical – 34
N	Develop a business continuity plan	Critical – 31
A	Develop a mobile device and connectivity strategy for City staff working in the field	Critical – 29
B	Develop and implement policies, procedures, and performance metrics	Critical – 29
O	Develop a standardized password management policy	Critical – 28
P	Upgrade or replace the City backup system	Critical – 28
M	Assess and update the City's E-Government services and website	Critical – 27
E	Implement security controls at all City facilities	Critical – 27
D	Improve the City's technical oversight and guidance	High – 26
J	Create and implement a hardware standardization plan	High – 25
C	Create and implement a conference room technology upgrade and replacement plan	High – 24
Q	Upgrade, expand, and segregate the City public Wi-Fi network	High – 24
H	Conduct a review of system roles and permissions for each department	High – 23
G	Formalize end-user technology training	Medium – 20
R	Implement standard collaboration tools for City staff	Medium – 20
F	Improve the data governance framework at the City	Medium – 19
I	Develop an inventory of approved software	Medium – 18
U	Identify and implement a standardized enterprise scheduling solution	Medium – 14
S	Identify software to document employee training and certifications	Medium – 12

3.3 Planned and In-Progress Projects

The City is currently working to complete in-progress technology projects that were identified as projects or initiatives during the planning process. It is important that the City consider this group of projects and initiatives as it moves forward with planning future projects and initiatives. Not doing so might result in fragmented projects that do not help in achieving the City's vision and goals, which might require additional resources due to a lack of coordination between in-progress and future projects within the Plan. It is also important to note that some projects in the Plan are designed to help ensure the successful completion of the in-progress projects.

There is a key difference between planned and in-progress projects and initiatives. In-progress projects have been approved and are underway. Planned projects have been approved, but funding might or might not be available, or the projects have not yet started. The City's current planned projects might or might not be implemented. Although they have been approved, the projects in the Plan could require modification or be rendered obsolete. The following tables present in-progress and planned projects identified by the City during the development of this Plan.

Table 5: In-Progress Projects

In-Progress Projects	
Project/Initiative Name	Project/Initiative Summary/Status
Microsoft Office O365 (O365) deployment	O365 G3 (Government Pricing) is planned for deployment as equipment replacements occur.
BS&A has been working with the City to identify enhancement opportunities	The City is currently working with BS&A resources to identify opportunities for improvement.
Updating the City's intranet	The City is in the process of updating the intranet to improve Citywide communications and access to training materials and policies for City staff; to reduce the City's reliance on paper; to improve project management and electronic document-sharing; and to increase electronic workflow and electronic approvals

Table 6: Planned Projects

Planned Projects	
Project/Initiative Name	Project/Initiative Summary/Status
Building enhanced security policies	The County noted that its staff intend to identify security concerns and build enhanced security policies that are tailored to fit the City's needs.
Virtual Desktop Infrastructure (VDI) proof of concept	County staff indicated that they would like to conduct a proof of concept to leverage the County investment into VM-Ware to determine what VDI technology might offer for the City.

3.4 Weighted Prioritized List of IT Projects and Initiatives

Following the projects and initiatives work session—in which each of the preliminary projects and initiatives were discussed, confirmed, and ranked—BerryDunn used the five weighted prioritization categories below to develop the prioritized list for inclusion in this Plan. BerryDunn used these weighted categories as a guideline in creating the sequence of the initiatives throughout the Plan years, with the recognition that some highly weighted initiatives might not be appropriate in the early years due to their relationships with other projects, costs, and expected lengths of implementation. On the other hand, some projects not weighted as high might be appropriate in the early years of the Plan because they can be easily completed and will keep the Plan moving ahead at a suitable pace. Figure 5, on the following page, depicts these five categories, as well as their respective weights.

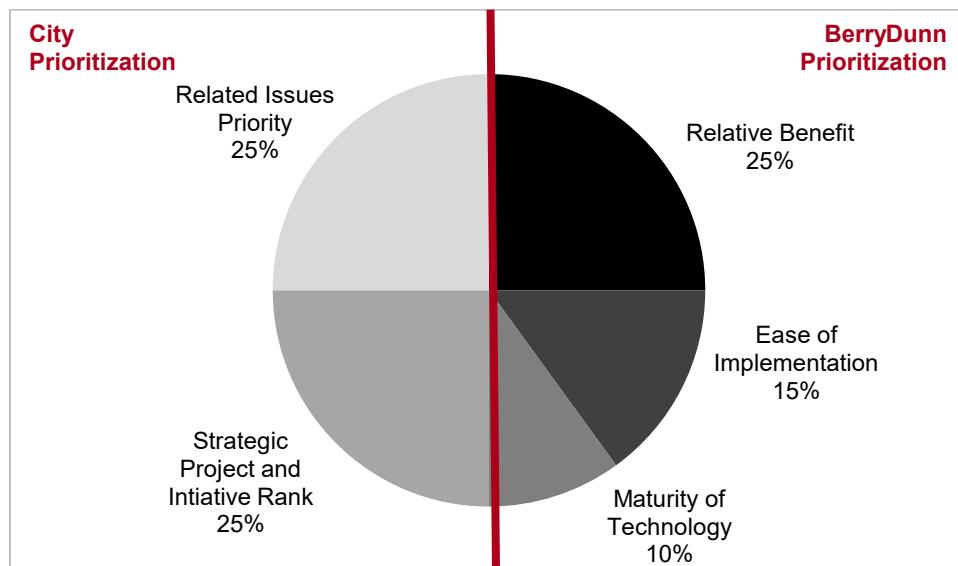
Figure 5: Weighted Prioritization Categories


Table 7 depicts these five weighted prioritization categories.

Table 7: Weighted Prioritization Categories

Weighted Prioritization Categories				
City		BerryDunn		
Strategic Project and Initiative Rank	Related Issues Priority	Relative Benefit	Ease of Implementation	Maturity of Technology
25%	25%	25%	15%	10%
		 High	 Easy	 Established
		 Medium	 Medium	 Leading Edge
		 Low	 Difficult	 Bleeding Edge

Based upon the application of the five weighted prioritization categories, BerryDunn developed the Weighted Prioritized List of IT Projects and Initiatives. Following the development of the Weighted Prioritized List of IT Projects and Initiatives, BerryDunn worked with the City Project Team to further review and refine each project.

The following table contains the Weighted Prioritized List of IT Projects and Initiatives, along with an indicator of the Plan years during which activities related to each initiative will be ongoing.

Table 8: Weighted Prioritized List of IT Projects and Initiatives

Weighted Prioritized List of IT Projects and Initiatives		
ID	Initiative	Plan Year Activity
K	Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions	Year 1
N	Develop a business continuity plan	Year 1
A	Develop a mobile device and connectivity strategy for City staff working in the field	Year 1
B	Develop and implement policies, procedures, and performance metrics	Year 1
O	Develop a standardized password management policy	Year 1
P	Upgrade or replace the City backup system	Year 1

Weighted Prioritized List of IT Projects and Initiatives		
ID	Initiative	Plan Year Activity
M	Assess and update the City's E-Government services and website	Year 1
E	Implement security controls at all City facilities	Year 1
D	Improve the City's technical oversight and guidance	Year 1
R	Implement standard collaboration tools for City staff	Year 1
T	Create an enterprise asset management (EAM) plan	Year 1
J	Create and implement a hardware standardization plan	Year 2
C	Create and implement a conference room technology upgrade and replacement plan	Year 2
Q	Upgrade, expand, and segregate the City public Wi-Fi network	Year 3
H	Conduct a review of system roles and permissions for each department	Year 3
G	Formalize end-user technology training	Year 3
F	Improve the data governance framework at the City	Year 4
I	Develop an inventory of approved software	Year 4
U	Identify and implement a standardized enterprise scheduling solution	Year 4
S	Identify software to document employee training and certifications	Year 4

3.5 Strategic Project and Initiative Format

BerryDunn has organized each project or initiative identified in Section 4 in a standard template. A sample template, which includes a description of each field, is provided on the following page.

Table 9: Strategic Project and Initiative Template

Initiative ID – Initiative Name															
Initiative Description: This section of the template will contain a description of the initiative.															
Initiative Source Information															
Functional Area:		This section of the template will identify the functional area(s) related to this initiative.													
Weighted Priority Ranking:		X of XX, where X is this initiative's ranking as determined by BerryDunn.													
Priority Ranking:		X of XX, where X is this initiative's ranking as voted on by City staff.													
Related Strategic Information Systems Issues and Opportunities															
#	This section of the template will contain a list of the strategic IT issue(s) that this initiative is designed to address.							Criticality of the issue							
Prioritization Category Rankings															
City Rankings			BerryDunn Rankings												
Strategic Project and Initiative Rank			Relative Benefit		Ease of Implementation		Maturity of Technology								
Rating of Strategic Issue and Opportunity Rank (Critical, High, Medium)			Rating of the Relative Benefit (High, Medium, Low)		Rating of the Ease of Implementation (Easy, Medium, Difficult)		Rating of the Maturity of the Technology (Established, Leading Edge, Bleeding Edge)								
Estimated Budget															
Total Budget Breakdown															
		One-Time			Recurring										
		Time		Budget		Time		Budget							
Budget Category		Low	High	Low	High	Low	High	Low							
Internal Labor		Internal labor hours will be developed with the idea that staff performing each task have a general knowledge of the subject matter (i.e., between an expert and a novice).													
Professional Services Labor															
Hardware															
Software															
Total Budget															
Total Budget by Year															
Year 1		Year 2		Year 3		Year 4		Year 5							
\$	\$	\$	\$	\$	\$	\$	\$	\$							
Budget Description:		This section of the template will contain a high-level description of the budget estimate, including the methodology used to determine the budget, as well as the estimated budget over all Plan years.													
Action Items to Implement Project or Initiative															
This section of the template will contain a list of the action items needed to implement the project or initiative.															
Anticipated Benefits															
This section of the template will contain a list of the anticipated benefits of the project or initiative.															
Potential Risks															
This section of the template will contain a list of the common risks the City could encounter as it implements (or does not implement) the initiative. The risks identified in this section are not meant to serve as an all-inclusive list.															

4. Strategic Projects and Initiatives

This section contains the detailed descriptions of each strategic project and initiative.

Initiative K – Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions

Initiative K – Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions

Initiative Description: City staff reported that some software applications have not been optimally configured or fully implemented. Maximizing the City's applications will allow staff to work as effectively and efficiently as possible, increasing the value of the City's applications.

BerryDunn recommends that this project include a review of applications that need additional modules or upgrading to the latest versions.

Task 1: Analysis

The first step to accomplish this initiative is to facilitate discussion with the IT Committee to identify known performance challenges, functionality enhancements, and department needs in the current environment. BerryDunn also recommends that the IT Committee identify a list of applications that need additional modules or upgrading to the latest versions. The City has consulted with BS&A regarding additional functionality that may be available. The City is also considering functionality enhancements that might be offered with newer versions of the software.

Task 2: Discuss Additional Functionality with Vendors

The second task for this initiative is to discuss additional functionality with the identified vendors. BerryDunn recommends that the City create a list of system requirements as a starting point. The City is then encouraged to consult with HRIS vendors to discuss employee self-service cost, implementation cost, and other desired functionality.

Task 3: Implement Plan

Once the IT Committee has compiled a list of applications that need additional modules or upgrading to the latest versions and determined costs with identified vendors, the City should create an implementation plan that includes phasing for the installation of additional modules and upgrades.

Initiative Source Information

Functional Area:	Applications
Weighted Priority Ranking:	1 of 21, where 1 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	1 of 21, where 1 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

A2	The City does not have a system to manage assets.	
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Initiative K – Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions

A3	Some software applications are not fully implemented or fully utilized.	 Critical
A1	City staff would benefit from additional technology training.	 Critical
T4	There are system latency and performance issues with various applications.	 Medium
M1	City departments rely significantly upon manual and paper-based processes.	 Medium

Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
 Critical		 High	 Difficult	 Established

Estimated Budget

Total Budget Breakdown								
	One-Time				Recurring			
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor	160	240	-	-	-	-	-	-
Professional Services Labor	75	125	\$15,000	\$25,000	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	\$5,000	\$5,000	-	-	-	-
Total Budget	345	365	\$20,000	\$30,000	-	-	-	-

Total Budget by Year					
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost

Initiative K – Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions

\$30,000	\$20,000	-	-	-	-	\$50,000						
Budget Description:	This initiative includes internal staff resources. The professional services hours included are for vendor implementation and training services for the expanded functionality of existing systems, with some anticipated funding for software licenses.											
Action Items to Implement Project or Initiative												
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Analyze known department challenges <input checked="" type="checkbox"/> Discuss additional functionality with vendors <input checked="" type="checkbox"/> Complete an inventory of all City applications <input checked="" type="checkbox"/> Prioritize applications for inclusion in the gap analysis <input checked="" type="checkbox"/> Implement the devised Plan 												
Anticipated Benefits												
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Expanded use of existing systems, leveraging previous investments <input checked="" type="checkbox"/> Greater return on the City's investment in these technologies <input checked="" type="checkbox"/> Additional functionality provided to staff managing paper or manual processes 												
Potential Risks												
<p>No Action:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Disparate systems and processes continue to exist <input checked="" type="checkbox"/> Existing systems are not utilized to their fullest potential <input checked="" type="checkbox"/> Additional point solutions may be purchased to meet department specific needs <p>During Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Not providing adequate training on new modules or features <p>Post-Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Not following up to confirm user adopting 												

Initiative N – Develop a business continuity plan
Initiative N – Develop a business continuity plan

Initiative Description: The City's business continuity planning activities are currently informal. Contingency planning entails the documentation of those elements that support the citywide strategic plan, such as a Business Continuity Plan, a Continuity of Operations Plan, a Disaster Recovery (DR) Plan, an Incident Response Plan, Emergency Response Plan, and a Crisis Communications Plan. The City should begin by conducting a Business Impact Assessment, a high-level discovery and requirements-gathering activity. This assessment will lay the groundwork for any of the related plans referred to above, including capturing roles, responsibilities, and workflow for both internal staff and external entities (such as law enforcement or the County in the event of a crisis). In such planning, the

Initiative N – Develop a business continuity plan

City should consider use of other City facilities (e.g., the City Library) given the potential benefits that other locations may have to support emergency operations.

Task 1: Issue Request for Proposals (RFP) for the Creation of a Business Continuity Plan

Utilizing the business continuity RFP outline provided by BerryDunn, the City should assess and coordinate with County IT staff to finalize an RFP to be issued for solicitation. The City can then begin the procurement process leading to the hiring of a consulting firm to assist in the process of developing a business continuity plan.

Task 2: Conduct a Business Impact Assessment

In collaboration with the hired consulting firm, BerryDunn recommends that a Business Impact Assessment be conducted to determine which services will need to be provided in the event of a disaster, the priority of these services, and how quickly they need to be resumed following the event. Based upon this list, these services should be assessed as to how vulnerable they are in the event of a disaster.

Task 3: Document Business Processes

The City should document business processes that are critical to the services identified in Phase 1 and that should be provided in the event of a disaster. The City should establish a committee or leverage an existing committee to identify those business processes that are critical to the organization. With a comprehensive list, the City can then begin to perform mapping sessions to diagram these critical processes.

Task 4: Develop Plan

Based on the results of the Business Impact Assessment and the accompanying business process documentation, the Plan can be developed involving both internal and contracted resources. The Plan should be detailed, noting the timing and individuals who will carry out the various aspects of the Plan. The Plan should also determine how an off-site data backup or operations facility will be leveraged. Given that County staff support the City computing environment, all aspects of the Plan should consider and involve representatives from the County as critical elements of the process.

Task 5: Regularly Test and Update Plan

In order to be best prepared for a disaster, the City needs to regularly test the procedures in its Business Continuity Plan. This can involve simple to complex drills, but the City should make efforts to test each aspect of the Plan at least once a year. In addition, the process to update the Plan should take place annually and in coordination with County IT staff.

