



Town of Farragut
Information Technology Strategic Planning Project



Information Technology Strategic Plan

Final

May 31, 2016

Prepared for:
Town of Farragut
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Farragut, Tennessee 37934

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Table i: Version History of the Report

Version	Delivered Date	Description
Draft 1	April 29, 2016	Draft 1 submitted to the Town for review
Version 1	May 24, 2016	Version 1 submitted to the Town with revisions from Draft 1
Final	May 31, 2016	Final version submitted to the Town.

Acknowledgements

Berry, Dunn, McNeil & Parker (BerryDunn) would like to thank the employees of the Town of Farragut and representatives from TekLinks and Arcadis for collaboratively working with us to develop this Information Technology Strategic Plan for the Town. Special thanks go to the eGovernment Team members listed below, whose time and commitment were essential to the development of this plan.

- Ashley Miller, Community Development
- Carrie Smith, Arcadis (the Town's third-party GIS support vendor)
- Adam Price, Community Development
- Chelsey Riemann, Parks and Leisure Services
- Gary Palmer, Administration
- Jenn Hatmaker, Administration
- Jennifer Brown, Public Works
- Kyle McClain, TekLinks (the Town's third-party IT support vendor)
- Lori Saal, Engineering
- Sue Stuhl, Parks and Leisure Services

We would also like to thank the Department Heads and staff who participated in the development of the plan. Not only did department representatives participate in the planning process, but each department valued the opportunity to participate and demonstrated an understanding that a successful Information Technology Strategic Plan is as much about participating in the process as it is about the final plan. We truly appreciate the level of cooperation, support, and feedback we received from the employees of the Town of Farragut and representatives from TekLinks and Arcadis.

Executive Summary

The Town of Farragut (Town) is a high-end community with educated residents with high expectations for technology. According to the United States Census, the median household income for the 22,676 residents is \$104,715, which is almost double the United States median income at \$53,482. Further, 60.7% of the Town's adult population has a college degree or higher, compared to only 29.3% nationwide. Technology jobs in Farragut and surrounding communities have drawn these highly skilled and educated citizens to the area. With these highly skilled and educated citizens comes an expectation that their surrounding environment is as efficient and technologically advanced as they are. Because of this, the Town developed the eGovernment Team, which is comprised of a cross section of staff members representing all departments at the Town. Despite the eGovernment Team's knowledge of the Town and of technology, they realized that they would benefit from bringing in outside consultants to help develop a technology roadmap to meet their citizen's expectations.

In November 2015, the Town retained Berry, Dunn, McNeil & Parker (BerryDunn) to assist in its assessment of its current information technology (IT) environment and the creation of a comprehensive plan that dictates how to most effectively develop and allocate the Town's IT resources to a prioritized set of technology initiatives over the next five years. There were four phases to the project.

The first phase of this project focused on assessing the current technology environment at the Town. BerryDunn began by requesting background documentation in order to gain a better understanding of the current technology environment. In addition, a Strengths, Weaknesses, Opportunities, and

Threats (SWOT) web survey was administered to a wide variety of department users of technology.



In January 2016, BerryDunn conducted on-site fact-finding meetings with all of the Town's departments. The focus of the fact-finding meetings was to understand the technology tools currently in use and their related strengths and weaknesses. The discussions also included potential technologies the Town staff was interested in to improve business processes.

BerryDunn reviewed the information collected through fact-finding efforts and developed a Preliminary List of Strategic IT Issues and Opportunities.

Each strategic IT issue was categorized to one of three areas: management and operations, applications, and technical. The list of strategic IT issues and opportunities was organized based on these categories, further defined on the following page.

- ❖ **Management and Operations (M):** Management and operations issues and opportunities are related to how the Town 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 Town.
- ❖ **Applications Issues (A):** Applications issues and opportunities are related to the applications that are used to support Town users in core business processes, including providing services to Town citizens.
- ❖ **Technical Issues (T):** Technical issues and opportunities are related to the Town's core technologies and how they are developed and maintained.

The Preliminary List of Strategic IT Issues and Opportunities was discussed, confirmed, and prioritized as part of a Strategic IT Issue and Opportunity Prioritization Work Session facilitated by BerryDunn in February 2016. This work session included representatives from Town departments in a collaborative discussion designed to build consensus in the resulting priorities assigned to each strategic IT issue and opportunity identified as part of the analysis. The prioritized list of issues and opportunities is contained in Section 2.2 and Appendix A of this Plan.



Following the Strategic IT Issue and Opportunity Prioritization Work Session, department representatives were asked to review the Prioritized List of Strategic IT Issues and Opportunities and complete initiative-planning worksheets to document technology projects that would address the strategic IT issues and opportunities. Each department submitted projects to contribute to the combined list that would eventually form this IT Strategic Plan.

A Projects and Initiatives Work Session facilitated by BerryDunn in March 2016 allowed departments to discuss, confirm, and score each initiative. Collaboration and involvement of all departments was a key ingredient to this successful effort, which became the basis for this IT Strategic Plan.

Following the Strategic Projects and Initiatives Work Session, in which each of the Preliminary Projects and Initiatives were discussed, confirmed, and ranked, BerryDunn used five weighted prioritization categories to develop the prioritized list for inclusion in this IT Strategic Plan.

The table on the following page summarizes the prioritized initiatives developed collaboratively by the Town and BerryDunn; a detailed description of each initiative is provided in Section 4.0.

Table ii: Prioritized Strategic Initiatives

Project and Initiative Budget and Timeline Matrix							
ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5 Year Total
Initiatives Starting in Year One							
A	Hire an Internal IT Staff Member	\$70,000	\$72,100	\$74,263	\$76,491	\$78,786	\$371,640
H	Develop IT-related Principles, Policies, and Frameworks	\$35,000	\$0	\$0	\$0	\$0	\$35,000
Initiatives Starting in Year Two							
B	Implement an IT Project Management Framework	-	\$0	\$0	\$0	\$0	\$0
M	Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	-	\$229,875	\$192,500	\$30,900	\$31,827	\$485,102
N	Replace the Parks and Recreation Application	-	\$65,000	\$11,000	\$11,330	\$11,670	\$99,000
Initiatives Starting in Year Three							
G	Increase the Use of the Town's Document Management System (DMS)	-	-	\$50,925	\$11,500	\$11,500	\$73,925
C	Implement a Technology Training Program	-	-	\$0	\$35,000	\$35,000	\$70,000
D	Implement Security Measures to Reduce Town Vulnerabilities	-	-	\$44,000	\$1,800	\$1,854	\$47,654
Initiatives Starting in Year Four							
F	Implement Increased Mobile Functionality for Internal Town Stakeholders	-	-	-	\$21,000	\$4,200	\$25,200
Initiatives Starting in Year Five							
J	Implement an Agenda Management Application	-	-	-	-	\$25,974	\$25,974
K	Implement an Organization-wide Intranet	-	-	-	-	\$24,000	\$24,000
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total Plan Initiatives Budget		\$105,000	\$366,975	\$372,688	\$188,021	\$224,811	\$1,257,495

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

In order to implement the projects and initiatives in this plan, it will be critical for the Town to obtain an internal IT resource to implement the recommended policies and project management practices, and to lead the project management and initiative implementation efforts. Implementing the projects and initiatives in this plan takes not only Town resources, appropriate staff, and third-party resources; but also a structured project management methodology and Plan champion to increase the likelihood of project success.