Initiative Source Information

Functional Area:	Management and Operations
Weighted Priority Ranking:	2 of 21 where 2 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	2 of 21, where 2 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

Initiative N – Develop a business continuity plan																	
M10	The City does not have a Business Continuity Plan.						 Critical										
Prioritization Category Rankings																	
City Rankings			BerryDunn Rankings														
Strategic Project and Initiative Rank		Relative Benefit		Ease of Implementation		Maturity of Technology											
 Critical		 High		 Difficult		 Established											
Estimated Budget																	
Total Budget Breakdown																	
	One-Time				Recurring												
	Time		Budget		Time		Budget										
Budget Category	Low	High	Low	High	Low	High	Low	High									
Internal Labor	60	90	-	-	10	20	-	-									
Professional Services Labor	225	300	\$45,000	\$60,000	-	-	-	-									
Hardware	-	-	-	-	-	-	-	-									
Software	-	-	-	-	-	-	-	-									
Total Budget	285	390	\$45,000	\$60,000	-	-	-	-									
Total Budget by Year																	
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost												
\$60,000	\$0	-	-	-	\$60,000												
Budget Description:	The budget amount of \$60,000 for this initiative is to hire an external consulting firm to assist the City with the development of a Business Continuity Plan. While the selected firm will conduct a majority of the effort of this initiative, it is expected City and County IT resources will be involved in the process, to the amount of 60 to 90 hours. This initiative will begin in the first year and be completed in the second year of the Plan.																
Action Items to Implement Project or Initiative																	

Initiative N – Develop a business continuity plan	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Engage a consultant to assist the City in developing the Plan<input checked="" type="checkbox"/> Conduct a Business Impact Assessment<input checked="" type="checkbox"/> Document business processes<input checked="" type="checkbox"/> Develop the Plan<input checked="" type="checkbox"/> Continually update and test the Plan	
Anticipated Benefits	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Increased risk mitigation<input checked="" type="checkbox"/> Improved business continuity<input checked="" type="checkbox"/> Decreased downtime in the event of a disaster<input checked="" type="checkbox"/> Preservation of critical data<input checked="" type="checkbox"/> Broadened knowledge of citywide business processes	
Potential Risks	
<p>Project Management:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> This initiative is subject to the project management risks of cost, schedule, and scope; however, the selection of an experienced consulting firm to assist in the development of the plan will help mitigate this risk using an established methodology and project management best practices<input checked="" type="checkbox"/> A plan is developed that exceeds the needs of the City and as a result becomes too costly to adhere to<input checked="" type="checkbox"/> Not testing and regularly updating the plan will cause it to become outdated and ineffective <p>No Action:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Inability to effectively react and quickly resume operations in the event of a disaster<input checked="" type="checkbox"/> Inability to provide essential services to citizens in the event of a disaster<input checked="" type="checkbox"/> Potential for the loss of large amounts of critical data <p>Maturity of Technology:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> There are a variety of technical components involved in the development and maintenance of a business continuity plan. These technologies can vary in level of maturity from leading edge to established technology	

Initiative A – Develop a mobile device and connectivity strategy for City staff working in the field

Initiative A – Develop a mobile device and connectivity strategy for City staff working in the field
<p>Initiative Description: BerryDunn recommends assessing City field staff's mobile device needs that should incorporate hardware, mobile enabled software, and wireless connectivity needs. The City should develop a mobile device and connectivity strategy, identify requirements, and create and execute an implementation plan to manage and deploy mobile capabilities where technology solutions</p>

Initiative A – Develop a mobile device and connectivity strategy for City staff working in the field

exist, and where added efficiencies might be realized. For example, building inspectors and code enforcement staff would ideally be able to enter what they did at the site, collect various data elements, and take pictures without the need to travel back to the office to update the system.

Task 1: Assessment

Assessment will include review, identification, and documentation of all City facilities that require connection to the City's Wide Area Network. Assessment will also include a review of City field staff's mobile devices such as hardware, mobile enabled software, and wireless connectivity needs.

Identification and documentation of all existing, planned, and in-progress connectivity improvements should be anticipated. Where additional connectivity is required, the assessment should make note of those challenges to anticipate and consider Wi-Fi improvements and enhancements.

Task 2: Discovery and Analysis

Fact-finding interviews should be conducted with department staff at each identified facility to validate known requirements and discover if connectivity needs have changed or determine if software enhancements may offer mobile ready solutions. Based on the information collected, it is anticipated that a contracted consultant can assist and compare the current connectivity and capacity at each location with what is needed to support daily operations and shortfalls identified. This analysis will include an evaluation of existing versus needed capacity or throughput for each location. Once the consultant identifies all connectivity shortfalls, these shortfalls will be compared to the network capacity analysis and planned upgrade projects, to identify connectivity needs that are not being met and will not be met by current or planned projects.

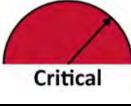
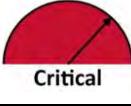
Task 3: Plan Creation

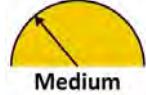
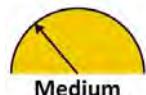
The IT Committee will review identified connectivity needs, set priorities, and establish a timeline to address the identified connectivity shortfalls. The timeline will consider available budget and staff resources needed to correct the shortfalls. The completion of this task may result in the creation of additional projects or the modification of existing projects and initiatives to adequately address mobile connectivity needs and result in the City Connectivity Master Plan.

Initiative Source Information

Functional Area:	Technical
Weighted Priority Ranking:	3 of 21 where 3 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	3 of 21, where 3 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

A3	Some software applications are not fully implemented or fully utilized.	
T1	Mobile access to City applications from field personnel is limited.	

Initiative A – Develop a mobile device and connectivity strategy for City staff working in the field								
M1	City departments rely significantly upon manual and paper-based processes.							
T5	Hardware is not standardized to one platform across the City.							
T6	There is a lack of system integration for data sharing and data reporting.							
T9	There is limited Wi-Fi access for City staff working outside of a City facility.							
Prioritization Category Rankings								
City Rankings		BerryDunn Rankings						
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation					
		 High	 Difficult					
Maturity of Technology								
			Established					
Estimated Budget								
Total Budget Breakdown								
	One-Time			Recurring				
	Time		Budget	Time				
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor	80	140	-	-	80	140	-	-
Professional Services Labor	50	75	\$10,000	\$15,000	50	75	\$10,000	\$15,000
Hardware	-	-	\$2,000	\$3,000	-	-	-	-
Software	-	-	\$8,000	\$12,000	-	-	\$10,000	\$15,000
Total Budget	130	215	\$20,000	\$30,000	130	215	\$20,000	\$30,000
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			

Initiative A – Develop a mobile device and connectivity strategy for City staff working in the field												
\$30,000	\$30,000	-	-	-	-	\$60,000						
Budget Description:	This initiative includes a software budget for anticipated licensing costs for deployment of mobile applications for existing or new City applications and the potential hardware costs of equipment to better support mobile connectivity. This initiative also has a combination of professional services and internal staff resources. The project could be accomplished predominantly by internal staff; however, BerryDunn recommends professional services due to the existing demands upon City staff and the potential need to add additional modules to existing applications.											
Action Items to Implement Project or Initiative												
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Validate and assess unmet connectivity needs <input checked="" type="checkbox"/> Identify and discovery with City staff <input checked="" type="checkbox"/> Prioritize unmet needs and develop the connectivity master plan 												
Anticipated Benefits												
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Identify connectivity needs not currently being met <input checked="" type="checkbox"/> Demonstrate IT is listening to and working to meet City department IT needs <input checked="" type="checkbox"/> Reduced help desk calls as connectivity improves <input checked="" type="checkbox"/> Provide a planning document for use in future budget input 												
Potential Risks												
<p>No Action:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Departments and facilities will continue to experience network connectivity issues leading to frustration and lost productivity <input checked="" type="checkbox"/> Departments will develop their own connectivity solutions that may not be compatible with IT standards and policies <input checked="" type="checkbox"/> Inability to efficiently perform job functions when away from the office <input checked="" type="checkbox"/> Continued use of personal phones for City business <p>During Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Failure to identify specific needs of all departments <input checked="" type="checkbox"/> Departments may feel that their issue is not being addressed quickly enough and implement an immediate fix of their own <input checked="" type="checkbox"/> IT staff may not have the time to participate in initial planning activities or provide necessary oversight to the professional services group <p>Post-Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Failure to regularly revisit and update the policy, leading to staff deviating from the policy to complete their job functions <input checked="" type="checkbox"/> Connectivity strategy does not meet the needs of all appropriate City staff 												

Initiative B – Develop and implement policies, procedures, and performance metrics

Initiative B – Develop and implement policies, procedures, and performance metrics

Initiative Description: Develop and implement policies, procedures, and performance metrics. This recommended action's goal is for the City to develop and implement technology and other policies identified as gaps. The City will document and update existing policies as well as develop new policies to address challenges in the current environment and expand upon internal controls.

- BerryDunn recommends establishing a primary point of contact, or business owner, for all major technology initiatives, this approach would ideally be considered with this initiative, and be incorporated in all future technology initiatives.
- Another recommended policy would consider provisioning and de-provisioning of user accounts and various Human Resources Department policies, to ensure a consistent and manageable process that allows advance notice and ensures that accounts are setup in advance for new hires, and established consistent steps to de-provision and de-activate user accounts where individuals depart the City.
- BerryDunn recommends that policies and procedures to strengthen passwords be developed which would establish strong and consistent expectations and describe and convey to the user community the importance of having appropriate passwords that are updated on a frequency that offers greater protections for City systems. Initiative "O" describes suggested changes in more detail.
- BerryDunn recommends policy definition pertaining to the purchases or implements a new software, where designation of resources would be advantageous. For example, a lead and a secondary person should by policy be designated as the primary contacts to support that software. As the primary points of contact, they will would ideally receive additional training on that software, be the initial point of contact for City staff wanting to use that software, and be expected to train other staff members. Incorporating this as policy and standard practice into future technology purchases might provide a better return on the City's investment in technology.
- BerryDunn would recommend that hardware and software standards be documented to establish the expectation that all City equipment will be configured with the same software and a consistent hardware platform to be a consistent as possible across City departments. Such a standard should include reference to equipment that will be issued to elected City officials, and how those devices will connect or share information with other City staff.
- BerryDunn would also recommend policy development that identifies expectations for individuals using City provided computing equipment. Such definition should include expectations for use of standard desktop applications, the use of standard calendar software, collaboration tools, and the expectation that work products can be shared amongst City staff using consistent and standard software tools.

Task 1: Evaluate the policies, procedures, and performance metrics

In considering the recommendation above, BerryDunn recommends that the IT Committee evaluate these and other challenges in the current environment, and develop the policies, procedures, and performance metrics for the City. BerryDunn recommends that this effort be led by the IT Committee members with active participation from executive leadership. Another element to consider in policy development is defining the role of the Business Owners who by policy are tasked with the justification and ongoing support of a particular technology initiative. Having such a role alleviates the IT

Initiative B – Develop and implement policies, procedures, and performance metrics

Committee from being the owner and driving force behind every project, simply because it is highly dependent upon existing or future use of technology. The Business Owner would be the individual creating the justification for the project or initiative, the individual who would create the budget estimates for the effort, and the individual who would bring to the IT Committee the request for approval of a technology project.

Task 3: Establish communication methods

The third task in reestablishing all IT policies and procedures is to establish the method of communicating approved IT initiatives to the rest of the City. In order for the policy to gain effective buy-in from City staff across all departments, staff should have a solid understanding of the policies that have been established and the rationale for making decisions. BerryDunn recommends ensuring that access to electronic versions of all policies are anticipated, and that a central location be established for all existing employees to review, and for new employees to read as a part of onboarding practices.

Task 4: Periodically revisit the IT Policies and Procedures, and Measure Conformance.

BerryDunn recommends that the IT Committee conducts ongoing and periodic reviews of established policies. Acceptable use of City computing resources may frequently need to be adapted to changing needs and expanding expectations for City users. Cybersecurity considerations have often driven changes to established policies, and require continued engagement with City users to understand new forms of attack and risks to the City.

Initiative Source Information

Functional Area:	Management and Operations
Weighted Priority Ranking:	4 of 21 where 4 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	4 of 21, where 4 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

M4	Standard collaboration tools for City staff are lacking.	
M9	There is a need for improved password management.	
T3	Network and software security policies and procedures are not compliant with industry best practice.	
A1	City staff would benefit from additional technology training.	

Initiative B – Develop and implement policies, procedures, and performance metrics								
A3	Some software applications are not fully implemented or fully utilized.	 Critical						
M5	Department policies, procedures, and performance metrics need to be developed.	 High						
A6	Provisioning of user accounts is not consistent or centrally managed for all software applications.	 High						
M8	There is a need for a common scheduling solution that would serve all City users.	 Medium						
A7	There is a desire for a Learning Management System for tracking employee training and employee certifications.	 Medium						
Prioritization Category Rankings								
City Rankings		BerryDunn Rankings						
Strategic Project and Initiative Rank		Relative Benefit						
 Critical		 High						
Ease of Implementation		Maturity of Technology						
 Easy		 Established						
Estimated Budget								
Total Budget Breakdown								
	One-Time			Recurring				
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor	180	240	-	-	40	60	-	-
Professional Services Labor	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Total Budget	180	240	-	-	40	60	-	-

Initiative B – Develop and implement policies, procedures, and performance metrics										
Total Budget by Year										
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost					
\$0	-	-	-	-	\$0					
Budget Description:	This initiative involves internal labor hours to develop, review, revise, and implement policies, procedures, and performance metrics.									
Action Items to Implement Project or Initiative										
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Establish IT Committee members as primary participants in this process <input checked="" type="checkbox"/> Evaluate the policies and procedures <input checked="" type="checkbox"/> Incorporate by policy role of business owners within justifying new technology initiatives <input checked="" type="checkbox"/> Establish communication methods <input checked="" type="checkbox"/> Periodically revisit the approach to the IT Committee 										
Anticipated Benefits										
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Policy is up-to-date <input checked="" type="checkbox"/> Processes for technology approval are efficient and lean 										
Potential Risks										
<p>No Action:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Projects slipping into the budget without thorough review; inefficient purchasing process <input checked="" type="checkbox"/> Inappropriate use of unapproved technology limits the ability to share work products <p>During Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Lack of change management and a communication plan <input checked="" type="checkbox"/> Lack of commitment to policy change and minimized adoption of new policies <p>Post-Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Project priorities could be challenged if new initiatives are not prioritized and re-evaluated against existing initiatives 										

Initiative O – Develop a standardized password management policy

Initiative O – Develop a standardized password management policy
<p>Initiative Description: BerryDunn recommends that the City create a detailed policy on password requirements and develop appropriate communications to establish greater awareness and broad user awareness of the importance of system security. This initiative would also consider use of password management tools that allow more complex password configurations and a more functional means of password management. Consistent and ongoing efforts to convey cybersecurity awareness are important to institute enhanced security protocols. Use of password management applications is one step in the overall approach to enhanced security measures, and these applications should function on multiple devices to be most effective and to help enforce stronger password policies for all City staff. The City could use such an application to generate random passwords of any length and enable</p>

Initiative O – Develop a standardized password management policy

copy/paste of passwords into the appropriate software applications. Additionally, the City could incorporate multi-factor authentication techniques into future password strategies.

Task 1: Establish Security Requirements

The first task in developing a standardized password management policy is to establish security requirements that are communicated to the City staff. The use of a password that does not expire, or is short and less complex, may have a direct impact on the security of the whole system. BerryDunn recommends the City enforce stronger passwords, consistent expiration periods, and consider incorporating multi-factor authentication techniques into future password strategies. BerryDunn recommends that the new password policy document be shared with users as a part of ongoing cybersecurity awareness education.

Task 2: Acquire Password Management Tools

Once security requirements have been established, BerryDunn recommends that the City consider the use of a password management tool that allows more complex password configurations while making it easier for City staff to adapt and comply with stronger passwords that are updated on agreed-upon time frames.

Task 3: Monitor Password Management Policy

The last task is to monitor the Password Management Policy by identifying strengths and weaknesses and areas of improvement. Monitoring the Password Management Policy will also help ensure that the policy is constantly being revisited and updated as necessary.

Initiative Source Information					
Functional Area:	Management and Operations				
Weighted Priority Ranking:	5 of 21, where 5 is this initiative's ranking as determined by BerryDunn.				
Priority Ranking:	5 of 21, where 5 is this initiative's ranking as voted on by City staff.				
Related Strategic Information Systems Issues and Opportunities					
M9	There is a need for improved password management.		 Critical		
Prioritization Category Rankings					
City Rankings		BerryDunn Rankings			
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation		
 Critical		 High	 Medium		
Maturity of Technology					
 Established					
Estimated Budget					
Total Budget Breakdown					

Initiative O – Develop a standardized password management policy																				
	One-Time				Recurring															
	Time		Budget		Time		Budget													
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	60	100			20	40														
Professional Services Labor																				
Hardware																				
Software			\$6,000	\$6,000			\$6,000	\$6,000												
Total Budget	60	100	\$6,000	\$6,000	20	40	\$6,000	\$6,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$30,000															
Budget Description:	This initiative includes internal labor hours to develop and implement the policy as well as the purchase and reoccurring cost for a password management tool for approximately 160 City users.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Establish security requirements <input checked="" type="checkbox"/> Acquire a password management tool <input checked="" type="checkbox"/> Monitor Password Management Policy																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased security of City pertinent data <input checked="" type="checkbox"/> Creation of a citywide standard policy																				
Potential Risks																				
No Action:																				
<input checked="" type="checkbox"/> Pertinent City data remain at risk																				
During Implementation:																				
<input checked="" type="checkbox"/> Greater awareness and broad user awareness of the importance of password security is not established <input checked="" type="checkbox"/> Password management tool is poorly implemented																				
Post-Implementation:																				
<input checked="" type="checkbox"/> Insufficient training and ongoing review of policies <input checked="" type="checkbox"/> Policy is not updated as necessary																				

Initiative P – Upgrade or replace the City backup system**Initiative P – Upgrade or replace the City backup system**

Initiative Description: The current backup solution for City data is not scalable and has limited capacity. County IT has identified this need and BerryDunn recommends that the City implement a modular backup system with independent options for hardware, software, and cloud storage. A more modern solution—that can be scaled as the data and technical requirements of the City change—would provide an improved and more reliable means to protect vital City data.