It is also important that, over the next five years, the role of internal IT at the Town continues to be developed, evolve, and assess leading edge and proven technology tools to solve technology issues at the Town. This should include establishing clear roles for the eGovernment Team, the internal IT resource, and the Town's IT support vendor, and finding the right level of services and decision making authority for each. As the roles of each IT resource develop and evolve, the Town's IT resources should focus on problem solving, while balancing other organizational needs, such as security, access to data, and sharing of data. Some of the initiatives in this plan will assist IT initiatives in moving towards a proactive focus on IT planning.

In an effort to align the prioritized strategic initiatives to the goals and objectives identified in the Town's 2016 Strategic Plan, a map was developed in Appendix D.

The information gathered from Town 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 Town department representatives will be necessary to continually update and refine the plan in the coming years.

1.0 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 November 2015, the Town retained BerryDunn to assist in its assessment of its current IT environment and the creation of a comprehensive plan that dictates how to most effectively develop and allocate the Town's resources to a prioritized set of technology initiatives over the next five years. There are four phases to conduct the project:

- Phase 1: Project Planning
- Phase 2: Fact Finding
- Phase 3: Data Analysis
- Phase 4: Strategy Formation

During the first phase, BerryDunn finalized a Project Work Plan and Schedule and then conducted fact-finding activities. In Phase 2, BerryDunn reviewed the information collected through those fact-finding efforts and developed a Preliminary List of Strategic IT Issues and Opportunities. Following the development of this list, in Phase 3, BerryDunn collaborated with the Town to prioritize the List of Strategic Technology Issues and Opportunities. BerryDunn worked with the Town to develop a Preliminary List of Projects and Initiatives to address the findings in the Prioritized List of Strategic Technology Issues and Opportunities; BerryDunn then worked with the Town to prioritize the List of Projects and Initiatives. Following the prioritization of Town initiatives, Phase 4 involved the development of a First Draft IT Strategic Plan. The Plan will serve as a roadmap toward the Town's overall technology goals, and will provide the Town with a repeatable methodology in order to verify progress, address new issues, and make updates as necessary.

1.2 TOWN INFORMATION TECHNOLOGY

Information Technology Management

In the current environment, the Town does not manage any information technology internally. Virtually all support and maintenance is managed by TekLinks, the Town's third-party vendor, based on a negotiated contract. TekLinks scope of services includes:

- Data storage
- Network integrated email solution
- Network maintenance and support
- Remote, web-based access to the network through a virtual private network (VPN)
- On-call setup of new desktop stations and repair of existing desktop stations
- Software license maintenance
- GIS support
- Wi-Fi maintenance and support
- Set up of new IT hardware and software

It was reported that the Town has a good relationship with TekLinks, and that the vendor adheres to the contract and provides the requested services. However, the Town has a need to begin developing in-house technical support resources to lead some IT projects and begin developing an internal IT support and governance framework through participation with the the eGovernment Team. It is anticipated that should the Town hire internal IT resources, the Town would continue to maintain a relationship with TekLinks, but look to adjust the ownership and delivery of services.

Information Technology Governance

The Town has made steps in recent years to implement a proactive approach to enterprise IT governance through the establishment of the eGovernment Team, which is comprised of a cross section of staff members representing all departments at the Town, and is led by the Town's Assistant Town Administrator.

It was reported that the Team was first developed to collaboratively manage the design and implementation of the Town's updated website, but since then has evolved to govern all IT activities – primarily acting as the liaisons for the departments, and a clearing house for all IT initiatives.

The eGovernment Team has had a significant role in this IT strategic planning project, including identifying the need, and procuring third-party resources to develop this IT Strategic Plan, as well as participating in the key activities in developing the Plan over the past six months, including:

- Project initiation and goal setting
- Contributing to fact-finding coordination and discussions
- Prioritizing identified issues and opportunities
- Developing strategic IT projects and initiatives to address the identified issues
- Prioritizing strategic IT projects and initiatives
- Providing feedback and level setting for the proposed 5 year IT initiative budget

It is anticipated that the eGovernment Team will continue to take a lead role in governing IT at the Town, and leading the implementation efforts of this IT Strategic Plan.

1.3 REPORT FORMAT

This report is comprised of four sections:

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. **Planning Framework.** This section contains the Town-wide Strategic IT Issues and Opportunities that were prioritized, and the vision, goals, and objectives of the Town regarding IT.
3. **Town-Wide Technology Initiatives.** This section contains the Strategic Initiative Reference Table and presents the Prioritized Plan Initiatives.
4. **Implementing the Strategic Information Technology Plan.** This section contains the budget and timeline for the Weighted Prioritized Plan Initiatives, contains funding considerations for the plan, and describes the approach to ongoing governance of the plan.

1.4 WORK PERFORMED

The first phase of this project focused on finalizing the Project Plan and coordinating tasks to assess the current technology environment at the Town. BerryDunn began by requesting background documentation in order to gain a better understanding of the current technology environment. In addition, a SWOT web survey was administered to a wide variety of department users of technology.

In January 2016, BerryDunn conducted on-site fact-finding meetings with all Town departments. The focus of the fact-finding meetings was to understand the technology tools currently in use and their related strengths and weaknesses. The discussions also included potential technologies Town staff was interested in to improve business processes. Also while on-site, BerryDunn reviewed the Town's IT activities and met with department employees to gain an understanding of the roles and responsibilities of the staff in regard to IT and the current technology environment at the Town.

BerryDunn reviewed the information collected through fact-finding efforts and developed a Preliminary List of Strategic IT Issues and Opportunities—strategic IT issues and opportunities identified by both BerryDunn and the Town. A strategic IT issue is a challenge or problem faced by the Town that relates to the use and/or management of technology. This preliminary list of issues was delivered to the Town in February 2016.

The Preliminary List of Strategic IT Issues and Opportunities was discussed, confirmed, and prioritized as part of the Strategic IT Issue and Opportunity Prioritization Work Session facilitated by BerryDunn in February 2016. This work session included representatives from all departments in a collaborative discussion designed to build consensus in the resulting priorities assigned to each Strategic IT Issue and Opportunity identified as part of the analysis. The Prioritized List of Issues and Opportunities is contained in Section 2.2 and Appendix A of this plan.

Immediately following the Strategic IT Issue and Opportunity Prioritization Work Session, department representatives were asked to review the prioritized list of strategic IT issues and opportunities and complete project planning worksheets to document technology projects that would address the strategic IT issues and opportunities. Each department submitted projects, which allowed a variety of perspectives to contribute to the combined list that would eventually form this IT Strategic Plan.

BerryDunn also developed a list, which was combined with those projects submitted by the department representatives. The Projects and Initiatives Work Session facilitated by BerryDunn in March 2016 allowed departments to discuss, confirm, and score each initiative or project. Collaboration and involvement of all departments was a key ingredient to this successful effort, which became the basis for the IT Strategic Plan. The information gathered from Town 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 department representatives will be necessary to continually update and refine the plan in the coming years.

1.5 COMMON TERMS AND ABBREVIATIONS

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

Table 1.1: Common Terms and Abbreviations

Common Terms and Abbreviations		
No.	Term/Abbreviation	Definition/Explanation
1	BAFO	Best and Final Offer
2	BerryDunn	Berry, Dunn, McNeil & Parker—the consulting firm retained by the Town to assist with this project
3	Board	Town of Farragut Board of Mayor and Alderman
4	BYOD	Bring Your Own Device
5	CAPM	Certified Associate in Project Management
6	COBIT	Control Objectives for Information and related Technology
7	COTS	Commercial off the Shelf
8	DMS	Document Management System – application software used to track, manage, and store electronic documents and electronic images.
9	ERP	Enterprise Resource Planning – integrated, multi-module application software packages designed to serve and support several business functions across an organization. Public sector ERP modules typically include core financials (general ledger, purchasing, accounts payable, etc.) human resources (payroll, personnel, time and attendance, etc.) revenue (tax billing and collections, point of sale, etc.), and community development (planning, permitting, inspections, etc.).
10	GIS	Geographical Information System
11	IEEE	Institute of Electrical and Electronics Engineers
12	IT	Information Technology
13	ITIL	Information Technology Infrastructure Library
14	MCSE	Microsoft Certified Solutions Expert
15	PALS	Parks and Leisure Services
16	Plan	This Information Technology (IT) Strategic Plan
17	PMBOK	Project Management Body of Knowledge
18	PMI	Project Management Institute
19	PMP	Project Management Professional
20	Prioritized List of Strategic IT Issues and Opportunities	A list of technology issues and opportunities at the Town, identified through staff interviews and a web survey, and prioritized by Town stakeholders
21	Prioritized List of IT Projects and Initiatives	A list of technology projects and initiatives for the Town to implement in an effort to address the identified issues and opportunities at the Town and prioritized by Town stakeholders

Common Terms and Abbreviations		
No.	Term/Abbreviation	Definition/Explanation
22	RACI Chart	Who is Responsible for the project? Who is Accountable for the project? Who should be Consulted? Who should be Informed?
23	RFP	Request for Proposals
24	SaaS	Software as a Service
25	SME	Subject Matter Expert
26	SWOT	Strengths, Weaknesses, Opportunities, and Threats
27	TekLinks	The Town's third-party IT management and support provider
28	Town	The Town of Farragut, TN
29	UAT	User Acceptance Testing
30	VPN	Virtual Private Network
31	Weighted Prioritized List of Projects and Initiatives	A list of projects and initiatives that the Town should implement over the next five years that addresses identified issues and opportunities at the Town and takes into account Town stakeholder's priority of each project/initiative, and each project/initiative's cost benefit, ease of implementation, and maturity of technology

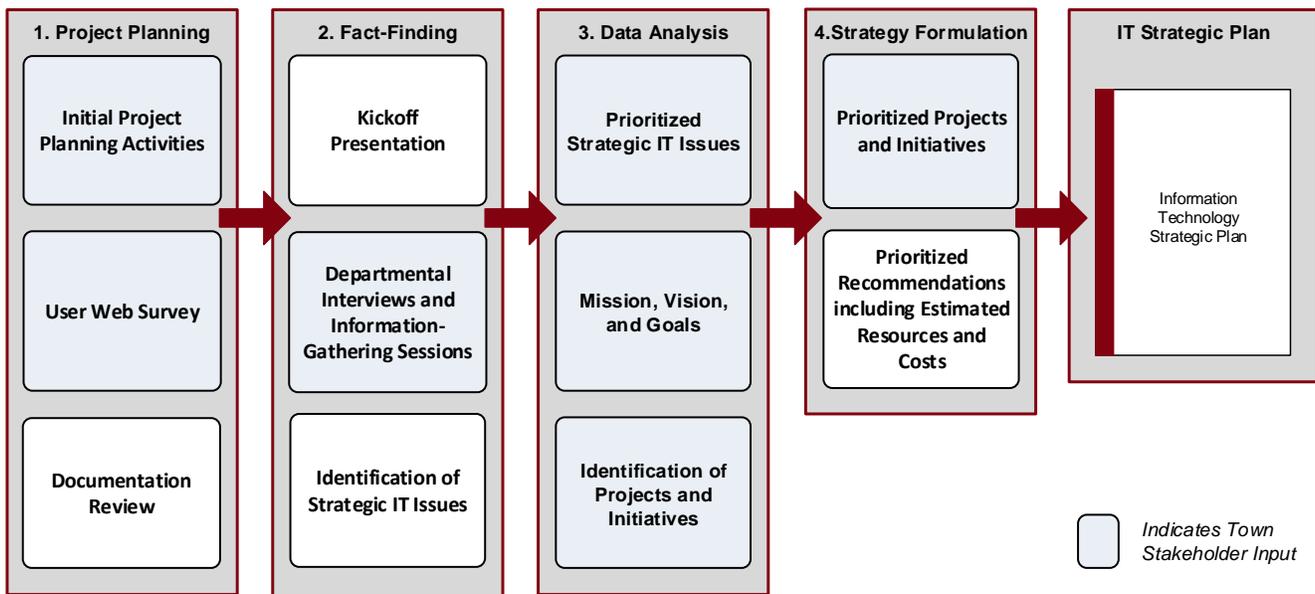
2.0 Planning Framework

This section contains the Town-wide Strategic IT Issues and Opportunities that were prioritized, and the vision, goals, and objectives of the Town regarding IT.