Task 1: Assess the Current City Backup System

The first task to upgrading or replacing the City's backup system is to assess the current backup system and identify the need to upgrade or replace the system. The City, in conjunction with the County, has assessed and developed requirements to replace the City's backup system with more modern and capable storage technologies such as electronic vaulting or storage as a service. This move will usually require deployment of the service provider's backup system.

Task 2: Implement a Modular Backup System

The final step to replacing the City's backup system is to implement the modular backup system to the City environment. BerryDunn recommends that the City backup system be scalable as the data and technical requirements of the City expand.

Initiative Source Information

Functional Area:	Management and Operations, Technical, and Applications
Weighted Priority Ranking:	6 of 21, where 6 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	6 of 21, where 6 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

M10	The City does not have a Business Continuity Plan.	
T8	Security concerns exist within some City facilities.	

Initiative P – Upgrade or replace the City backup system																				
A8	Access to the City network and system privileges requires review.						 Medium													
Prioritization Category Rankings																				
City Rankings			BerryDunn Rankings																	
Strategic Project and Initiative Rank		Relative Benefit		Ease of Implementation		Maturity of Technology														
 Critical		 High		 Medium		 Established														
Estimated Budget																				
Total Budget Breakdown																				
	One-Time				Recurring															
	Time		Budget		Time		Budget													
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	60	120	\$0	\$0	0	0	\$0	\$0												
Professional Services Labor	0	0	\$0	\$0	0	0	\$0	\$0												
Hardware	0	0	\$50,000	\$50,000	0	0	\$0	\$0												
Software	0	0	\$5,000	\$5,000	0	0	\$5,000	\$5,000												
Total Budget	60	120	\$55,000	\$55,000	0	0	\$5,000	\$5,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
\$55,000	\$5,000	\$5,000	\$5,000	\$5,000	\$75,000															
Budget Description:	The budget includes estimated costs for hardware, software, and cloud storage. This initiative will use internal staff resources.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Assess the current backup system <input checked="" type="checkbox"/> Document requirements for the modular backup system <input checked="" type="checkbox"/> Implement the modular backup system																				
Anticipated Benefits																				

Initiative P – Upgrade or replace the City backup system

- Increased security of pertinent City data
- This initiative would support the City's Business Continuity Plan
- A more modern backup system

Potential Risks
No Action:

- Pertinent City data may remain at risk

During Implementation:

- Staff time commitment is underestimated

Post-Implementation:

- Insufficient training
- The system does not meet the needs of the City

Initiative M – Assess and update the City's E-Government services and website
Initiative M – Assess and update the City's E-Government services and website

Initiative Description: The public currently has limited options to access City services online. Although there are some planned projects to improve this in the short term (rebranding and updating the City website), there are still areas where functionality is unavailable. In collaboration with the public, the City should identify services that could be offered online and create an action plan to enhance the existing capabilities and provide citizens additional access to City services. There is a need for software that will allow businesses or citizens to complete forms online and submit variable payments for occupation taxes (e.g., restaurant or general business occupation taxes).

Task 1: Conduct a Needs Analysis of the City's E-Government Services.

The first task is to conduct a needs analysis to identify the major challenges with current E-Government services, including soliciting input from both City staff and the public about the City's website, application portals, and reviewing other document submission channels (e.g., fax). BerryDunn recommends soliciting input from the public and City staff through use of electronic surveys.

Task 2: Determine Action Plan and Update the E-Government Services and Website.

The second task includes determining the changes needed to increase the efficiency and usability of E-Government services for both City staff and the public for those services determined to offer the greatest return on investment. This task also includes hiring a third party to assist in developing the updated E-Government website.

Note: The City is in process of updating its E-Government services and website.

Initiative Source Information

Functional Area:	Technology and Management and Operations
Weighted Priority Ranking:	7 of 21, where 7 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	7 of 21, where 7 is this initiative's ranking as voted on by City staff.

Initiative M – Assess and update the City’s E-Government services and website													
Related Strategic Information Systems Issues and Opportunities													
City Rankings		BerryDunn Rankings											
Strategic Project and Initiative Rank		Relative Benefit		Ease of Implementation		Maturity of Technology							
 Critical		 Medium		 Medium		 Leading Edge							
Estimated Budget													
Total Budget Breakdown													
Budget Category	One-Time				Recurring								
	Time		Budget		Time		Budget						
Internal Labor	Low	High	Low	High	Low	High	Low	High					
Professional Services Labor	90	100	\$18,000	\$20,000	-	-	-	-					
Hardware	-	-	\$3,000	\$5,000	-	-	-	-					
Software	-	-	-	-	-	-	\$5,000	\$5,000					
Total Budget	130	180	\$21,000	\$25,000	-	-	-	-					
Total Budget by Year													
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost								
\$25,000	\$5,000	\$5,000	\$5,000	\$5,000	\$45,000								
Budget Description:	This initiative includes an estimated budget for the City to work with a third-party resource to implement solutions to identified challenges with current E-Government services.												
Action Items to Implement Project or Initiative													

Initiative M – Assess and update the City’s E-Government services and website	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Complete a needs analysis, surveying staff and the public<input checked="" type="checkbox"/> Identify and prioritize possible additional E-Government services<input checked="" type="checkbox"/> Develop a plan for implementing additional E-Government services<input checked="" type="checkbox"/> Implement new E-Government services and website	
Anticipated Benefits	
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Greater transparency and availability of information online<input checked="" type="checkbox"/> Enhanced customer self-service functionality<input checked="" type="checkbox"/> Reduction of the need for the public to visit the City to perform certain functions and transactions	
Potential Risks	
<p>No Action:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Continued need to visit the City to perform the majority of transactions<input checked="" type="checkbox"/> Falling behind the E-Government services offered by other communities and private utility organizations <p>During Implementation:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Identified E-Government services are cost prohibitive due to maturity of technology and availability of professional services<input checked="" type="checkbox"/> Unrealistic expectations on the time and effort required to implement the identified enhancements <p>Post-Implementation:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Education and support of the new web-based services<input checked="" type="checkbox"/> Inability to meet future customer expectations/needs (technical obsolescence)<input checked="" type="checkbox"/> Failure to maintain systems and interfaces to keep services available	

Initiative E – Implement security controls at all City facilities

Initiative E Evaluate security controls at all City facilities

Initiative Description: City staff reported that some City locations do not have adequate security, cameras, or video recording equipment. The City should conduct an analysis of specific needs per facility. Considerations might include measures to protect front-line staff in areas where there is risk of assault. Facilities include but are not limited to the Library, City Hall, the Community Center, City Parks & Fields, Sports Complex, Community Development, and Public Works. Identified challenges are expected to be specific to each facility, while there might also be common challenges.

Task 1: Identify Risks

The first step in implementing security controls at all City facilities is to identify the risks within facilities that require security enhancements. This task should begin with an assessment and review of current sites, facility security, and physical security systems. Potential risks might include limited/lack of monitoring systems, access controls, etc. BerryDunn recommends that the IT Committee prioritize

Initiative E Evaluate security controls at all City facilities

findings for facilities based on their need for improved security controls and video surveillance. BerryDunn is recommending that an external organization perform the assessment of City facilities.

Task 2: Assess Threats and Vulnerability

After identifying risks, the City should assess and prioritize threats and vulnerability. The City should consider any risks that current security measures do not address or only address at a bare minimum.

Task 3: Review Facility Operating Procedures

After the City has identified risks and threats, it should evaluate the procedures in place for staff. For example, personnel might leave doors unlocked or propped open after business hours for convenience. The City should establish procedures to help ensure access to City facilities is restricted. BerryDunn recommends that the City establish a security control policy. Additionally, the City should evaluate and update emergency plans and procedures and include them into the planned activities. The City is encouraged to standardize access control and video surveillance systems.

Task 4: Security Controls Implementation Plan

Following the creation of a security control policy, the City should develop an implementation plan that includes phasing for the installation of access control and surveillance systems.

Initiative Source Information

Functional Area:	Technical
Weighted Priority Ranking:	8 of 21, where 8 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	8 of 21, where 8 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

T8	Security concerns exist within some City facilities.	
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Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
				

Estimated Budget

Total Budget Breakdown				
	One-Time		Recurring	
	Time	Budget	Time	Budget

Initiative E Evaluate security controls at all City facilities																				
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	80	160	-	-	-	-	-	-												
Professional Services Labor	50	80	\$10,000	\$16,000	-	-	\$10,000	\$10,000												
Hardware	-	-	\$3,000	\$4,000	-	-	-	-												
Software	-	-	-	-	-	-	-	-												
Total Budget	130	240	\$13,000	\$20,000	-	-	\$10,000	\$10,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
\$20,000	\$10,000	\$10,000	\$10,000	\$10,000	\$60,000															
Budget Description:	This budget for this initiative is based on professional services to assess and develop a citywide policy and device standard for security control and as well as a budget for security enhancements such as protective barriers, bulletproof glass, security doors, etc. BerryDunn expects that upgrades will be a multi-year effort, and funding will be provided for future years to address this need.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Identify risks <input checked="" type="checkbox"/> Assess threats and vulnerability <input checked="" type="checkbox"/> Review facility operating procedures <input checked="" type="checkbox"/> Create an implementation plan with timeline to deploy access control throughout the City																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased security for City employees and assets <input checked="" type="checkbox"/> Creation of a citywide policy and device standard for the City																				
Potential Risks																				
No Action: <input checked="" type="checkbox"/> City employees and assets remain at risk																				
During Implementation: <input checked="" type="checkbox"/> Incorrect configuration of the cameras, recording devices, and access control hardware <input checked="" type="checkbox"/> Incorrect placement of cameras and access control points																				
Post-Implementation: <input checked="" type="checkbox"/> Lack of maintenance of the systems <input checked="" type="checkbox"/> Insufficient training and ongoing review of policies																				

Initiative D – Improve the City’s technical oversight and guidance

Initiative D – Improve the City’s technical oversight and guidance

Initiative Description: With the increasing reliance upon technology, and the many ongoing technology initiatives, the City needs a position whose primary responsibility is to oversee technology. That position would be responsible for supporting all departments and researching and recommending solutions that address common department challenges. Additional responsibilities would include coordinating, enhancing, and overseeing contracted assistance by County and other vendor contracts; it would also provide project management support for technology projects and larger projects and initiatives.

Task 1: Hire a Technical Staff Member

As the need for a position to oversee technology becomes apparent, BerryDunn recommends that the City hire a technical staff member who will be responsible for supporting all departments, researching, and recommending solutions that address common department challenges. This task includes developing a position title and job description as well an onboarding training plan. This full-time equivalent (FTE) position would also provide project management support for technology projects.

Task 2: Identify a Best Practice Project Management Framework

A common project management authority is the PMI®, which has developed and published the *PMBOK® Guide*. The *PMBOK® Guide* is a set of standard guidelines for project management, which provides details on standard terminology and industry best practices. BerryDunn recommends that the City identify the preferred project management framework for initiating and implementing projects and initiatives at the City. Support for all City departments will be a key benefit and would support the initiatives identified in this Plan.

Initiative Source Information

Functional Area:	Management and Operations
Weighted Priority Ranking:	9 of 21, where 9 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	9 of 21, where 9 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

M7	There is a need for additional technical guidance and oversight of technical enhancements to support all departments.	
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Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
		 Medium	 Medium	 Established

Initiative D – Improve the City’s technical oversight and guidance																				
Estimated Budget																				
Total Budget Breakdown																				
	One-Time				Recurring															
	Time		Budget		Time		Budget													
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	-	-	\$60,000	\$80,000	-	-	\$83,200	\$93,589												
Professional Services Labor	-	-	-	-	-	-	-	-												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	-	-	-	-	-	-												
Total Budget	-	-	\$60,000	\$80,000	-	-	\$83,200	\$93,589												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
\$80,000	\$83,200	\$86,528	\$89,989	\$93,589	\$433,306															
Budget Description:	The budget includes estimated cost of hiring a technical staff member. The budget for this initiative anticipates that Human Resources and City Leadership will develop the job description, solicit applicants, and hire and onboard the successful candidate for the IT Oversight position. Recurring costs are included in the budget estimate. The estimate of recurring salary costs was estimated using a 4% annual increase.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Secure position funding <input checked="" type="checkbox"/> Hire a technical staff <input checked="" type="checkbox"/> Develop a plan for onboarding and ongoing training <input checked="" type="checkbox"/> Identify a best practice project management framework <input checked="" type="checkbox"/> Assist with completion of Plan initiatives																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased success of initiative implementations <input checked="" type="checkbox"/> More efficient use of IT resources by City staff (software and applications, hardware, etc.) <input checked="" type="checkbox"/> Improved IT-related project management <input checked="" type="checkbox"/> Defined structure and approach to project management and related activities (communication management, risk management, etc.) <input checked="" type="checkbox"/> Increased awareness of technology best practices for City staff																				

Initiative D – Improve the City’s technical oversight and guidance**Potential Risks****No Action:**

- Increased security vulnerabilities/risks
- IT-related projects will not follow a defined and structured project management approach

During Implementation:

- Project management framework is not properly adapted to meet City needs

Post-Implementation:

- Not coordinating or following project management best practices

Initiative R – Implement standard collaboration tools for City staff**Initiative R – Implement standard collaboration tools for City staff**

Initiative Description: Staff have reported several concerns related to internal collaboration. A few collaboration tools are in use, but not everyone is using the same tool, which causes issues when trying to collaborate effectively. In addition, the City is slowly transitioning to O365 to offer not only cloud-hosted email but also enhanced functionality and additional capability as complimentary products. The City is implementing a change to O365, and is doing so in a manner that is introducing the new software as each piece of older technology is replaced. This approach will take multiple years to complete. This means that for several years City staff will be working with different software products, and there will be a lack of consistent software tools available to everyone. BerryDunn recommends accelerating the transition to O365 and purchasing licenses for all City staff that would include collaboration tools such as Microsoft teams (MS-teams), SharePoint, Exchange Online, and OneDrive. Employees needing a more efficient way to collaborate on documents, projects, etc., will benefit from a more accelerated transition to common tools that offer the City improvement in the ability to work together and share information and ideas.

Task 1: Needs Assessment

City staff reported they desire more features and capabilities from a standard collaboration tool; staff reported that not everyone is using the same tools. The City should conduct an educational session to create a common understanding of collaboration tools and capabilities available for use, focusing on those that can be delivered, supported, and appropriately secured by County IT. BerryDunn would then recommend a needs assessment or survey requesting feedback from City staff across departments to determine current challenges and future needs. It will be important to focus only on tools that can be adequately secured and those that would be available to all City users to establish a standard tool that is more easily supported and deployed.

Task 2: Implementing Collaboration Tools and Capabilities.

BerryDunn recommends an integrated and more immediate approach to the rollout of O365. This would include licensing Office 365, Exchange Online, OneDrive, SharePoint, and MS-Teams. This approach would more quickly have all users on the same platform while giving them access to additional collaboration tools. The collaboration suite of applications, which would include the aforementioned Microsoft tools and possible other tools that can be offered to all users, should be given special emphasis. BerryDunn recommends including dedicated training to fully implement the

Initiative R – Implement standard collaboration tools for City staff

complimentary collaboration tools that offer the ability for group collaboration, with both defined and ad hoc groups. These capabilities can offer a means to not only share files but also create group shares for discussion and an exchange of ideas virtually. Shared file repositories, shared calendars, and shared inboxes offer new ways of collaboration. BerryDunn recommends that outside expertise (County) be considered so that configuration and setup of these tools can result in a maximized return on the investment.