2.1 PLAN DEVELOPMENT

BerryDunn, in collaboration with Town stakeholders, conducted an iterative process to develop the IT Strategic Plan, starting with initial project planning and fact finding. Figure 2.1 provides a visual representation of the framework.

Figure 2.1: Planning Framework



2.2 TOWN-WIDE STRATEGIC ISSUES AND OPPORTUNITIES

In the first phase of the Plan development, BerryDunn finalized the Project Plan and coordinated tasks to conduct fact-finding activities, including departmental interviews, issuing a web-based SWOT survey, and requesting and reviewing documentation. This led to an understanding of the Town’s primary business processes; current technology applications, hardware, and support; and key themes identified in the SWOT analysis and requested documentation.

During the department fact-finding meetings, issues and opportunities related to technology were identified. As a result of the meetings, a Preliminary List of Strategic IT Issues and Opportunities was created. A strategic issue is a challenge or problem faced by the Town that relates to the use and/or management of technology.

Each strategic IT issue and opportunity has been allocated to one of three functional areas: management and operations, applications, and technical. The list of strategic IT issues and opportunities is organized based on these categories, further defined on the following page.

- **Management and Operations (M):** Management and operations issues and opportunities are related to how the Town 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 Town.
- **Applications Issues (A):** Applications issues and opportunities are related to the applications that are used to support Town users in core business processes, including providing services to Town providers.
- **Technical Issues (T):** Technical issues and opportunities are related to the Town’s core technologies and how they are developed and maintained.

This list was reviewed and discussed as part of the Strategic IT Issue and Opportunity Work Session facilitated by BerryDunn that included representatives from the Town departments. During the work session, the Preliminary List of Strategic Issues and Opportunities was discussed, confirmed, and prioritized.

The priorities assigned provide high-level guidance for the Town to determine when each issue should be resolved during the five-year planning horizon in the IT Strategic Plan. The issues were prioritized by each representative department, using the following three categories:

Table 2.1: Priority Key

Priority for Strategic IT Issues and Opportunities
Critical – should be addressed during the first year 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, which were assigned a priority number. Critical Issues were given a score of three (3), High a score of two (2), and Medium a score of one (1). The Town scoring representatives were divided into five groups and were allowed one vote in the process. Among the final scores, higher numbers represent higher-priority issues.

The resulting priorities are contained in Table 2.2. The complete List of Strategic IT Issues and Opportunities, with each issue’s summary statement, is included in Appendix A.

Table 2.2: Summary of Prioritized List of Strategic IT Issues and Opportunities

Prioritized List of Strategic IT Issues and Opportunities		
No.	Issue and Opportunity Description	Score
Management and Operations		
M4	The Town does not have an internal IT support staff.	Critical – 15
M3	Many manual and paper-based processes exist in the current environment.	Critical – 12
M5	The Town has a limited IT project management structure.	Critical – 11
M9	Security measures are not documented or widely communicated across the departments.	Critical – 11

Prioritized List of Strategic IT Issues and Opportunities		
No.	Issue and Opportunity Description	Score
M1	Laserfiche is not being utilized to its fullest potential.	High – 10
M2	Resources have not been allocated to scan documents into Laserfiche.	High – 10
M6	Geographical Information System (GIS) functionality and resources available to departments have not been widely communicated and promoted to staff.	High – 10
M7	Technology training at the Town is limited.	High – 10
M8	There is limited IT policy and procedures documentation.	Medium – 9
M10	Disaster recovery has incomplete processes and no formal documented policy.	Medium – 7
Applications		
A4	There is limited software interoperability across common Town applications.	Critical – 15
A1	The Town does not currently have a fully functioning Permitting and Inspections system.	Critical – 13
A2	The use of Incode could be improved Town-wide.	High – 12
A5	Department-specific applications are not meeting Town needs.	High – 12
A3	Mobile functionality is not meeting the needs of field staff and remote activities.	High – 10
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others.	High – 10
A8	The Town is developing Board and committee agenda packets manually and hand delivering them to members.	Medium – 7
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.	Medium – 6
Technical		
T5	WiFi in Town buildings is inadequate for regular business operations.	Critical – 15
T2	The ability to connect to the Town's network while in the field is not present for all staff members.	Critical – 12
T4	Mobile devices are not encrypted.	High – 11
T6	Town meetings are being recorded and posted to YouTube instead of using video software specific to the function.	High – 10
T7	The Town has not implemented an organization-wide intranet.	High – 10
T3	The Town has limited viable spare workstations available.	Medium – 9
T1	The Town's workstation replacement program is inconsistent.	Medium – 8

2.3 TOWN-WIDE AND IT VISION, GOALS, AND OBJECTIVES

As part of the planning process, BerryDunn facilitated work sessions with the Town Project Team to discuss and document the Town's vision, goals, and objectives related to the IT Strategic Plan. During these meetings the Town's existing vision, goals, and objectives and IT-related goals were discussed and confirmed.

2.3.1 Town Vision, Goals, and Objectives

During work sessions with the Town Project Team, the Town’s existing vision, goals, and objectives were discussed and confirmed for inclusion in the IT Strategic Plan. These are contained in the following tables.

Table 2.3: Town Vision

Town Vision	
Town Vision	A Distinctive Residential Community. It’s our history, beauty (natural and built), high-quality residential choices, multiple activity centers, convenient living, outstanding recreational opportunities, and community spirit that makes us distinctive.

Table 2.4: Town Goals and Objectives

Town Goals and Objectives	
No.	Objective
Goal 1: Maintain Financially Sound Town Providing Excellent Services	
1.1	Responsible use of debt by Town Government
1.2	Town services provided in the most cost-effective manner
1.3	Adequate revenues to support defined Town services, programs, and facilities
1.4	Competitive compensation and benefits for Town employees
1.5	High customer satisfaction rating for Town services
1.6	Reliable delivery of Town services
1.7	Well-planned and well-maintained Town facilities and infrastructure
Goal 2: Strengthen the Local Economy	
2.1	Increase number of visitors coming to Farragut
2.2	Residents shopping local—keeping sales tax revenues in the Town
2.3	Increase number of retail businesses in Farragut
2.4	Expand number of successful small businesses
2.5	Have a reputation as positive climate for business—people want to have a business here
Goal 3: Develop the Town's Historic Assets	
3.1	Expand areas for Museum displays
3.2	Relocate and preserve Campbell Station Inn
3.3	Annex and develop Concord Village as a historic area
3.4	Develop Campbell Station Park as a historic area
3.5	Develop architectural standards and lighting throughout the Town
3.6	Develop a reputation as a historic destination
3.7	Preserve historic Pleasant Forest Cemetery

Town Goals and Objectives	
Goal 4: Facilitate Future Growth, Development, and Redevelopment	
4.1	Pursue modifications in the urban growth boundary
4.2	Expand Town limits through annexation
4.3	Develop Town infrastructure for future growth and development
4.4	Appropriate land uses for future development
4.5	Future development consistent with Town’s plans and standards
4.6	More beautiful corridors and development—signs, storefronts, landscaping
Goal 5: Expand Leisure Amenities (Venues and Programs)	
5.1	Expand park development
5.2	Extend the Greenway System
5.3	Develop a community center
5.4	Increase pedestrian connectivity within Farragut
5.5	Increase sports tourism through more local and regional tournaments

2.3.2 IT-related Goals

During project planning and work sessions with the Town Project Team, goals related to IT were identified and confirmed. These are contained in the following table.

Table 2.5: IT-related Goals

IT-related Goals	
No.	Goal
1	Standardize and integrate applications and equipment
2	Streamline inefficient processes and identify training opportunities
3	Improve mobile functionality in the field
4	Meet citizen’s digital expectations
5	Reduce paper use and storage

2.3.3. Map of Town-Wide Goals and Objectives to IT-related Goals and Initiatives

Appendix D contains the Map of Town-wide Goals and Objectives to IT-related Goals and Initiatives.

3.0 Town-Wide Technology Initiatives

This section contains the Strategic Initiative Reference Table and presents the Prioritized Plan Initiatives.

3.1 STRATEGIC PROJECTS AND INITIATIVES DEVELOPMENT

The table below lists all of the initiatives developed collaboratively among BerryDunn and the Town following the Strategic Issue and Opportunity Prioritization Work Session. In addition to those that were developed by BerryDunn, each representative department submitted multiple projects and initiatives.

The Preliminary List of Projects and Initiatives was collaboratively reviewed during the Strategic Project and Initiatives Work Session facilitated by BerryDunn. Representatives from the Town departments 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 in the work session. The projects and initiatives were prioritized by each department, using the following three categories:

Table 3.1: Priority Key

Priority for Projects and Initiatives
Critical – should be addressed during the first year of the Plan
High – should be addressed during years two and three of the Plan
Medium – should be addressed during years four and five of the Plan

The Town scoring representatives were divided into five groups and were allowed one vote in the process. Among the final scores, higher numbers represent higher-priority projects and initiatives. Table 3.2 contains a summary list of the prioritized projects and initiatives. Appendix B contains the complete list of Prioritized List of Projects and Initiatives.

Table 3.2: Summary of Prioritized List of Projects and Initiatives

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Name	Score
A	Hire an internal IT staff member.	Critical
H	Develop IT-related principles, policies, and frameworks.	Critical
L	Replace the permitting and inspections software application.	Critical
B	Implement an IT project management framework.	High
C	Implement a technology training program.	High
E	Implement interfaces between Incode and other Town-wide applications.	High
G	Increase the use of Laserfiche throughout the Town.	High
I	Implement a work order and asset management system.	High

Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Name	Score
D	Implement security measures to reduce Town vulnerabilities.	Medium
F	Implement increased mobile functionality for internal Town stakeholders.	Medium
J	Implement an agenda management application.	Medium
K	Implement an organization-wide intranet.	Medium

Following a work session between BerryDunn and the Town’s eGovernment Team to review the Prioritized List of IT Projects and Initiatives, three initiatives were combined into one new initiative, a new initiative was included, and some initiatives were revised as follows:

- *Initiative M – Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)* was created and includes the following initiatives:
 - *Initiative L – Replace the Permitting and Inspections Software Application*
 - *Initiative E – Implement Interfaces Between Incode and Other Town-wide Applications*
 - *Initiative I – Implement a Work Order and Asset Management System*
- *Initiative N – Replace the Parks and Recreation Application* was developed.
- *Initiative G – Increase the Use of Laserfiche throughout the Town* was revised to be called *Increase the Use of the Town’s Document Management System*.
- A number of initiatives were reordered to reflect dependencies among initiatives, as well as other practical factors based on BerryDunn’s experience prioritizing initiatives.

Table 3.3 reflects the revised summary of the Prioritized List of Projects and Initiatives.

Table 3.3: Revised Summary of the Prioritized List of Projects and Initiatives

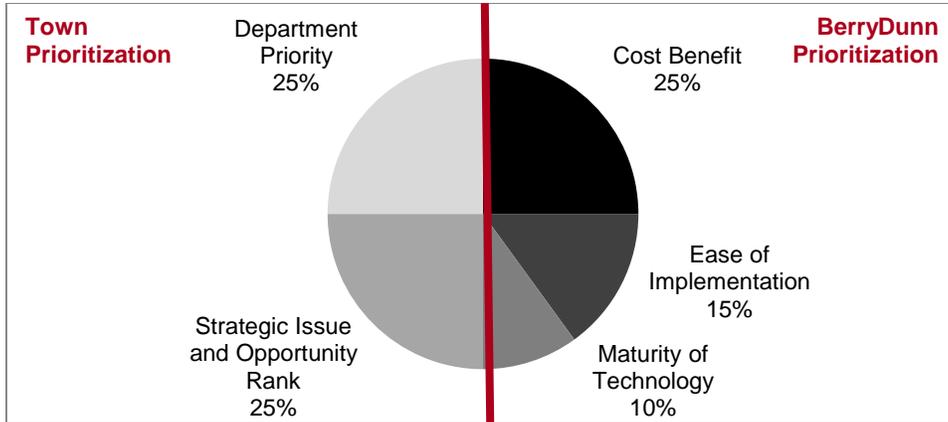
Prioritized List of IT Projects and Initiatives		
ID	Project/Initiative Name	Revised Priority
A	Hire an Internal IT Staff Member	Critical
H	Develop IT-related Principles, Policies, and Frameworks	Critical
B	Implement an IT Project Management Framework	Critical
M	Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	Critical
G	Increase the Use of the Town’s Document Management System	High
C	Implement a Technology Training Program	High
D	Implement Security Measures to Reduce Town Vulnerabilities	High
N	Replace the Parks and Recreation Application	High
F	Implement Increased Mobile Functionality for Internal Town Stakeholders	Medium
J	Implement an Agenda Management Application	Medium
K	Implement an Organization-Wide Intranet	Medium

3.2 WEIGHTED PRIORITIZED LIST OF STRATEGIC PROJECTS AND INITIATIVES

Following the Strategic 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 IT Strategic Plan. The following figure depicts these five categories, as well as their respective weights.