Initiative Source Information

Functional Area:	Management and Operations and Technical
Weighted Priority Ranking:	10 of 21, where 10 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	10 of 21, where 10 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

M4	Standard collaboration tools for City staff are lacking.	 Critical
M7	There is a need for additional technical guidance and oversight of technical enhancements to support all departments.	 High
T7	Communications across the City is challenging for internal and external constituents.	 High
M8	There is a need for a common scheduling solution that would serve all City users.	 Medium

Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
 Medium		 Low	 Difficult	 Leading Edge

Estimated Budget

Total Budget Breakdown				
	One-Time		Recurring	
	Time	Budget	Time	Budget

Initiative R – Implement standard collaboration tools for City staff																				
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	80	100	-	-	40	80	-	-												
Professional Services Labor	-	-	-	-	-	-	-	-												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	\$38,000	\$38,000	-	-	\$38,000	\$38,000												
Total Budget	80	100	\$38,000	\$38,000	40	80	\$38,000	\$38,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
\$38,000	\$38,000	\$38,000	\$38,000	\$38,000	\$190,000															
Budget Description:	This initiative budget includes internal labor to identify and implement citywide collaboration tools as well as funding for professional services labor to provide training to City staff. The cost of O365, with bundled collaboration tools (Exchange Online, OneDrive, SharePoint, and MS-Teams) is estimated at \$20.00/month per user for an estimated 160 users.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Conduct a needs assessment <input checked="" type="checkbox"/> Identify collaboration tools and capabilities <input checked="" type="checkbox"/> Begin the rollout and implementation of new tools <input checked="" type="checkbox"/> Conduct appropriate training and education of enhanced capabilities																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased staff efficiency <input checked="" type="checkbox"/> Improved citywide communication and collaboration <input checked="" type="checkbox"/> Improved document tracking and retention <input checked="" type="checkbox"/> Access to documents from the field																				
Potential Risks																				
No Action: <input checked="" type="checkbox"/> Inefficient staff collaboration <input checked="" type="checkbox"/> Inability to access documents from the field																				
During Implementation: <input checked="" type="checkbox"/> Improper configuration and end-user training																				
Post-Implementation: <input checked="" type="checkbox"/> Staff not following policies that were created for document sharing and online collaboration																				

Initiative T – Create an Enterprise Asset Management (EAM) Plan

Initiative T – Create an Enterprise Asset Management (EAM) Plan

Initiative Description: An external assessment of the Public Works and Recreation departments was completed by the Novak Consulting Group in February 2019. The findings of the assessment recommended updating current asset inventories and adding assets to the inventory not currently tracked. The assessment study reported that: “Asset management is a cornerstone of professional public works administration. Effective asset management programs seek to maximize asset life cycles through a combination of preventive maintenance and regular replacement schedules. Monitoring assets in this way helps to ensure that capital investments made by a community are maximized over time and typically extends the service life of each asset. To accomplish this, it is essential for the City to inventory assets and to determine their overall condition.” In working with City staff, BerryDunn also identified the need for improved asset management as one of the strategic IT issues. Asset management focuses on extending systems and asset life for an organization, rather than replacing old systems and physical assets. BerryDunn recommends that the City pursue a plan that allows the City to better inventory, assess, and maintain City assets. The intent of such a plan is to extend the useful life of assets and reduce unplanned expenditures that might negatively impact department budgets.

Task 1: Establish a Working Group. The first task is to establish a working group that will oversee the development of the asset management plan and manage process. This group should be comprised of representatives from across City departments tasked to facilitate the management of all City assets, to include those who have a role in identifying, maintaining, and financially accounting for City assets.

Task 2: Solicit Assistance from a Consulting Organization to Assist with the Analysis, Coordination, and Planning of the EAM Initiative. The second task is to conduct a complete analysis of the City’s specific business needs and organizational goals dependent on physical assets, infrastructure, and maintenance processes. BerryDunn recommends conducting an analysis of existing application capabilities. This review may include discussions with the vendor community to expand existing applications or to identify additional functionality that might be required to meet the City’s needs. BerryDunn recommends that the City solicit the assistance of a consulting organization that can help plan, support, and guide this process.

Task 3: Develop System Requirements and a RFP Document. The third task is to collaboratively develop desired system functionality based on the City’s needs, including the ability to identify and collect asset information, conditions, costs, maintenance history, expected replacement dates, and identified risks.

Task 4: Issue the RFP Document. The fourth task is to create and publish an RFP for an EAM solution, which would be guided by the consulting organization working with the City.

Task 5: Evaluate and Select an EAM Solution. The fifth task is to evaluate vendor responses to the RFP and select a vendor. The key to this step is not only determining what functionality is offered by proposing vendors, but to also gain a better understanding how each solution performs the required functionality. Many vendors might offer a particular functionality, but some might perform that function more efficiently than others.

Task 6: Implement the EAM Solution. The final task is to implement the EAM solution. This will require conducting system configuration and testing, training staff, and developing associated asset management policies and procedures. Continued assistance to support the City effort might be

Initiative T – Create an Enterprise Asset Management (EAM) Plan

warranted following implementation activities. The emphasis upon training and change management elements are important considerations in selecting an organization to support the City.

Initiative Source Information

Functional Area:	Applications
Weighted Priority Ranking:	N/A
Priority Ranking:	N/A

Related Strategic Information Systems Issues and Opportunities

A2	The City does not have a system to manage assets.	 Critical
A3	Some software applications are not fully implemented or fully utilized.	 Critical
M1	City departments rely significantly upon manual and paper-based processes.	 Critical

Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
 Critical		 High	 Difficult	 Established

Estimated Budget

Total Budget Breakdown								
	One-Time				Recurring			
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor/Training			20,000	20,000	-	-	-	-
Professional Services Labor			25,000	30,000		-		-

Initiative T – Create an Enterprise Asset Management (EAM) Plan																							
Hardware					-	-	-	-	-														
Software			45,000	60,000	-	-																	
Maintenance							20,000	25,000															
Total Budget			90,000	110,000	-	-	20,000	25,000															
Total Budget by Year																							
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost																		
110,000	50,000	25,000	25,000	25,000	235,000																		
Budget Description:	This initiative includes internal staff resources. The professional services hours included are for consulting services. Vendor system software costs include software licensing, maintenance, implementation and training services.																						
Action Items to Implement Project or Initiative																							
<input checked="" type="checkbox"/> Analyze City needs <input checked="" type="checkbox"/> Discuss additional functionality with current vendors <input checked="" type="checkbox"/> Develop RFP <input checked="" type="checkbox"/> Evaluate vendor responses <input checked="" type="checkbox"/> Select vendor <input checked="" type="checkbox"/> Implement EAM solution <input checked="" type="checkbox"/> Apply Cost-Effective Management <input checked="" type="checkbox"/> Execute Long-term Financial Planning																							
Anticipated Benefits																							
<input checked="" type="checkbox"/> Reduced risk of unplanned asset expenditures <input checked="" type="checkbox"/> Improved planning for funding of asset maintenance and replacement <input checked="" type="checkbox"/> Extended life expectancy of City assets <input checked="" type="checkbox"/> Expanded use of existing systems, leveraging previous investments where possible <input checked="" type="checkbox"/> Enhanced decision-making <input checked="" type="checkbox"/> Maximize return on City asset investments <input checked="" type="checkbox"/> Inventory optimization <input checked="" type="checkbox"/> Improved asset history <input checked="" type="checkbox"/> Reduce reliance on manual processes and risk of human error																							

Initiative T – Create an Enterprise Asset Management (EAM) Plan	
Potential Risks	
No Action:	<ul style="list-style-type: none"><input checked="" type="checkbox"/> Financial value and condition of City assets are not efficiently tracked<input checked="" type="checkbox"/> Disparate asset management systems and processes continue to exist<input checked="" type="checkbox"/> Existing systems are not utilized to their fullest potential
During Implementation:	<ul style="list-style-type: none"><input checked="" type="checkbox"/> Not providing adequate training on new systems or enhanced functionality of existing systems
Post-Implementation:	<ul style="list-style-type: none"><input checked="" type="checkbox"/> Not following up to confirm user adoption<input checked="" type="checkbox"/> Not staying up to date on system upgrades

Initiative J – Create and implement a hardware standardization plan

Initiative J – Create and implement a hardware standardization plan

Initiative Description: The City does not have standardized end-user hardware devices citywide. There are a mix of iPads and Microsoft Windows laptops in use, and City staff report challenges where applications do not run on some City-purchased hardware. Additionally, City staff have reported that some existing equipment does not work efficiently on more demanding software such as geographic information system (GIS) software.

BerryDunn recommends that the City establish a documented plan that prioritizes and delineates specific standards for hardware that is purchased to conduct City business.

Task 1: Assess

The first step to creating and implementing a hardware standardization plan is to assess and determine core business and hardware needs. The City should create a complete inventory of hardware in use. This inventory should be catalogued and include a detailed description of hardware specifications. The City should specifically identify and document special demands such as the need to use GIS software.

Task 2: Establish Hardware Standards

BerryDunn recommends that the IT Committee in conjunction with County IT establish and document a standard desktop configuration that would address the needs of a typical City user. The standard desktop configuration would be expected to satisfy 85% of City users streamlining end-user support efforts. For select groups, where mobile capabilities are required, BerryDunn recommends that the City also consider a standard laptop or tablet. Mobile equipment should have a docking station that would allow these devices to be used in the office setting much as a desktop computer and allow the employee to work in other locations. Where specialized configurations are necessary, such as workstations using GIS software, it would be advantageous to document the hardware configuration so that equipment costs for such a configuration are known. BerryDunn recommends that configurations for desktops, laptops, or tablets be as consistent as possible to simplify support and training efforts.

Task 3: Document Hardware Standards

As the City establishes hardware standards, it should publish and/or distribute them so that all departments are aware of the standards and the expected cost of new equipment. The City should

Initiative J – Create and implement a hardware standardization plan

review and update the standards on a periodic basis, which most likely would be just prior to the annual budget cycle so the IT Committee can accurately anticipate the cost of new equipment. The IT Committee should work with County resources when considering changes to the hardware specifications.

Initiative Source Information

Functional Area:	Technical
Weighted Priority Ranking:	11 of 21, where 11 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	11 of 21, where 11 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

T5	Hardware is not standardized to one platform across the City.	
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Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
	High	 High	 Medium	 Established

Estimated Budget

Total Budget Breakdown									
	One-Time				Recurring				
	Time		Budget		Time		Budget		
Budget Category	Low	High	Low	High	Low	High	Low	High	
Internal Labor	212	344	-	-	-	-	-	-	-
Professional Services Labor	-	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-	-
Total Budget	212	344	-	-	-	-	-	-	-

Total Budget by Year									
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Initiative J – Create and implement a hardware standardization plan										
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost					
-	\$0	-	-	-	\$0					
Budget Description:	This initiative includes an estimated internal labor budget for the City and County to determine hardware standards.									
Action Items to Implement Project or Initiative										
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Assess and identify the hardware currently in use <input checked="" type="checkbox"/> Determine hardware specifications and develop standards <input checked="" type="checkbox"/> Document and implement the hardware standardization plan 										
Anticipated Benefits										
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Standardized employee training <input checked="" type="checkbox"/> Consistency in hardware management <input checked="" type="checkbox"/> More streamlined software procurement process <input checked="" type="checkbox"/> Technician familiarity 										
Potential Risks										
<p>No Action:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Communication challenges <input checked="" type="checkbox"/> Lack of scalability as the City grows <input checked="" type="checkbox"/> Inefficient hardware/software procurement process <p>During Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> City employees may want to keep the old hardware that they have been using <p>Post-Implementation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Departments purchase outside hardware standards 										

Initiative C – Create and implement a conference room technology upgrade and replacement plan

Initiative C – Create and implement a conference room technology upgrade and replacement plan

Initiative Description: BerryDunn recommends that the City establish a plan to update conference room technology on a more frequent basis. BerryDunn recommends that the City establish a documented plan that prioritizes and delineates specific plans for conference room technology upgrades for locations throughout the City. A documented conference room technology upgrade replacement plan will help the City monitor all conference room equipment, stay current with technology needs, and minimize disruptions due to technology failures. The plan might provide for replacement of equipment before end-of-life or at frequencies that diminish challenges relating to equipment failure. The plan should also take into account equipment warranty periods to reduce or eliminate repair costs for the expected life of the equipment. This effort should include all departments

Initiative C – Create and implement a conference room technology upgrade and replacement plan

and all facilities (e.g., the Library and Police Department [“smart” podium] where equipment is nearing end-of-life).

Task 1: Assess City conference rooms

The first task to updating conference room technology is to conduct an analysis of all City conference rooms and identify the needs for enhancements or upgraded equipment. This task should begin with an assessment and review of all conference rooms at all City facilities to document existing functionality, capabilities, and future needs.

Task 2: Create a list of prioritized facilities

The second task is to prioritize the list of locations that require updating and establish an agreed-upon replacement plan. For each type of hardware being used, the City should determine whether it would replace hardware all at once or in a staggered approach. The intended approach would be to identify the most immediate needs, continue with replacement of equipment for upcoming years, and do so with some degree of standardization. The use of standard equipment throughout the City will make training and support of such equipment easier.

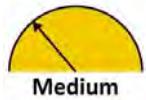
Task 3: Execute the plan

The third task is to execute the upgrade of the location(s) identified. The City should create a formal, documented plan that details how, why, and when hardware or software is to be upgraded or replaced. A documented hardware upgrade replacement plan will minimize disruptions due to technology failures, by providing steps to replace equipment before it is expected to be at end-of-life. The intention is to continue to identify improvements that can be delivered for each of the upcoming years in the plan. BerryDunn encourages the City to continually reassess and reprioritize conference room requirements to help ensure that technological capabilities continue to meet City and stakeholder expectations.

Initiative Source Information

Functional Area:	Technical
Weighted Priority Ranking:	12 of 21, where 12 is this initiative’s ranking as determined by BerryDunn.
Priority Ranking:	12 of 21, where 12 is this initiative’s ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

T2	There is a lack of City standards relating to video surveillance systems.	
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City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology

Initiative C – Create and implement a conference room technology upgrade and replacement plan																				
 High	 Medium		 Medium	 Established																
Estimated Budget																				
Total Budget Breakdown																				
		One-Time				Recurring														
		Time		Budget		Time		Budget												
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	105	170	-	-	15	30	-	-												
Professional Services Labor	10	15	\$4,000	\$6,000	-	-	-	-												
Hardware	-	-	\$50,000	\$84,000	-	-	\$10,100	\$10,100												
Software	-	-	-	-	-	-	\$900	\$900												
Total Budget	115	185	\$54,000	\$90,000	15	30	\$11,000	\$11,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	\$90,000	\$11,000	\$11,000	\$11,000	\$123,000															
Budget Description:	This initiative includes an estimated internal labor budget for the City to determine its hardware/software needs and implement a replacement plan, as well the recurring yearly costs of replacing equipment and software upgrades. Costs of replacing the hardware and software are based on approximately 15 audio and video conferencing systems, including the Police Department Community Room and Briefing Room.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Analyze and assess all City conference rooms <input checked="" type="checkbox"/> Prioritize list of locations that require equipment updates <input checked="" type="checkbox"/> Document and execute the plan																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Improved citywide communication and flexibility for staff <input checked="" type="checkbox"/> Minimized disruptions due to hardware failure <input checked="" type="checkbox"/> Robust video conference capabilities <input checked="" type="checkbox"/> Increased security with latest versions of hardware and operating systems																				

Initiative C – Create and implement a conference room technology upgrade and replacement plan**Potential Risks****No Action:**

- Assurance that all equipment will be supported by manufacturer

During Implementation:

- Inappropriate sequencing of hardware replacements and software updates

Post-Implementation:

- Not following the replacement plan
- Not making appropriate changes to the plan based on number of employees, quantity of hardware, new technology, etc.

Initiative Q – Upgrade, expand, and segregate the City public Wi-Fi network**Initiative Q – Upgrade, expand, and segregate the City public Wi-Fi network**

Initiative Description: The City's current public Wi-Fi network uses the same access points, switches, and Internet connection as the City production network. The current public Wi-Fi is protected by running the same devices but on a separate virtual network. To enhance security, the City should complete a full separation of the networks. The City can achieve this by separating the public Wi-Fi entirely, so that it runs on dedicated public Wi-Fi access points, switches, and Internet. The City also anticipates the need to expand public Wi-Fi capabilities to provide greater availability in public parks, at sports complexes, and in other designated public City spaces.

Task 1: Confirm Areas That Need Expanded Wi-Fi

The City should create and confirm a list of locations that need expanded Wi-Fi. BerryDunn recommends that the City conduct an assessment to confirm that the locations identified are the appropriate locations where Wi-Fi should be expanded. The assessment should consider the feasibility of bringing or extending Wi-Fi to additional locations, as there might be City locations that are remote that might be difficult or costly to connect. Although most facilities have wireless, in some locations it is not robust and/or there are dead spots, and in other locations there might be capacity or bandwidth issues that limit use.

Task 2: Separation of the Networks

The City's current public Wi-Fi network uses the same access points, switches, and internet connect. BerryDunn recommends that the City, in conjunction with the County, complete a full separation of private City networks and the publicly available Wi-Fi. This will require some architectural design and the purchase of appropriate equipment so that public and private Wi-Fi traffic is appropriately segregated.

Task 3: Develop a Plan to Expand Wi-Fi for Staff and Customer use

As a result of the assessment, City staff should develop an actionable plan to expand or strengthen Wi-Fi capabilities. The plan should address the options for expanding Wi-Fi and how to implement expanded Wi-Fi where feasible. The City should contract with a third party to upgrade, expand, and

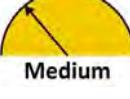
Initiative Q – Upgrade, expand, and segregate the City public Wi-Fi network

segregate Wi-Fi in identified City locations to offer City staff the ability to connect from more locations and to offer, where deemed appropriate, public Wi-Fi capabilities.

Initiative Source Information

Functional Area:	Management and Operations, Technical, and Applications
Weighted Priority Ranking:	14 of 21, where 14 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	14 of 21, where 14 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

M3	Online payment capabilities and ease of access to information on the City website is limited.	
T3	Network and software security policies and procedures are not compliant with industry best practice.	
T9	There is limited Wi-Fi access for City staff working outside a City facility.	