Figure 3.1: Weighted Prioritization Categories

Weighted Prioritization Categories



These five weighted prioritization categories are depicted in the table below.

Table 3.4: Weighted Prioritization Categories

Strategic Initiatives Weighted Prioritization Categories				
Town		BerryDunn		
Strategic Issue and Opportunity Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
25%	25%	25%	15%	10%
Critical	Critical	High	Easy	Established
High	High	Medium	Medium	Leading Edge
Medium	Medium	Low	Difficult	Bleeding Edge

Based upon the application of the five weighted prioritization categories, BerryDunn developed the Weighted Prioritized List of Strategic Projects and Initiatives. The following table contains this list, along with an indicator of the Plan years that activity related to each Initiative will be ongoing.

Table 3.5: Weighted Prioritized List of Strategic Projects and Initiatives

Weighted Prioritized List of Strategic Projects and Initiatives		
ID	Initiative	Plan Year Activity
A	Hire an Internal IT Staff Member	Years 1–5
H	Develop IT-related Principles, Policies, and Frameworks	Years 1–5
B	Implement an IT Project Management Framework	Years 2–5
M	Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	Years 2–5
N	Replace the Parks and Recreation Application	Years 2–5
G	Increase the Use of the Town's Document Management System	Years 3–5
C	Implement a Technology Training Program	Years 3–5
D	Implement Security Measures to Reduce Town Vulnerabilities	Years 3–5
F	Implement Increased Mobile Functionality for Internal Town Stakeholders	Years 4–5
J	Implement an Agenda Management Application	Year 5
K	Implement an Organization-Wide Intranet	Year 5

3.3 STRATEGIC PROJECT AND INITIATIVE FORMAT

Each project or initiative in Section 3.4 has been presented utilizing a standard template. A sample template is provided below that includes a description of each field in the form.

Table 3.6: Strategic Project and Initiative Template

Initiative ID – Initiative Name	
Initiative Description: <i>(This section of the template will contain a description of the initiative or project.)</i>	
Initiative Source Information	
Functional Area:	<i>(This section of the template will identify the functional area(s) related to this project or initiative.)</i>
Priority Ranking:	<i>(X of XX, where X is this project or initiative's ranking among the total number of projects or initiatives.)</i>
Related Strategic Information Technology Issue and Opportunities	
#	<i>(This section of the template will contain a list of the strategic information technology issue(s) that this project or initiative is designed to address.)</i>

Initiative ID – Initiative Name								
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
<i>Rating of Strategic Issue and Opportunity Rank (Critical, High, Medium)</i>	<i>Rating of Priority to Departments (Critical, High, Medium)</i>		<i>Rating of the Cost Benefit (High, Medium, Low)</i>		<i>Rating of the Ease of Implementation (Easy, Medium, Difficult)</i>		<i>Rating of the Maturity of the Technology (Established, Leading Edge, Bleeding Edge)</i>	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor								
Hardware								
Software								
Total Budget								
Total Budget by Year								
Year 1	Year 2	Year 3		Year 4		Year 5		5-Yr Total Cost
\$	\$	\$	\$	\$	\$	\$	\$	\$
Budget Description:	<i>(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.)</i>							
Action Items to Implement Project or Initiative								
<i>(This section of the template will contain a list of the action items that are needed to implement the project or initiative.)</i>								
Anticipated Benefits								
<i>(This section of the template will contain a list of the anticipated benefits of the project or initiative.)</i>								

3.4 STRATEGIC PROJECTS AND INITIATIVES

A – Hire an Internal IT Staff Member

Initiative A – Hire an Internal IT Staff Member

Initiative Description:

IT support at the Town is currently outsourced. Staff reported challenges with the timeliness of outsourced IT, a lack of face-to-face interactions, and limited detailed knowledge of the Town. The Town should solicit and hire a qualified candidate to take on basic IT and IT support activities. Ideally, this resource could also provide IT project management, develop IT policies and procedures, act as a liaison between the Town and third-parties, provide IT training, and assist with website management. This position would not include GIS support responsibilities.

Task 1: Develop the Position Title and Job Description

Based on an analysis of current needs, the first task should be to develop the position description and identify the responsibilities of the role. The Town has already made significant progress in this task, in creating the document titled Geographical Information System/IT Analyst. The Town should use this document as a starting point to develop the job description for an IT analyst, by removing all language related to GIS. To further develop the description, the Town should build out the document based on a discussion of current needs and alignment with industry practices.

Some preliminary research suggests that the role the Town seeks would include many of the responsibilities that are often identified in IT helpdesk technician/analyst/specialist and desktop support specialist roles.

These responsibilities could include:

- Providing helpdesk support and resolving issues
- Troubleshooting and upgrading hardware and software
- Setting up computers for new employees
- Maintaining an inventory of equipment, software, licenses, and contracts
- Communicating complex information both verbally and written

Along with typical helpdesk and support responsibilities, the Town is also interested in an individual that has the ability to develop and implement policies and procedures, facilitate training, and manage the successful completion of the IT strategic planning projects. The skills required for these tasks will require specialized knowledge or certifications to be performed adequately. It is recommended that the Town hire an individual with a proven track record of success due to the autonomy of the role.

Experience that could be required or desired include:

- 2+ years experience in a technical support role
- Project management experience
- Policy development experience
- Training and/or meeting facilitation experience
- General knowledge of local government and local government budgeting

Credentials that could be required or desired include:

- Bachelor's degree in IT or related field
- Certified Associate in Project Management (CAPM) or Project Management Professional (PMP) certification
- A+ or Microsoft Certified Solutions Expert (MCSE) certification
- Control Objectives for Information and related Technology (COBIT) and/or Information Technology Infrastructure Library (ITIL) certifications

Initiative A – Hire an Internal IT Staff Member

Task 2: Secure Position Funding

Once the job description has been developed, the Town should follow standard position control procedures and request funding for the position. The Town should plan to budget for a salary of \$40,000 to \$60,000 per year, plus benefits.