Prioritization Category Rankings

City Rankings		BerryDunn Rankings					
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology			
	High		Medium		Medium		Established

Estimated Budget

Total Budget Breakdown								
	One-Time				Recurring			
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor	140	200	-	-	-	-	-	-
Professional Services Labor	-	-	-	-	-	-	-	-

Initiative Q – Upgrade, expand, and segregate the City public Wi-Fi network																				
Hardware	-	-	\$12,000	\$14,000	-	-	\$6,000	\$6,000												
Software	-	-	-	-	-	-	-	-												
Total Budget	140	200	\$12,000	\$14,000	-	-	\$6,000	\$6,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	-	\$14,000	\$6,000	\$6,000	\$26,000															
Budget Description:	This initiative's budget is focused on an estimate for the City to work with County IT resource to assess Wi-Fi accessibility at all City facilities and create an expansion plan and hardware costs that also segregate public and private usage.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Confirm areas that need expanded Wi-Fi <input checked="" type="checkbox"/> Complete separation of public and private network structures <input checked="" type="checkbox"/> Develop a plan to expand Wi-Fi																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> More secure network <input checked="" type="checkbox"/> Some recommendations might provide savings to the City <input checked="" type="checkbox"/> Recommended training for staff to support different aspects of the network <input checked="" type="checkbox"/> Public wireless for vendors, City staff, and customers within City facilities <input checked="" type="checkbox"/> Internal wireless for conference rooms and meetings																				
Potential Risks																				
No Action: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Dead spots or diminished capacity in locations throughout the City <input checked="" type="checkbox"/> Not meeting expectations of internal and external stakeholders During Implementation: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Areas to add Wi-Fi are not appropriately identified Post-Implementation: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Additional cost and expectations for further expanding Wi-Fi 																				

Initiative H – Conduct a review of system roles and permissions for each department

Initiative H – Conduct a review of system roles and permissions for each department	
Initiative Description:	Many City departments reported that staff cannot perform critical functions because of permission limitations. This issue has created internal challenges for some departments. Through a collaborative process, the City should evaluate the permissions for each application by department.

Initiative H – Conduct a review of system roles and permissions for each department

After this evaluation, the City might require updates to policies and procedures that diminish future challenges with roles and permissions by improving the provisioning of user accounts. Additional training on these systems might be needed as a result of new or expanded system access. BerryDunn recommends that this project include an evaluation of enterprise systems and applications used within a single department.

Task 1: Evaluate and Document Existing Roles and Permissions

This project should begin with a review of the applications used in each department and documentation of current established roles and permissions. System administrators or users with administrative rights should review and document current permissions to capture the current state. Following the documentation of roles and permissions for each department, BerryDunn recommends that the IT Committee review the roles and permissions for department users, to adjust roles and add or limit permissions as appropriate. BerryDunn recommends that additional interviews be conducted with appropriate leads from user departments (e.g., department director, division manager, etc.) where there might be dispute or questions regarding expected roles and permissions. BerryDunn recommends comparing the roles and permissions initially documented against the additional needs identified during the department interviews, then developing a list of necessary role and permission changes to be completed by County IT staff.

Task 2: Implement Changes and Provide Training

After the identified changes are validated by the IT Committee, BerryDunn recommends that the changes be communicated to users whose role or level of permission is being changed. IT Committee staff should review the nature of these changes to determine whether additional training is needed. For areas where training might be needed, IT Committee staff should schedule and facilitate small group or one-one-one training with impacted users.

Initiative Source Information		
Functional Area:	Applications and Management and Operations	
Weighted Priority Ranking:	15 of 21, where 15 is this initiative's ranking as determined by BerryDunn.	
Priority Ranking:	15 of 21, where 15 is this initiative's ranking as voted on by City staff.	
Related Strategic Information Systems Issues and Opportunities		
A6	Provisioning of user accounts is not consistent or centrally managed for all software applications.	 High
M5	Department policies, procedures, and performance metrics need to be developed.	 High
A8	Access to the City network and system privileges requires review.	 Medium
Prioritization Category Rankings		

Initiative H – Conduct a review of system roles and permissions for each department																				
City Rankings			BerryDunn Rankings																	
Strategic Project and Initiative Rank		Relative Benefit		Ease of Implementation		Maturity of Technology														
			 High		 Medium		 Established													
Estimated Budget																				
Total Budget Breakdown																				
	One-Time				Recurring															
	Time		Budget		Time		Budget													
Budget Category	Low	High	Low	High	Low	High	Low	High												
Internal Labor	150	220	-	-	-	-	-	-												
Professional Services Labor	-	-	-	-	-	-	-	-												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	-	-	-	-	-	-												
Total Budget	150	220	-	-	-	-	-	-												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	-	\$0	-	-	\$0															
Budget Description:	This initiative does not include a budget. BerryDunn recommends that this initiative be completed using internal resources.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Collect and review existing system roles and permissions <input checked="" type="checkbox"/> Create and update documentation based on current system roles and permissions <input checked="" type="checkbox"/> Document and validate necessary changes <input checked="" type="checkbox"/> Implement changes to existing system roles and permissions, providing training as necessary																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased use of existing City applications <input checked="" type="checkbox"/> Reduction of manual and paper-based processes <input checked="" type="checkbox"/> Improved sharing of information between departments																				

Initiative H – Conduct a review of system roles and permissions for each department**Potential Risks****No Action:**

- Staff continue to work outside systems, using manual or paper-based processes

During Implementation:

- Less than full participation of staff during the interview process might prevent all necessary changes from being identified
- IT Committee resources might not have sufficient time to dedicate toward the interviews and training activities

Post-Implementation:

- Identified gaps in system roles and permissions might lead to the need to purchase additional software licensing
- Not keeping developed documentation current as systems and staff change

Initiative G – Formalize end-user technology training**Initiative G – Formalize end-user technology training**

Initiative Description: City staff report that technology training is lacking throughout the City and that the new employee onboarding process lacks adequate focus on technology training and use of the City's software and network structures. BerryDunn recommends that the City place greater emphasis on end-user technology training as a part of onboarding efforts and as ongoing training for all employees. BerryDunn also recommends the City develop an education strategy to help ensure that City staff have appropriate knowledge of deployed technologies and are more self-sufficient and productive. By implementing a technology training plan, the City should benefit from a greater knowledge base and be better prepared for change, allowing City staff to maximize the City's investment in technology.

Associated activities could include expanding the use of the City's intranet to develop and post training manuals and materials, and assessing the feasibility of increased use of online training. The City could also explore the use of a Learning Management System (LMS) to facilitate training scheduling and delivery when such capabilities are added to the computing environment. (See Initiative S.)

Task 1: Assess Current Training Capabilities

The City should first assess, and document current training methods leveraged during onboarding and available within each department. This should include a review of where and how supporting training collateral is captured and made available to end users. This assessment should account for various factors, such as time spent utilizing hands-on training for end users, the ability and availability of follow-up training sessions and the resources dedicated for delivery. Another factor to consider would be the frequency that training collateral is refreshed or kept current. This assessment should assist the City in creating objective metrics to evaluate both the quality of existing training and considerations for inclusion into an enhanced training program. The intended benefit of this initiative is to provide extensive training with any new technology initiative, conduct expanded training during onboarding, readily provide access to training materials for refresher courses or for employees changing roles or

Initiative G – Formalize end-user technology training

job functions, or provide access to training materials where cross-training of staff might offer operational advantages.

Task 2: Implement a Training Plan for City Departments

Once the City has assessed the current training offerings and the training offered within some departments, the City should look to replicate the best practices currently in use within departments and establish a training plan. The plan should identify various types of training that all City users are required to complete so that appropriate use of City systems can be expected. Such training should identify the City's acceptable use policy, initial and annual cybersecurity training, and required training for all end users and for use of specific technologies where user roles and permissions dictate the required use of certain applications. BerryDunn recommends documenting the training that should be provided to all users as citywide minimum standards for training, and documenting reoccurring training expectations. BerryDunn recommends the City identify resources as the owners or custodians of specific training collateral so that additional training materials can be created, and existing training collateral be maintained or expanded.

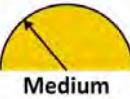
Task 3: Procure a Learning Management Systems for employee Training and Certifications

For this initiative and in support of Initiative S, BerryDunn recommends the acquisition of a LMS. BerryDunn recommends the City centralize training and employee certifications using a LMS that would serve the entire organization. The benefits of such a system include the possibility of scheduling training sessions, using a central repository for post-training manuals and materials, and the possibility of expanding annual Human Resources training courses or cybersecurity training courses online. The City could create a central repository in the LMS for tracking all employee training and certifications. The LMS could also provide advance notification of upcoming certification renewals for Human Resources and employees, document the date and time that training or certifications were completed or achieved, and provide a complete Human Resources record of all training and certifications held by each employee.

Initiative Source Information

Functional Area:	Applications and Management and Operations
Weighted Priority Ranking:	17 of 21, where 17 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	17 of 21, where 17 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

A1	City staff would benefit from additional technology training.	 Critical
A7	There is a desire for a Learning Management System for tracking employee training and employee certifications.	 Medium

Initiative G – Formalize end-user technology training												
M6	There is a need for improved data analysis and presentation capabilities.											
Prioritization Category Rankings												
City Rankings		BerryDunn Rankings										
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation									
		 High	 Medium									
Maturity of Technology		 Established										
Estimated Budget												
Total Budget Breakdown												
	One-Time		Recurring									
	Time		Budget									
Budget Category	Low	High	Low	High	Low	High	Low	High				
Internal Labor	180	240	-	-	40	60	-	-				
Professional Services Labor	20	40	\$4,000	\$8,000	-	-	-	-				
Hardware	-	-	-	-	-	-	-	-				
Software	-	-	\$34,000	\$40,000	-	-	\$8,000	\$8,000				
Total Budget	200	280	\$38,000	\$48,000	40	60	\$8,000	\$8,000				
Total Budget by Year												
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost							
-	-	\$48,000	\$8,000	\$8,000	\$64,000							
Budget Description:	This initiative includes an estimated budget for the City to work with a cloud-based provider to select a solution and complete this initiative in Year 3. Subsequent years reflect that annual maintenance cost; however, the City should identify the user count for such a system, which might reduce the estimate. The above estimates are based on a user count of 250.											
Action Items to Implement Project or Initiative												

Initiative G – Formalize end-user technology training

- Assess current training capabilities
- Implement a training plan for City departments
- Procure a LMS for employee training and certifications

Anticipated Benefits

- Improved technology training at the City
- More informed and educated staff
- Increased IT policy and procedures documentation
- Increased use of citywide and department-level technology
- Improved use of technology best practices at the City
- More efficient use of City IT resources
- Reduction in manual and paper-based processes
- Ability to use training as a recruiting tool

Potential Risks**No Action:**

- End-user technology training continues to be inefficient to support City processes and City growth
- Limited awareness of technology best practices at the City
- Continued inefficient use of technology at the City
- Continued manual and paper-based processes

During Implementation:

- Buy-in from end users might be limited, leading to decreased initiative effectiveness
- End users might not have sufficient time to dedicate toward training activities
- The end-user technology training program may not be right-sized for the City, leading to unnecessary training activities, or too few training opportunities

Post-Implementation:

- The training program might not be followed, leading to insufficient training at the City
- Funds might not be sufficiently allocated to provide the appropriate amount of training
- End users might not have sufficient time or might not prioritize training

Initiative F – Improve the data governance framework at the City**Initiative F – Improve the data governance framework at the City**

Initiative Description: A data governance framework is a consistent approach to collecting, managing, and sharing data in order to improve business processes and provide transparency for citizens. In the current environment, there are inefficiencies to be improved regarding data management. For example, the City could improve data classification, data retention, data warehousing, system integrations, interface and applications, and reporting abilities. BerryDunn recommends that the City implement a

Initiative F – Improve the data governance framework at the City

best-practice framework for data governance to improve the City's business intelligence, document and records management, collaboration between departments, and interactions with citizens.

Improvement steps could include developing and promoting document retention policies, implementing or removing required fields from software applications, developing integrations between software applications to reduce duplication of data, consolidating databases, or providing training on good data management techniques.

Task 1: Fact-Finding and Assessment

BerryDunn recommends the City secure the assistance from individuals or firms providing professional services to support this initiative. BerryDunn recommends that the City seek assistance conducting an analysis of the data being collected in the current environment. City staff should identify information gaps and take steps to remediate deficiencies. The first step to improving the data governance framework at the City includes assessing and analyzing the data being collected in the current environment through fact-finding sessions. This could include end user web survey, meetings, and interviews that will result in a Current State Report. The City is encouraged to assess its master data management and information management to identify information gaps.

Task 2: Develop a Data Governance Framework Roadmap and Implementation Plan

This task should include key metrics to be tracked as part of the data governance framework. The documentation should include the Implementation Plan and associated Staffing Plan to support implementation of the framework. A key factor of the Implementation Plan is assessing how data governance will integrate with other City efforts and become part of the standard City business processes. The metrics, framework, Implementation Plan and Staffing Plan are all key components to the overall plan to move the City closer to its desired data governance environment.

Task 3: Develop a Data Governance Framework Policy and Procedure Guide

The third task should focus on developing policies, rules, and procedures for managing data along with implementation assistance of the plan. BerryDunn recommends that the City work with the third-party consultants to review draft policies and documentation and modify as needed.

Task 4: Develop a Procedure for Monitoring Progress

The last task is to develop a procedure to monitor progress after the data governance framework policy is implemented. A key factor in successfully implementing a data governance plan is the adaptability and flexibility of the plan and its acceptance by City staff. Elements of data governance relate directly to the Business Continuity Plan detailed in Initiative N. BerryDunn recommends that the City consider components of the data governance framework within the Business Continuity Plan.

Initiative Source Information

Functional Area:	Technical and Management and Operations
Weighted Priority Ranking:	18 of 21, where 18 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	18 of 21, where 18 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

Initiative F – Improve the data governance framework at the City

T6	There is a lack of system integration for data sharing and data reporting.	 Medium
M6	There is a need for improved data analysis and presentation capabilities.	 Medium

Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
 Medium			 Difficult	 Established

Estimated Budget

Total Budget Breakdown								
	One-Time				Recurring			
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High
Internal Labor	115	170	-	-	-	-	-	-
Professional Services Labor	310	390	\$62,000	\$78,000	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Total Budget	425	560	\$62,000	\$78,000	0	0	\$0	\$0

Total Budget by Year

Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost
-	-	-	\$78,000	\$0	\$78,000
Budget Description:	This initiative's budget includes professional services for establishing a data governance framework at the City as well as internal hours.				

Action Items to Implement Project or Initiative

- Assess the current data governance framework
- Develop a Data Governance Framework Roadmap and Implementation Plan

Initiative F – Improve the data governance framework at the City

- Develop a Data Governance Framework Policy and Procedure Guide
- Develop a procedure for monitoring progress

Anticipated Benefits

- Policy is up-to-date
- Processes for data usage are efficient and lean

Potential Risks**No Action:**

- Citizen transparency might not be improved
- Data management inefficiencies will persist

During Implementation:

- Lack of change management and communication

Post-Implementation:

- Data governance framework is not adhered to
- Framework is poorly monitored and not updated frequently
- Best practices are not well documented

Initiative I – Develop an inventory of approved software**Initiative I – Develop an inventory of approved software**

Initiative Description: BerryDunn recommends that the City develop a catalog that lists all software used by the City employees. City staff should use this catalog as the first-line resource for finding software solutions for departmental processes. The catalog should include basic information about the software solution as well as details about common applications of the solution and the software's capabilities and limitations. The managing directors should approve the catalogue and publish it on the City's intranet for easy access by departments. The intent is to standardize, to the degree possible, common software that all City employees will use. The benefits of standardizing is that training, support, and sharing of documents are all complemented by having City employees all using the same software. While some exceptions might be necessary, there should be direction set by the IT Committee to define standard software tools. The management team should develop a process for responding to requests for software purchases not on the approved list.

Task 1: Create a Complete Inventory of Existing Software Applications

The IT Committee should create, in coordination with the County, a complete inventory of the existing software in use throughout the City. BerryDunn recommends that the list of existing software be transformed into a catalog of approved software or software standards. This can include desktop applications, operating systems, and databases. The inventory and catalog would ideally include the software version, the purpose of the application, the departments and specific users of the application, an identification of training available for the software, and tracking of applicable software licenses.

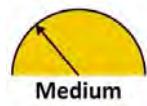
Task 2: Communicate Inventory of Approved Software to All Users

Initiative I – Develop an inventory of approved software

BerryDunn recommends that the inventory of approved software and the need for standardization be appropriately documented by the IT Committee and communicated to the organization. Establishing an accurate understanding of the approach and rationale would likely increase awareness and adoption of approved software. The list of standard software should ultimately be a document that can be referenced and understood by all City employees and reference when new equipment is being purchased or new technology applications are being considered. The purchase of new computer equipment should enforce the software standards and work toward a consistent use of software among departments and throughout the organization.

Task 3: Review and Update Software Applications Standards on a Regular Basis

After assembling the initial catalog, the IT Committee should continue to update this inventory of approved software and standards in order for the City to reference it when reviewing requests for new equipment or for larger proposals where identification of hardware and software standards are equally important.