Task 3: Develop a Plan for Onboarding and Ongoing Training

Being the only IT resource onsite at the Town, extensive onboarding and training should be conducted so that the individual can get up to speed on their role as quickly as possible. Onboarding and initial training should include:

- New employee orientation
- Software application overview
- Technical overview
- Position expectations and autonomy

Other Considerations:

Although it is not critical to the implementation of the strategic planning initiatives, hiring an IT resource should greatly help. Further, because the resource would be involved with project management, this initiative should be strategically aligned with the implementation of the other initiatives. For example, once the IT analyst has been hired and is up to speed on Town operations and infrastructure, they can work with the eGovernment Team to begin implementing *Initiative H: Develop IT-related Principles, Policies, and Frameworks*; *Initiative B: Implement an IT Project Management Framework*; and *Initiative C: Implement a Technology Training Program*, among others.

Initiative Source Information

Functional Area:	Management and Operations
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Priority Ranking:	1 of 11
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Related Strategic Information Technology Issue and Opportunities

M4	The Town does not have an internal IT support staff.
M5	The Town has a limited IT project management structure.
M9	Security measures are not documented or widely communicated across the departments.
M1	Laserfiche is not being utilized to its fullest potential.
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.
M7	Technology training at the Town is limited.
M8	There is limited IT policy and procedures documentation.
M10	Disaster recovery has incomplete processes and no formal documented policy.
T3	The Town has limited viable spare workstations available.
T1	The Town’s workstation replacement program is inconsistent.

Initiative A – Hire an Internal IT Staff Member								
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 Critical	 Critical		 Medium		 Medium		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Internal Costs	-	-	\$50,000	\$70,000	-	-	\$50,000	\$70,000
Professional Services Labor	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Total Budget	0	0	\$50,000	\$70,000	0	0	\$50,000	\$70,000
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
\$70,000	\$72,100	\$74,263	\$76,491	\$78,786	\$371,640			
Budget Description:	The budget for this initiative assumes that the eGovernment Team, Human Resources, and Town Leadership will develop the job description, solicit applicants, and hire and onboard the successful candidate for the IT analyst position. It is anticipated that the recurring cost is the salary range to be paid annually, including benefits. The total budget by year is the high estimate for the one-time salary to be budgeted in Year 1 (\$50,000-\$70,000), and then the high estimate of the recurring salary cost, including a 3% increase, in Years 2–5.							
Action Items to Implement Project or Initiative								
<input checked="" type="checkbox"/> Develop the position title and job description <input checked="" type="checkbox"/> Secure position funding <input checked="" type="checkbox"/> Develop a plan for onboarding and ongoing training								

Initiative A – Hire an Internal IT Staff Member

Anticipated Benefits

- ☑ *Improved IT service delivery*
- ☑ *Improved IT-related project management*
- ☑ *Coordinated IT goals and objectives*
- ☑ *More efficient use of IT resources by Town staff (software and applications, hardware, etc.)*
- ☑ *Improved technology training*

H – Develop IT-related Principles, Policies, and Frameworks

Initiative H – Develop IT-related Principles, Policies, and Frameworks

Initiative Description:

In the current environment, the Town has little to no principles, policies, and frameworks for governing and managing IT. The Town should develop principles, policies, and frameworks to guide the decision making and direction of IT at the Town, and safeguard against any negative events. Examples of principles, policies, and procedure topics that should be developed include, but are not limited to: security, training, document retention, disaster recovery, and acceptable computer/device use.

COBIT 5,¹ a framework for the governance and management of enterprise IT, identifies the combination of principles, policies, and frameworks as one of seven enablers of good governance and management of enterprise IT. Principles, policies, and frameworks are the vehicles to translate desired behavior into practical guidance for day-to-day management. More specifically:

- Principles: simple statements that express the core values of IT
- Policies: provide guidance on how to put principles into practice and influence how decision making aligns with the principles
- Frameworks: provide structure, guidance, and tools to implement and monitor policies and procedures

Task 1: Formally Assign the eGovernment Team Decision-making Authority and Outline the Team’s Roles and Responsibilities

The first task in developing IT-related principles, policies, and procedures is to formally establish the eGovernment Team. A document (charter) should be developed that outlines the following information:

- Background of the eGovernment Team
- Purpose
- Scope of authority
- Objectives
- Team composition and turnover procedures
- Meeting and reporting frequency
- Charter responsibility and maintenance

The charter should include certain policies and procedures that fall under the responsibilities of the eGovernment Team, including:

- *Approval of IT Policies and Procedures:* A primary area of decision making that the Team should be tasked with is general policy and procedure decisions. Examples include security, training, document retention, disaster recovery, and acceptable computer/device use. This is an area where the Team should carefully consider the directives of Town leadership and local, state, and federal regulations.

¹ <http://www.isaca.org/cObIT/pages/default.aspx>

Initiative H – Develop IT-related Principles, Policies, and Frameworks

- *IT Project Selection, Prioritization, and Management: See Initiative B: Implement an information technology project management framework*

Task 2: Develop Framework to Identify, Develop, Implement, and Update Policies

This task should follow the Town’s already developed policy framework, and expand on it. The primary deviation from the standard approach to policy management is that IT-related policy development and review should begin with the eGovernment Team. The eGovernment Team should be responsible for the regular review and approval of policies relating to IT. The eGovernment Team should also be responsible for assigning the development of policies and procedures to staff, such as an IT analyst or other members of the eGovernment Team.

Task 3: Identify Policies to Be Developed and Plan for Development

Following the policy framework, the Town should identify the policies to be developed. This could include conducting research online, reaching out to peer communities, or reaching out to other third-party resources. If the Team determines that policy identification and development falls outside of their expertise, there are many private sector organizations that provide policy development services.

The following is a list of typical IT policies for a local government organization:

- Policy responsibilities and oversight
- Physical and environmental security
- Acceptable use and personnel security
- Device build and configuration management
- Application development
- Data and asset classification
- Access control
- Network security
- Information exchange management
- Operations management
- Information security incident management
- Business continuity management
- Compliance
- Third-party security
- Social media and internet postings

Task 4: Develop Policies

Once the eGovernment Team has identified the necessary IT policies, the Team should begin development.