Initiative Source Information			
Functional Area:	Applications		
Weighted Priority Ranking:	19 of 21, where 19 is this initiative's ranking as determined by BerryDunn.		
Priority Ranking:	19 of 21, where 19 is this initiative's ranking as voted on by City staff.		
Related Strategic Information Systems Issues and Opportunities			
A4	There is no inventory of approved software application available to City staff.		 High
Prioritization Category Rankings			
City Rankings		BerryDunn Rankings	
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation
 Medium		 High	 Medium
Maturity of Technology			
 Established			
Estimated Budget			
Total Budget Breakdown			
		One-Time	
		Time	Budget
Budget Category		Low	High
		Low	High
		Low	High

Initiative I – Develop an inventory of approved software																				
Internal Labor	280	380	-	-	20	40	-	-												
Professional Services Labor	-	-	-	-	-	-	-	-												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	-	-	-	-	-	-												
Total Budget	280	380	\$0	\$0	20	40	\$0	\$0												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	-	-	\$0	\$0	\$0															
Budget Description:	This initiative budget includes City staff time to develop an inventory of existing software and create the approved software standards. City time will be used to inventory approved applications, communicate it to end-users, and to maintain the software standards on a going forward basis.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Create a complete inventory of existing software applications <input checked="" type="checkbox"/> Communicate the inventory of approved software applications to all users <input checked="" type="checkbox"/> Review and update software applications standards on a regular basis																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Decreased duplication of systems <input checked="" type="checkbox"/> Decreased duplication of systems that IT has to support <input checked="" type="checkbox"/> Improved efficiencies in the procurement of applications <input checked="" type="checkbox"/> Increased integration within the City <input checked="" type="checkbox"/> Improved organizational communication <input checked="" type="checkbox"/> Increased knowledge of existing systems																				
Potential Risks																				
No Action:																				
<input checked="" type="checkbox"/> The City continues to use applications that are duplicating efforts, or not being used to its fullest potential <input checked="" type="checkbox"/> The City continues to procure new applications without first evaluating the current applications in use, leading to inefficient use of funds <input checked="" type="checkbox"/> Limited integration between existing applications																				
During Implementation:																				
<input checked="" type="checkbox"/> Inadequate funding to implement the needed approach																				
Post-Implementation:																				

Initiative I – Develop an inventory of approved software

- The application catalog is not updated on a regular basis, or used, leading to similar challenges if this initiative is not implemented

Initiative U – Identify and implement a standardized enterprise scheduling solution**Initiative U – Identify and implement a standardized enterprise scheduling solution**

Initiative Description: BerryDunn has identified that within the current environment, each department has its own method of scheduling meetings, shifts, vacations, and out-of-office time. Some departments use Microsoft Outlook calendars to schedule or block time, some use Payroll Maxx, and yet others use Google Docs. In some cases, City staff have to make note of their out-of-office time in several different systems. BerryDunn recommends that the City identify and agree upon a software solution that will be used by all departments so that organizational efficiencies can be gained, and City management can more quickly and appropriately coordinate and schedule meetings for all City staff. Scheduling of large groups of employees is time consuming and inefficient in the current environment. Use of a single scheduling solution would not only improve operational efficiencies on a day-to-day basis but also substantially benefit coordination of activities during emergency operations.

Task 1: Identification and Requirements Gathering

BerryDunn recommends that the IT Committee identify the capabilities and functionality that is required of a standard calendaring tool. Such capabilities may include the ability to share calendars, the ability to restrict calendar views, make meetings private, allocate conference rooms and equipment, and show allocated vacation days or out-of-office time. After documentation of required functionality, BerryDunn would recommend that the IT Committee review and identify the capabilities of existing software applications (i.e. MS Office), and note the functionality that cannot be satisfied by software currently in use throughout the City. BerryDunn would then suggest that the IT Committee identify enhanced capabilities and functionality that might be provided by the adoption of Microsoft Office 365 tools, which may offer mobile capabilities not offered in the existing applications.

Task 2: Agree Upon Next Steps and Implement Interim Solution

If the review of existing software (MS Office or MS Office 365) provides the required functionality, then BerryDunn would suggest that the City proceed with implementation of MS Office 365 and other complementary tools.

If at the end of these steps, the IT Committee is unable to identify and agree upon a solution that would support all departments, then BerryDunn would recommend that the City take an interim step and utilize the functionality and capabilities offered in MS Office 365 until formal requirements can be gathered and funding allocated and a RFP created to see another solution. The integration offered with the MS Office 365 suite of applications would advance the capabilities of the City immensely.

BerryDunn would also recommend that organization expectations be established to dictate the standard scheduling software that will be used for scheduling of meetings, allocation of resources (projectors, conference phones, etc.), and conference rooms. There is diminished efficiency when individuals either do not use the software or choose to use other software, which highlights the importance and need for standardization. For example, if someone is attempting to coordinate a meeting with the IT Committee, finding available time for everyone can be done quickly and easily using the calendar functionality within the software. However, if all City employees do not use the software, the efficiency and the return on the City's investment in this technology is lost.

Other Considerations:

Initiative U – Identify and implement a standardized enterprise scheduling solution

As with the introduction of any new software, the requisite training that helps ensure the productive use of new software is an important consideration. BerryDunn recommends that the implementation of new software be complemented with sufficient training to help ensure that the City gains the return on this investment in technology.

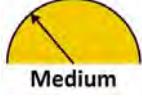
Initiative Source Information

Functional Area:	Applications, Management and Operations, and Technical
Weighted Priority Ranking:	20 of 21, where 20 is this initiative's ranking as determined by BerryDunn.
Priority Ranking:	20 of 21, where 20 is this initiative's ranking as voted on by City staff.

Related Strategic Information Systems Issues and Opportunities

A1	City staff would benefit from additional technology training.	 Critical
M4	Standard collaboration tools for City staff are lacking.	 Critical
T7	Communication across the City is challenging for internal and external constituents.	 High
M5	Department policies, procedures, and performance metrics need to be developed.	 High

Prioritization Category Rankings

City Rankings		BerryDunn Rankings		
Strategic Project and Initiative Rank		Relative Benefit	Ease of Implementation	Maturity of Technology
 Medium		 High	 Medium	 Established

Estimated Budget

Total Budget Breakdown								
	One-Time				Recurring			
	Time		Budget		Time		Budget	
Budget Category	Low	High	Low	High	Low	High	Low	High

Initiative U – Identify and implement a standardized enterprise scheduling solution																				
Internal Labor	180	240	-	-	-	-	-	-												
Professional Services Labor	-	-	-	-	-	-	-	-												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	-	-	-	-	-	-												
Total Budget	180	240	\$0	\$0	-	-	-	-												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	-	-	\$0	\$0	\$0															
Budget Description:	This initiative is scheduled to begin in year four of the Plan. The budget for this initiative is based on time allocated by the IT Committee and the funding provided in initiative "R". It is expected that the functionality provided by MS Office 365 will satisfy the needs of the City.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Identify and gather requirements <input checked="" type="checkbox"/> Agree upon next steps and implement the interim solution																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Increased efficiency related to coordination of meetings and people <input checked="" type="checkbox"/> Reduction of the reliance on paper-based processes <input checked="" type="checkbox"/> Stronger operational coordination of staff, meeting locations, and supporting equipment <input checked="" type="checkbox"/> Increased visibility to staff schedules with appropriate security restrictions																				
Potential Risks																				
Project Management:																				
<input checked="" type="checkbox"/> This initiative will require defining configuration options during implementation to meet the needs of all departments <input checked="" type="checkbox"/> It will be important for the City to follow project management best practices and develop a project plan and schedule, and monitor risks and issues related to testing, training, and implementation <input checked="" type="checkbox"/> Implementing an enterprise-wide system will require a comprehensive change management and communication strategy. A failure to manage change and implement an effective communication plan can create project challenges and lead to buy-in issues from City staff																				
No Action:																				
<input checked="" type="checkbox"/> Scheduling and coordinating meeting will continue to be more of a manual process <input checked="" type="checkbox"/> Facilitating meetings and identifying scheduling conflicts will be more time consuming <input checked="" type="checkbox"/> There will be no necessity to even use a scheduling tool																				

Initiative U – Identify and implement a standardized enterprise scheduling solution**Post-Implementation:**

The application catalog is not updated or used on a regular basis, leading to similar challenges if this initiative is not implemented

Initiative S – Identify software to document employee training and certifications**Initiative S – Identify software to document employee training and certifications**

Initiative Description: Currently, City departments or individual staff members are tracking their own training and certification requirements. Best practice would dictate that all employee records be centralized and managed by Human Resources. In addition, Human Resources should track employee certifications and licenses that require Continuing Educational Units. To more effectively support City employees meeting their educational requirements, or renewing various certifications, there would be a capability to coordinate and provide advance notifications of expiration dates. The coordination of training and certifications, in addition to many other employee details, warrants improved capability. Such improvements are likely to fall into expanded capabilities and functionality of the HRIS application, and the opportunity to take advantage of the LMS identified in Initiative G.

Task 1: Identify Added Capabilities of the HRIS Application

BerryDunn recommends that the City seek assistance with representatives from HRIS, or professional services organizations that can work with the City to perform an assessment of the current application. The intent would be to identify functionality not currently being used, or functionality that was not originally purchased with the HRIS application. With the need for improved tracking of employee information, the assessment should identify options for the City to consider. With the offerings and modules provided with this application, additional functionality could be purchased or HRIS could be contracted to assist with the setup of existing functionality not currently being used.

Task 2: Explore Learning Management Systems for Training and Certifications

BerryDunn also recommends that the City explore the benefits of using the LMS, which was recommended by Initiative G to establish the capabilities of integration with HRISHRIS to centrally save and retrieve information for all employees. The benefits of a LMS may include the possibility of scheduling and maintaining employee training and certification renewals, establishment of a central repository for post-training manuals and materials, and the possibility of scheduling and offering annual training courses online. Such a system should allow City employees to access training at a time that is convenient for them, allow Human Resources to track the amount of training and certifications employees have received over user-defined periods of time, and improve the ability for Human Resources regularly notify employees of certification expiration dates.

Task 3: Develop Action Plan

Once the project team researches, documents, and analyzes the additional offering of the HRIS application, and the capabilities of the LMS, the City should develop an Action Plan that outlines the recommended option for the City to pursue. Expanded use of HRIS and/or greater usage of the LMS, may require professional services to assist the City with this initiative.

Initiative Source Information

Functional Area:	Management and Operations, Applications, and Technical
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Initiative S – Identify software to document employee training and certifications

Weighted Priority Ranking:		21 of 21, where 21 is this initiative's ranking as determined by BerryDunn.												
Priority Ranking:		21 of 21 where 21 is this initiative's ranking as voted on by City staff.												
Related Strategic Information Systems Issues and Opportunities														
M4	Standard collaboration tools for City staff are lacking.							 Critical						
A7	There is a desire for a Learning Management System for tracking employee training and employee certifications.							 Medium						
M1	City departments rely significantly upon manual and paper-based processes.							 Medium						
T6	There is a lack of system integration for data sharing and data reporting.							 Medium						
Prioritization Category Rankings														
City Rankings			BerryDunn Rankings											
Strategic Project and Initiative Rank			Relative Benefit		Ease of Implementation		Maturity of Technology							
 Medium			 Medium		 Medium		 Established							
Estimated Budget														
Total Budget Breakdown														
	One-Time				Recurring									
	Time		Budget		Time		Budget							
Budget Category	Low	High	Low	High	Low	High	Low	High						

Initiative S – Identify software to document employee training and certifications																				
Internal Labor	120	240	-	-	-	-	-	-												
Professional Services Labor	40	60	\$8,000	\$12,000	40	60	\$8,000	\$12,000												
Hardware	-	-	-	-	-	-	-	-												
Software	-	-	\$5,000	\$8,000	-	-	\$5,000	\$8,000												
Total Budget	160	300	\$13,000	\$20,000	-	-	\$13,000	\$20,000												
Total Budget by Year																				
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost															
-	-	-	\$20,000	\$20,000	\$40,000															
Budget Description:	This initiative budget includes internal labor, professional services, and software licensing costs. It is not expected that professional services assistance will be required beyond the two years identified within the plan, although there may be ongoing licensing costs relating to HRIS that are unknown at this time.																			
Action Items to Implement Project or Initiative																				
<input checked="" type="checkbox"/> Identify added capabilities of the HRIS Application <input checked="" type="checkbox"/> Explore LMS for training and certifications <input checked="" type="checkbox"/> Develop the Action Plan																				
Anticipated Benefits																				
<input checked="" type="checkbox"/> Improved tracking of employee training and certification <input checked="" type="checkbox"/> Potential increase in learning and training capabilities <input checked="" type="checkbox"/> More efficient use of City IT resources <input checked="" type="checkbox"/> Reduction in manual and paper-based processes <input checked="" type="checkbox"/> Greater ability to share information among City staff																				

Initiative S – Identify software to document employee training and certifications**Potential Risks****No Action:**

- Continued inefficient use of resources at the City
- Added risk relating to employee actions due to a lack of documentation
- Continued manual and paper-based processes

During Implementation:

- Integration with the LMS may be challenging, and require professional services
- Add-on capabilities of HRIS may warrant professional assistance with setup and configuration to maximize the return on investment

Post-Implementation:

- Improper or inefficient use of LMS
- Lack of adoption of new functionality or capability

5. Implementing the Plan

This section contains the budget and timeline for the weighted prioritized Plan initiatives, identifies funding considerations for the Plan, and describes the approach to ongoing governance of the Plan.

5.1 Budget and Timeline

Section 4 of the Plan provided detailed descriptions for each initiative, and outlines estimated budgets and timing for the initiative. Additionally, each initiative includes action items to implement the initiative, and anticipated benefits of the initiative.

Table 10 below summarizes the budget estimates for the recommended initiatives presented in this Plan. The timeline provides a framework for budgeting project costs and for planning implementation timeframes over a five-year planning horizon. The timeframes and costs presented are estimates and will vary based on the City budget, competing technologies, the availability of support resources, and the specific technical approach used to undertake each initiative.

BerryDunn has provided the following table to identify the year that the City should initiate each initiative within the Plan. If a year has a zero presented for the initiative cost, this signifies no budget amount is expected to complete the initiative. A dash symbol indicates that there are no planned activities for the initiative during the respective year.

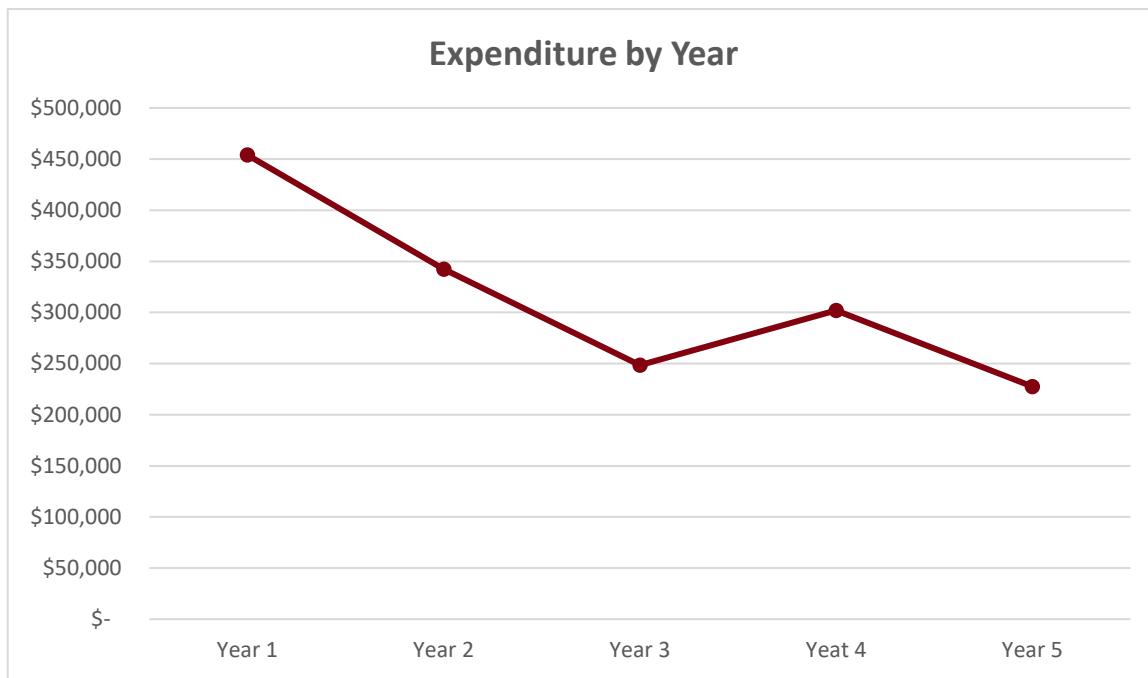
The following table depicts the five-year trend of the combined budget amounts for the strategic initiatives in each of the Plan years.

Table 10: Strategic Project and Initiative Budget and Timeline Matrix

ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
K	Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions	\$30,000	\$20,000	\$0	\$0	\$0	\$50,000
N	Develop a business continuity plan	\$60,000	\$0	\$0	\$0	\$0	\$60,000
A	Develop a mobile device and connectivity strategy for City staff working in the field	\$30,000	\$30,000	\$0	\$0	\$0	\$60,000

ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
B	Develop and implement policies, procedures, and performance metrics	\$0	\$0	\$0	\$0	\$0	\$0
O	Develop a standardized password management policy	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$30,000
P	Upgrade or replace the City backup system	\$55,000	\$5,000	\$5,000	\$5,000	\$5,000	\$75,000
M	Assess and update the City's E-Government services and website	\$25,000	\$5,000	\$5,000	\$5,000	\$5,000	\$45,000
E	Implement security controls at all City facilities	\$20,000	\$10,000	\$10,000	\$10,000	\$10,000	\$60,000
D	Improve the City's technical oversight and guidance	\$80,000	\$83,200	\$86,528	\$89,989	\$93,589	\$433,306
R	Implement standard collaboration tools for City staff	\$38,000	\$38,000	\$38,000	\$38,000	\$38,000	\$190,000
T	Create an enterprise asset management (EAM) plan	\$110,000	\$55,000	\$25,000	\$25,000	\$25,000	\$240,000
J	Create and implement a hardware standardization plan	-	\$0	\$0	\$0	\$0	\$0
C	Create and implement a conference room technology upgrade and replacement plan	-	\$90,000	\$11,000	\$11,000	\$11,000	\$123,000
Q	Upgrade, expand, and segregate the City public Wi-Fi network	-	-	\$14,000	\$6,000	\$6,000	\$26,000
H	Conduct a review of system roles and permissions for each department	-	-	\$0	\$0	\$0	\$0
G	Formalize end-user technology training	-	-	\$48,000	\$8,000	\$8,000	\$64,000

ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Total
F	Improve the data governance framework at the City	-	-	-	\$78,000	\$0	\$78,000
I	Develop an inventory of approved software	-	-	-	\$0	\$0	\$0
U	Identify and implement a standardized enterprise scheduling solution	-	-	-	\$0	\$0	\$0
S	Identify software to document employee training and certifications	-	-	-	\$20,000	\$20,000	\$40,000
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total Plan Initiatives Budget		\$454,000	\$342,200	\$248,528	\$301,989	\$227,589	\$1,526,306

Figure 6: Five-Year Spending Levels

5.2 Plan Governance

The City should begin implementing the projects and initiatives contained in this Plan during Fiscal Year 2022. Planning, funding, selecting, deploying, and managing improved technology systems and service delivery mechanisms will require strong leadership. Additionally, clear strategic and tactical plans, and, where reasonable, comprehensive needs assessments to help identify the technologies that best address City challenges.

After the City implements new technologies and initiatives, it will need to actively communicate the new functionality and/or services, and their benefits, to both internal and external stakeholders. For example, the City should not expect that a technology-training program would be widely adopted unless the benefits of the program are effectively communicated, and the training is easy to schedule and attend.

New technologies create significant opportunities to change how the City manages daily operations. The City must plan for significant business process changes that streamline operations and focus on using technology to improve customer service. The City should consider the following requirements that a plan of this magnitude necessitates:

Figure 7: Requirements to Consider When Implementing the Plan

Active executive management, involvement, and advocacy will be critical to the successful adoption and continued support of the Plan.

Implementing a successful Plan will require **significant planning, increased capital investment, and human resources** in order to successfully implement the Plan initiatives.

Project goals and objectives should be clearly communicated to stakeholders and progress proactively monitored.

Business processes should be evaluated and, where necessary, redesigned to take advantage of new technologies in order to meet the City's desired objectives.

Many changes will be non-technical. Rather, they will be cultural shifts, process changes facilitated by change management, and policy and procedure adjustments.

Departments must work cooperatively and collaboratively to facilitate effective change that is in the best interest of the City.

County Technical support staff will be critical to the success of the Plan's implementation. Internal stakeholders must be ready, willing, and able to use new technology and embrace effective change.

5.2.1 Updating the Plan

BerryDunn recommends that the City review and update the Plan at minimum twice a year or when significant change occurs. BerryDunn would recommend that the City IT Committee manage the review process. The review meetings should address the following:

- The first update of the year should be to track the progress made against initiatives.
- The second update during the year should focus on reassessing upcoming projects and reprioritizing the order of projects for the upcoming fiscal year. Although individual department input is important, the IT Committee should make the overall decision to reprioritize initiatives. As part of this update, the IT Committee should meet with department representatives to obtain their input and communicate plans for the upcoming year.

BerryDunn anticipates that the City will identify new projects throughout the year. Some of these projects may be the result of new State mandates or other unexpected events that create the need for a new project. The IT Committee should be responsible for assessing new projects as they are identified, and determining how they can be incorporated into the Plan.

5.2.2 Incorporating New Projects into the Plan

The Plan is not intended to be a static document and does not include support and maintenance activities associated with projects or systems not specifically identified in this document. BerryDunn recommends that as new projects are identified, the City select and prioritize projects based on the following:

Figure 8: Recommended Project Prioritization Criteria



The City can use the methodology and tools provided during the development of this Plan by identifying and prioritizing critical issues impacting the City's needs and select new projects to

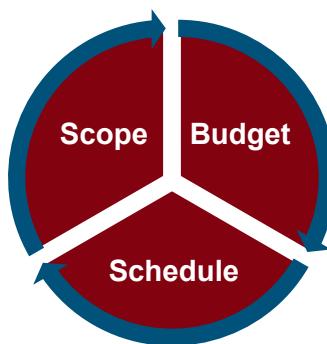
be added to the Plan based on the number of issues the project addresses, in addition to the factors identified previously.

5.2.3 Assessing Current Projects

As important as it is for the City to select and prioritize projects to be added to the Plan in the future, the City should also assess the overall status of “in-progress projects.”

BerryDunn recommends that the City develop project status reports to track and report on the status for all projects. Many organizations assess the overall “health” of a project by analyzing the following factors, known as the “Triple Constraints”:

Figure 9: Triple Constraints



The City can assign indicators to each of these project factors, and a project that is failing to perform in one of these critical areas can be further analyzed to develop a Corrective Action Plan to address project performance issues.

Many of the projects contained in this Plan are enterprise-wide. For such projects, the City can identify specific areas to assess as part of reviewing an in-progress project to determine the overall likelihood of a success. BerryDunn recommends the City consider analyzing the areas summarized in Table 11, below, when assessing an enterprise-wide in-progress project.

Table 11: Project Assessment Areas

Project Assessment Areas		
No.	Assessment Areas	Description
1	Project Management	Project planning has occurred (business case and scope developed), roles and responsibilities have been identified, and a Project Management Plan that addresses the management of project scope, project schedule, risks and issues, and quality has been developed. The triple constraints (scope, schedule, and costs) are being managed appropriately.
2	Implementation Approach	An approach to implementing the project has been developed based on best practices and is being followed.

Project Assessment Areas		
No.	Assessment Areas	Description
3	Change Management	An approach to change management has been developed and implemented. Stakeholders understand the scope of project and how they will be affected.
4	Governance	Appropriate project governance has been established to help ensure that participants are accountable and responsible as appropriate. A framework (policies and procedures) is being followed to help ensure that there is project ownership, and ultimately, project success.
5	Quality Management	Steps are being taken to help ensure that quality is being managed appropriately, including quality planning (project quality standards and metrics are defined), quality assurance (tasks and deliverables are reviewed and accepted by the governing body), and quality control (tasks and deliverables that do not pass quality assurance standards are remediated).
6	Capability Maturity	Capabilities implemented as a result of the completion of tasks and deliverables are evaluated to establish and track maturity (e.g., maturity of the project selection and prioritization process, or the maturity of IT technology training).
7	Cost-Benefit	The costs of the project are regularly evaluated to help ensure that the anticipated and realized benefits of the project are worthwhile.

The indicators in the Table 12, below, can be used to categorize the status of the assessment areas.

Table 12: Project Assessment Indicators

Project Assessment Indicators	
Status	Complete
	 In Progress: On Schedule
	 In Progress: Behind Schedule
	 Not Started

5.2.4 IT Committee's Role on Projects

The IT Committee should have an active role in the projects contained in the Plan; however, the IT Committee's involvement will vary depending on the project. Table 13 on the following page

summarizes involvement depending on the particular project. The IT Committee will either lead (have ultimate responsibility for the entire life cycle of a project from initiation to completion) or participate (be an active advisor and participant in a project and serve in an advisory role to departments that are identified as the lead for a project) on the projects in the Plan.

Table 13: IT Project Roles

IT Project Roles		
ID	Project Description	IT Committee Role (Lead or Participate)
K	Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions	Lead
N	Develop a business continuity plan	Participate
A	Develop a mobile device and connectivity strategy for City staff working in the field	Participate
B	Develop and implement policies, procedures, and performance metrics	Lead
O	Develop a standardized password management policy	Lead
P	Upgrade or replace the City backup system (County)	Lead
M	Assess and update the City's E-Government services and website	Participate
E	Implement security controls at all City facilities	Lead
D	Improve the City's technical oversight and guidance	Lead
T	Create an enterprise asset management (EAM) plan	Participate
J	Create and implement a hardware standardization plan	Lead
C	Create and implement a conference room technology upgrade and replacement plan	Lead
Q	Upgrade, expand, and segregate the City public Wi-Fi network	Participate
H	Conduct a review of system roles and permissions for each department	Lead
G	Formalize end-user technology training	Lead
R	Implement standard collaboration tools for City staff	Lead
F	Improve the data governance framework at the City	Participate
I	Develop an inventory of approved software	Lead
U	Identify and implement a standardized enterprise scheduling solution	Lead
S	Identify software to document employee training and certifications	Lead

5.2.5 Success Factors for the Plan

One of the critical success factors for the implementation of the Plan will be executive support for the projects in the Plan. The City will certainly review and should commit to undertaking the projects in this Plan, which will require executive support to allocate the appropriate City resources, and help ensure that projects outside the scope of this Plan in current and future years are thoroughly evaluated before adjusting existing priorities.

As described in preceding sections, the City can improve the process to identify the business owner who will justify the initiative and champion a new project. This change and improvements to selecting, prioritizing, tracking, monitoring, and reporting on IT projects would be beneficial. In order to implement the projects in this Plan, it will be critical for the City to dedicate project management support and technical support resources. Implementing the projects and initiatives in this Plan will not only take City resources and appropriate County support staff, but also a structured project management methodology to increase the likelihood of project success.

Over the next five years, the role of IT at the City should continue to evolve and continually be assessing leading edge and proven technology tools to solve technology issues at the City. The role of the IT Committee should focus on problem solving while balancing other organizational needs such as security, access to data, and E-Government services.

Appendix A: Prioritized List of Strategic Issues and Opportunities

This appendix contains the Prioritized List of Strategic Issues and Opportunities confirmed as a result of the Strategic IT issue and opportunity prioritization work session.

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
<i>Management and Operations</i>		
M10	The City does not have a Business Continuity Plan. While plans exist for particular components or applications in use throughout the City, a citywide business continuity plan does not exist. Such a plan would help to ensure that critical City business can continue even during a disaster.	 Critical 31
M3	Online payment capabilities and ease of access to information on the City website is limited. City staff report that there is a desire for improved capabilities for online payments and increased access to information on the City website. There is a desire for a citizen portal that would allow citizens and businesses to easily access data and perform a number of actions such as making online payments for permits, licenses, fees, and taxes. There are currently limited options for the public to interact with the City online. Staff reported a need for more efficient electronic communication services through the City website and/or online application portals.	 Critical 29
T3	Network and software security policies and procedures are not compliant with industry best practice. Current security policies and procedures warrant review.	 Critical 29
A3	Some software applications are not fully implemented or fully utilized. Staff reported that departments are not fully utilizing the ERP software because it was not fully implemented or because current staff do not know how to use the software. It was reported that there is limited or inadequate functionality in current systems to support some business processes. Several City departments reported a need to assess current systems to determine if additional functionality would benefit their operations. These applications include, but are not limited to, BS&A, CivicPlus, HRIS, and Evolution. Staff expressed a desire to fully utilize current applications through additional training and implementation of additional modules or features.	 Critical 28

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
A2	The City does not have a system to manage assets. Participating staff reported the need for an asset management system. Building Maintenance staff reported a desire for an inventory with bar code scanning capability that would populate work orders with items used. Parks and Grounds staff reported a desire to have a standard repository of all assets with pictures and an ability to locate assets using the City GIS capabilities. The fleet asset inventory is maintained in a Microsoft Excel spreadsheet on the City's shared drive; the shop foreman reported this is difficult, as he does not have access to this shared drive.	 Critical 27
T1	Mobile access to City applications from field personnel is limited. Staff reported that mobile system availability, access, and data capture for staff working in the field did not meet current needs. Staff reported that multiple departments need improved access to mobile applications and devices to increase operational efficiency in the field. For example, it would also be more efficient if work orders could be updated in real time as they are acted on. CivicPlus and BS&A both have mobile functionality that has not been implemented. Another example of the need for mobile devices was reported by the fleet shop foreman: Mechanics routinely need to look at service manuals or other information online. To do this, they are required to go into the office, log on to the one shop computer, find the information, print the information, and then go back to the vehicle. They may need to do this two or three times in the course of one vehicle repair.	 Critical 27
A1	City staff would benefit from additional technology training. Staff reported that there is not sufficient training as part of the onboarding process to appropriately use existing software systems. Staff also reported there is no regular or ongoing refresher training for existing employees or employees who may not have had the opportunity to participate in training originally offered by the enterprise resource planning (ERP) vendor.	 Critical 27
M9	There is a need for improved password management. It was reported that staff are required to remember multiple (up to 30) system passwords. Staff reported using various manual process for tracking their passwords, many of which are unsecure and pose a security risk to the City.	 Critical 26

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
M4	Standard collaboration tools for City staff are lacking. Staff reported that the existing intranet site is difficult to use, has limited information, and does not have the desired collaboration tools. Staff reported that the City intranet is not frequently accessed as it is difficult to use, requires a separate logon, and contains limited information. Problems were reported with the underlying capability of the intranet and the lack of clear guidance regarding responsibilities and ownership of information saved to the intranet site. Staff reported using different tools to collaborate on documents, and they are looking for a more efficient way to communicate. Staff reported the desire for features and capabilities of a modern collaboration tool. In addition, staff reported that email notifications are challenging within the current environment, and maintaining email distribution lists has proven challenging since many of them need to be maintained by County IT resources.	 Critical 24
T8	Security concerns exist within some City facilities. Staff reported that many departments do not have security cameras and that City Hall does not have security cameras installed. Staff reported that the Police Department is the only area that currently has security cameras installed. Staff expressed concern that the lack of security cameras in City facilities creates undue risk to both City staff members and the protection of valuable equipment.	 High 24
M7	There is a need for additional technical guidance and oversight of technical enhancements to support all departments. It was reported that although the City staff are satisfied with the County's IT support in general, there may be a need for a dedicated IT resource located at the City to provide guidance and assistance beyond that provided by the County's IT staff. The City would benefit by having additional technical expertise.	 High 2

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
T7	Communication across the City is challenging for internal and external constituents. It was reported that digital information boards would be beneficial for many departments to improve communications with citizens and others who come to City facilities. A pilot program was started with the Parks and Recreation Department, and use of an electronic information board has improved communications with customers. Staff would like digital boards in the lobbies of other City facilities for improved communication with individuals interacting with City staff. On multiple occasions, staff reported that internal communications are lacking, and many reported feeling they are not well informed. Although it was reported that a City newsletter is distributed by email, some have reported that these communications are typically not effective. Additional means to share pertinent information with all City staff would be welcomed. It was reported that the library shares a phone system with the Metro Community College, and calls cannot be transferred to the library through the City's phone system.	 High 23
M5	Department policies, procedures, and performance metrics need to be developed. Staff reported that due to staff turnover, departments such as Human Resources lack foundational policies and procedures. Job descriptions are updated only when there is a vacancy, and personnel files are currently all paper based. In addition, the City director of administrative services and several department directors expressed a desire for performance management and productivity metrics.	 High 22
A6	Provisioning of user accounts is not consistent or centrally managed for all software applications. With different enterprise applications, users are not centrally managed or coordinated, causing inconsistent provisioning and de-provisioning of users, unsynchronized lists and directories of users, and security risks. It was reported that email addresses remain visible in distribution groups long after employees have left the City. Human Resources does not currently send a monthly list of terminated employees to Sarpy IT. System access permissions are not all centralized; for example, access to RTA is managed by the fleet shop foreman.	 High 22
T4	There are system latency and performance issues with various applications. It was reported that there are issues with slowness during login to the BS&A system. In addition, this application commonly freezes, preventing use of the application for several minutes at a time. Additionally, Community Development staff reported lag time and freezing with the GIS system.	 High 21

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
A4	There is no inventory of approved software application available to City staff. It was reported that a software catalogue is not published or otherwise available to City staff to choose from when considering software purchases. It was reported that the library purchases its own software licenses. A list of approved software would prevent software installations that are duplicative or do not comply with existing software contracts and City/County standards.	 High 21
T5	Hardware is not standardized to one platform across the City. It was reported there is a combination of products in use across the City. The City is largely running Microsoft OS on its desktops and laptops, but not all departments are using the same version of Microsoft Office. A transition to Office 365 is in process but not complete. A number of Apple iPads were purchased for the City Council meetings and managers five years ago to reduce the number of paper documents printed. There are currently 39 iPads deployed that may need to be replaced with devices that are more compatible with Microsoft Office products. It has become clear to staff that Apple iPads do not work well with Microsoft Office products. Some departments, such Public Works, have been issued Surface Pros. Other field workers are using rugged laptops (Toughbooks). In addition to challenges with iPads, staff reported there are performance issues with all-in-one PCs where in use.	 Medium 20
A8	Access to the City network, facilities, and system privileges requires review. It was reported that the fleet shop foreman does not have access to the City's P drive. He is required to ask the Public Works administrative assistant to print needed information from the P drive for him. He also reported he is unable to enter new vehicles and/or vehicle part's vendor information into BS&A. Additionally staff reported not having access to required facilities.	 Medium 19
T2	There is a need to determine standards and refresh cycles for conference room technology. It was reported there are limited video conferencing capabilities, and upgrades are needed to conference room technology. It was reported that the City Council chambers' video technology needs updating, as does the Police Department's briefing room and community room. It was also reported there is no audio/visual capability in two City library conference rooms, and the equipment in another library meeting room is over 20 years old and no longer functioning.	 Medium 19

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
T9	There is limited Wi-Fi access for City staff working outside of a City facility. Staff reported that Wi-Fi connectivity is not available past a certain range of City Hall. There is no ability for field staff to access Wi-Fi without having to return to a City facility. Currently, public works, building maintenance, building inspection, and streets staff must return to their office locations and use shared desktops, instead of being able to electronically complete their work on a mobile device with connection to the internet in any manner. A problem with using printed work orders in the field was reported, as printed work orders can be easily lost due to wind or damaged by rain, etc. City staff working on sewer maintenance reported too much reliance on paper. Three-ring binders are kept in their trucks for maps and other documentation, due to lack of electronic connectivity in the field. The Sewer Division reported it has one computer and printer that staff must share for email and other electronic document access. Public Works and Streets Department staff reported a desire to be able to take pictures of potholes and scan and upload them to a work order, while on location.	 Medium 18
M1	City departments rely significantly upon manual and paper-based processes. Many City departments reported managing business functions in Microsoft Excel outside of existing systems and relying on such tools to provide necessary reporting and analysis detail to complete their job functions. This causes duplicate data entry and reporting issues, and poses a security risk.	 Medium 17
M6	There is a need for improved data analysis and presentation capabilities. It was reported that City staff do not have the necessary training to develop and write their own reports using the BS&A software. City staff have little understanding of or the ability to query the system for information or view dashboards of key information/indicators. To create meaningful reports, staff must often export and manipulate data from siloed systems.	 Medium 17
M8	There is a need for a common scheduling solution that would serve all City users. It was reported that the City does not have enterprise-wide calendaring capabilities for sharing calendars or scheduling meetings and meeting rooms. Departments reported manually tracking work assignments on Microsoft Excel spreadsheets and whiteboards.	 Medium 17

Prioritized List of Strategic Issues and Opportunities		
No.	Issues and Opportunities Description	Score
T6	<p>There is a lack of system integration for data sharing and data reporting. It was reported that the City is not taking advantage of the large amount of data it collects to operate as efficiently and as effectively as possible. Departments hold information in silos and use it for a single purpose. Due to the lack of data standards, duplication of information is common, and integration of data is poor. Most current data use at the City involves workarounds to link data across systems for reporting and decision-making due to technology constraints, such as lack of common unique identifiers, vendor-driven data formats, and a lack of systems interoperability. The City does not have a data repository or data warehouse for capturing and reporting enterprise data. Without set data standards, data is managed and used within silos, and integration is not easy and, in most cases, not even pursued. For example, it was reported that the Parks and Recreation Department would benefit from an interface between ActiveNET and BS&A.</p>	 Medium 17
A7	<p>There is a desire for a Learning Management System for tracking employee training and employee certifications. The Human Resources Department and the director of Administrative Services reported a need for a LMS and the ability to track certifications for employees in multiple departments.</p>	 Medium 14

Appendix B: Prioritized List of IT Projects and Initiatives

This appendix contains the Prioritized List of IT Projects and Initiatives confirmed as a result of the projects and initiatives work session.

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
K	<p>Expand the use of existing applications through implementation of additional modules and upgrading to the latest versions. City staff reported that some software applications have not been optimally configured or fully implemented. Maximizing the City's applications will allow staff to work as effectively and efficiently as possible, increasing the value of the City's applications.</p> <ul style="list-style-type: none"> • The project should include the ability to manage assets. Asset management functionality should consider recording the asset, capturing locations, and tracking replacement and maintenance schedules, repairs, and disposal. • The ability for staff to initiate changes to personnel records is currently a challenging manual process. The City should consider implementing Employee Self-Service (ESS) to allow employees to request a change of address, report a life event, and complete benefit enrollment electronically. HRIS offers this functionality, but the City did not implement this functionality in the initial Phase. • The City should review organizational needs and determine if the current Citizen CRA Module is capable of meeting the defined needs. Considerations include improved functionality for internal and external users, and appropriate training of the solution. • Plans should also consider an upgrade to the existing systems to the most recent versions as a means to overcome reported latency and improve performance issues. <p>Department Referencing Initiative: <i>BerryDunn, Human Resources</i></p> <p>Strategic IT Issues Addressed:</p> <p><i>Critical: A2, A3, A1</i></p> <p><i>High: T4</i></p> <p><i>Medium: M1</i></p>	 Critical

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
N	<p>Develop a Business Continuity Plan. The City's business continuity planning activities are currently informal. Contingency planning entails the documentation of those elements that support the citywide strategic plan, such as a Business Continuity Plan, a Continuity of Operations Plan, a DR Plan, an Incident Response Plan, Emergency Response Plan, and a Crisis Communications Plan. The City should begin by conducting a Business Impact Assessment, a high-level discovery and requirements-gathering activity. This assessment will lay the groundwork for any of the related plans referred to above, including capturing roles, responsibilities, and workflow for both internal staff and external entities (such as law enforcement or the County in the event of a crisis). In such planning, the City should consider use of other City facilities (e.g., the City Library) given the potential benefits that other locations may have to support emergency operations.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>Critical: M10</i></p>	
A	<p>Develop a mobile device and connectivity strategy for City staff working in the field. BerryDunn recommends conducting an assessment of City field staff's mobile device needs that should incorporate hardware, mobile enabled software, and wireless connectivity needs. The City should develop a mobile device and connectivity strategy, identify requirements, and create and execute an implementation plan to manage and deploy mobile capabilities where technology solutions exist, and where added efficiencies might be realized. For example, building inspectors and code enforcement staff would ideally be able to enter what they did at the site, collect various data elements, and take pictures without the need to travel back to the office to update the system.</p> <p>Department Referencing Initiative: <i>BerryDunn, City Clerk, Code Enforcement, Community Development, Public Works</i> Strategic IT Issues Addressed: <i>Critical: A3, T1</i> <i>Medium: M1, T5, T6, T9</i></p>	

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
B	<p>Develop and implement policies, procedures, and performance metrics. This recommended action's goal is for the City to develop and implement technology and other policies identified as gaps. The City will document and update existing policies as well as develop new policies to address challenges in the current environment and expand upon internal controls.</p> <p>As an example, BerryDunn recommends establishing a primary point of contact, or business owner, for all major technology initiatives, this approach would ideally be considered with this initiative. Other policies might include provisioning and de-provisioning of user accounts and various Human Resources policies.</p> <p>Additionally, when the City purchases or implements a new piece of software, it would be advantageous for a lead and a secondary person to be designated as the primary contacts to support that software. As the primary points of contact, they will ideally receive additional training on that software, be the initial point of contact for the City staff wanting to use that software, and be expected to train other staff members. Incorporating this as policy and standard practice into future technology purchases might provide a better return on the City's investment in technology.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed:</p> <p><i>Critical: M4, M9, T3, A1, A3</i></p> <p><i>High: M5, A6</i></p> <p><i>Medium: M8, A7</i></p>	 Critical
O	<p>Develop a standardized password management policy. BerryDunn recommends that the City create a detailed policy on password requirements and develop appropriate communications to establish greater awareness and broad user awareness of the importance of system security. This initiative would also consider use of password management tools that allow more complex password configurations and a more functional means of password management. Such applications should function on multiple devices and would be helpful to enforce stronger passwords for City staff. The City could use such an application to generate random passwords of any length and enable copy/paste of passwords into the appropriate software applications.</p> <p>Additionally, multi-factor authentication techniques might also be incorporated into future password strategies.</p> <p>Department Referencing Initiative: <i>BerryDunn, City Clerk</i> Strategic IT Issues Addressed:</p> <p><i>Critical: M9</i></p>	 Critical

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
P	<p>Upgrade or replace the City backup system. The current backup solution for City data is not scalable and has limited capacity. County IT has recommended that the City implement a modular backup system with independent options for hardware, software, and cloud storage. A more modern solution that can be scaled as the data and technical requirements of the City change would provide an improved and more reliable means to protect vital City data.</p> <p>Department Referencing Initiative: <i>IT Committee</i></p> <p>Strategic IT Issues Addressed:</p> <p><i>Critical: M10</i></p> <p><i>High: T8</i></p> <p><i>Medium: A8</i></p>	 Critical
M	<p>Assess and update the City's E-Government services and website. The public currently has limited options to access City services online. While there are some planned projects to improve this in the short term, there are still areas where functionality is unavailable. In collaboration with the public, the City should identify services that could be offered online and create an action plan to enhance the existing capabilities and provide citizens additional access to City services. There is a need for software that will allow businesses or citizens to complete forms online and submit variable payments for occupation taxes (e.g., restaurant or general business occupation taxes).</p> <p>Department Referencing Initiative: <i>BerryDunn</i></p> <p>Strategic IT Issues Addressed:</p> <p><i>Critical: M3</i></p> <p><i>High: T7</i></p>	 Critical
E	<p>Implement security controls at all City facilities. City staff reported that some City locations do not have adequate security, cameras, or video recording equipment. The City should conduct an analysis of specific needs per facility. Considerations might include measures to protect front-line staff in areas where there is risk of a violent attack or assault. Facilities include, but are not limited to, the Library, City Hall, the Community Center, Community Development, and Public Works. Identified solutions will be specific to each facility.</p> <p>Department Referencing Initiative: <i>BerryDunn, Finance</i></p> <p>Strategic IT Issues Addressed:</p> <p><i>High: T8</i></p>	 Critical

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
D	<p>Improve the City's technical oversight and guidance. With the increasing reliance upon technology, and the many ongoing technology initiatives, the City needs a position whose primary responsibility is to oversee technology. That position would be responsible for supporting all departments and researching and recommending solutions that address common department challenges. Additional responsibilities would include coordinating, enhancing, and overseeing contracted assistance by the County and other vendor contracts; it would provide project management support for technology projects and larger facility-related projects as well.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>High: M7</i></p>	 High
J	<p>Create and implement a hardware standardization plan. The City is not standardized on one platform citywide. There are a mix of iPads and Microsoft Windows laptops in use. Staff reported challenges where applications do not run on some City-purchased hardware. The City should establish a documented plan that prioritizes and delineates specific plans for hardware purchases.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>Medium: T5</i></p>	 High
C	<p>Create and implement a conference room technology upgrade and replacement plan. BerryDunn recommends that the City update conference room technology on a more frequent basis. The City should establish a documented plan that prioritizes and delineates specific plans for conference room technology upgrades. A documented conference room technology upgrade replacement plan will minimize disruptions due to technology failures by providing steps to replace devices before end of life, and help the City track its conference room equipment. The plan will also take into account warranty dates and help ensure that technology that does need replacement sooner than expected is still covered under warranty. This effort should include all departments and all facilities (e.g., the Library and Police Department ["smart" podium] where equipment is nearing end of life).</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>Medium: T2</i></p>	 High

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
Q	<p>Upgrade, expand, and segregate the City public Wi-Fi network. The City's current public Wi-Fi network uses the same access points, switches, and Internet connection as the City production network. The current public Wi-Fi is protected by running the same devices but on a separate virtual network. To enhance security, the City should complete a full separation of the networks. The City can achieve this by separating the public Wi-Fi entirely, so that it runs on dedicated public Wi-Fi access points, switches, and Internet. The City also anticipates that public Wi-Fi capabilities should be expanded to provide availability in public parks, at sports complexes, and in other designated public City spaces.</p> <p>Department Referencing Initiative: <i>IT Committee</i> Strategic IT Issues Addressed: <i>Critical: M3, T3</i> <i>Medium: T9</i></p>	 High
H	<p>Conduct a review of system roles and permissions for each department. Many City departments reported that staff cannot perform critical functions because of permission limitations. This issue has created internal challenges for some departments. Through a collaborative process, the City should evaluate the permissions for each application by department.</p> <p>After this evaluation, the City might require updates to policies and procedures that diminish future challenges with role and permissions by improving the provisioning of user accounts. Additional training on these systems might be needed as a result of new or expanded system access.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>High: A6, M5</i> <i>Medium: A8</i></p>	 High

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
G	<p>Formalize end-user technology training. City staff reported that the onboarding process lacks sufficient training. The City does not have regular or ongoing refresher training for existing employees, nor report writer training for BS&A software. BerryDunn recommends the City develop an education strategy to help ensure that system functionality is being fully used and that there is a shared understanding across the City. By developing a more highly trained workforce, City users may become more self-sufficient and productive. By implementing an IT training plan, the City should benefit from a greater knowledgebase and be better prepared for changes as they come.</p> <p>Associated activities could include expanding the use of the City intranet to develop and post training manuals and materials and assessing the feasibility of increased use of online training. The City could also explore the use of a LMS to facilitate training scheduling and delivery. Designation of a primary point of contact for major initiatives might also provide an ability to better utilize critical systems and offer a single point of contact for vendors.</p> <p>Facilities such as the City Library might offer opportunity to support citywide training efforts, or could be an alternate location for emergency operations if appropriately equipped with technology devices, which could also benefit City Library constituents during regular operations.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>Critical: A1</i> <i>Medium: A7, M6</i></p>	 Medium
R	<p>Implement standard collaboration tools for City staff. Staff have reported several concerns related to internal collaboration. A few collaboration tools are in use, but not everyone is using the same tool, which causes issues when trying to collaborate effectively. Employees need a more efficient way to collaborate on documents, projects, etc.</p> <p>Department Referencing Initiative: <i>City Administration</i> Strategic IT Issues Addressed: <i>Critical: M4</i> <i>High: M7, T7</i> <i>Medium: M8</i></p>	 Medium

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Description	Priority
I	<p>Develop an inventory of approved software. BerryDunn recommends that the City develop a catalog that lists every software application used by the City. City staff should use this catalog as the first-line resource for finding software solutions for departmental processes. The catalog should include basic information about the software solution as well as details about common applications of the solution and the software's capabilities and limitations. The managing directors should approve the catalogue and publish it on the City's intranet for easy access by departments. The management team should also develop a process for responding to requests for software purchases not on the approved list.</p> <p>Department Referencing Initiative: <i>BerryDunn</i> Strategic IT Issues Addressed: <i>High: A4</i></p>	 Medium
U	<p>Identify and implement a standardized enterprise scheduling solution. Currently, every department has its own method of scheduling for work, shifts, vacations, and out-of-office time. Some departments use Outlook, some use Payroll Maxx, and others use Google Docs. In some cases, staff have to note their out-of-office time in three different systems. The City should identify a software solution that will be the solution and common platform for all departments to use.</p> <p>Department Referencing Initiative: <i>Public Works</i> Strategic IT Issues Addressed: <i>Critical: A1, M4</i> <i>High: T7, M5</i></p>	 Medium
S	<p>Identify software to document employee training and certifications. Currently, City departments or individual staff members are tracking their own training and certification requirements. Best practice would dictate that training records be centralized and managed by the Human Resources Department. In addition, the City should track staff certifications and licenses that require Continuing Educational Units (CEU) in a way that supports their ability to meet educational requirements, providing notifications well in advance of expiration dates.</p> <p>Department Referencing Initiative: <i>Human Resources</i> Strategic IT Issues Addressed: <i>Critical: M4</i> <i>Medium: A7, M1, T6</i></p>	 Medium

Appendix C: Project Participants

This appendix contains the list of individuals that participated in the project.

City Project Participants		
No.	Name	Department
1.	Kevin Pokorny	Administrative Services Department
2.	Chris Solberg	Community Development Department
3.	Jean Hurst	Public Library
4.	Stacia Burt	Police Department
5.	Brian Stolley	Police Department
6.	Crystal Larson	Administration Department
7.	Tommy Prouhet	Administration Department
8.	PJ Biodrowski	Sarpy County Information Systems Department
9.	Ryan South	Recreation Department
10.	Mitch Beaumont	Administration Department
11.	Pam Buethe	City Clerk's Office
12.	Trish Robey	Public Works
13.	Ray Crane	Public Works