Task 5: Review and Update Policies Based on Implemented Framework

With the regularly changing technology landscape, review of IT-related policies and procedures should be conducted by the eGovernment Team at least annually. The Team should consult third-party resources on an as-needed basis to ensure best practice.

Initiative Source Information

Functional Area:	Management and Operations
Priority Ranking:	2 of 11

Related Strategic Information Technology Issue and Opportunities

M3	Many manual and paper-based processes exist in the current environment.
M5	The Town has a limited IT project management structure.

Initiative H – Develop IT-related Principles, Policies, and Frameworks								
M9	Security measures are not documented or widely communicated across the departments.							
M1	Laserfiche is not being utilized to its fullest potential.							
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.							
M7	Technology training at the Town is limited.							
A2	The use of Incode could be improved Town-wide.							
A5	Department specific applications are not meeting Town needs.							
T4	Mobile devices are not encrypted.							
T7	The Town has not implemented an organization-wide intranet.							
M8	There is limited IT policy and procedures documentation.							
M10	Disaster recovery has incomplete processes and no formal documented policy.							
T3	The Town has limited viable spare workstations available.							
T1	The Town's workstation replacement program is inconsistent.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 Critical	 Critical		 High		 Easy		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	160	200	\$28,000	\$35,000	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Total Budget	160	200	\$28,000	\$35,000	0	0	\$0	\$0
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
\$35,000	\$0	\$0	\$0	\$0	\$35,000			

Initiative H – Develop IT-related Principles, Policies, and Frameworks

Budget Description:	The budget for this initiative includes third-party resources to assist in identifying and developing principles, policies, and frameworks (160–200 hours at \$175 per hour). The total budget by year is the high estimate for one-time professional services labor costs in Year 1 (\$35,000), and then no additional costs in the subsequent years.
Action Items to Implement Project or Initiative	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Formally assign the eGovernment Team decision-making authority and outline the Team’s roles and responsibilities <input checked="" type="checkbox"/> Develop framework to identify, develop, implement, and update policies <input checked="" type="checkbox"/> Identify policies to be developed and plan for development <input checked="" type="checkbox"/> Develop policies <input checked="" type="checkbox"/> Review and update policies based on implemented framework 	
Anticipated Benefits	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Defined guidelines and overall direction for IT-related activities <input checked="" type="checkbox"/> Improved efficiencies in use of technology <input checked="" type="checkbox"/> Reduced security vulnerabilities/risks <input checked="" type="checkbox"/> Increased success of initiative implementations <input checked="" type="checkbox"/> Increased awareness of technology best practices for Town staff <input checked="" type="checkbox"/> Improved Town-wide communication 	

B – Implement an IT Project Management Framework

Initiative B – Implement an IT Project Management Framework

Initiative Description:

The purpose of this project is to implement an IT project management framework to identify and manage IT-related projects and initiatives. The Town should develop a formalized structure that defines how the Town identifies, prioritizes, assigns resources, and executes IT-related projects. The Town should leverage the eGovernment Team and assign it additional authorities and responsibilities through formal administrative policy. An internal IT resource could assist in implementing a framework and lead IT project management efforts.

Task 1: Obtain Formal Authority Through Administrative Policy for the eGovernment Team to Develop Policies and Oversee IT Project Management at the Town

This task should be accomplished during the implementation of *Initiative H – Develop IT-related Principles, Policies, and Frameworks*. The eGovernment Team should be tasked with providing overall direction for project management activities and assigning staff to implement the framework and manage the projects.

Task 2: Identify a Best Practice Project Management Framework to Follow

A common project management authority is the Project Management Institute (PMI), which has developed and published the Project Management Body of Knowledge (PMBOK). The PMBOK is a set of standard guidelines for project management, which provides detail on standard terminology and industry best practices. The Town should identify the preferred project management framework for initiating and implementing projects and initiatives at the Town.

The following tasks are based on the PMI/PMBOK Guide.

Initiative B – Implement an IT Project Management Framework

Task 3: Implement the Chosen Project Management Framework and Develop and Document Project Management Policies and Procedures

The concept of the project management framework has been around for many years. Because of that, the Town should not try to reinvent the wheel. The Town should leverage existing materials (which are usually free on the internet) to develop policies and procedures related to project management. When developing the documentation, the Town should follow the approach in *Initiative H – Develop IT-related Principles, Policies, and Frameworks*.

Project Management policies and procedures should reflect the desire to manage like programs as a portfolio and interconnected projects as programs, avoiding gaps, overlaps, and misunderstandings across departments and projects. For the size and complexity of the Town, one policy document that spans the scope of project management should be sufficient.

The components of the IT project management policy document should include, but not be limited to:

- Purpose
- Scope
- Definition of an IT Project
- Project Management Methodology
 - Required Documentation
 - Communication and Reporting Requirements
 - Roles and Responsibilities
 - Project Management Tools
- Approach for Requesting New Projects

Task 4: Implement the Components of the IT Project Management Methodology

Required Documentation:

All projects should be required to have formal documents developed in order to properly plan for, track, and memorialize each project. Recommended documents to be developed for each project include:

- Business Case – *justification for the project*
- Statement of Work – *narrative description of the tasks and deliverables in the project*
- Project Charter – *formal authorization to implement the project. Typically includes the project participants and budget.*
- Project Work Plan and Schedule – *narrative on how the project will be managed, including the scope, schedule, costs, and tasks*
- Risk Register – *document used to identify and track any risks throughout the project*
- Status Reports – *document to share with project stakeholders to identify accomplishments, risks, and upcoming tasks*

Communication and Reporting Requirements:

The Project Management Policy should identify guidelines for communicating with stakeholders throughout the project, and steps to facilitate proper change management. Examples of required activities could include:

- Regularly schedule status calls with leadership
- Finding ways to include stakeholders throughout the project to obtain buy-in
- Regularly issued Town-wide memos/communications to keep stakeholders up to date on progress

Roles and Responsibilities:

The Policy should identify typical roles and responsibilities for projects and also require each project to have documented roles and responsibilities. Typical roles to be identified should include:

- eGovernment Team's Role on the Project

Initiative B – Implement an IT Project Management Framework

- Project Sponsor
- Project Manager
- Subject Matter Experts (SMEs)
- Other Departmental, IT, and Third-party Resources

A common tool for documenting roles and responsibilities is a RACI chart, which identifies who is Responsible for the project, Accountable for the project, who should be Consulted, and who should be Informed.

Project Management Tools:

The Policy should identify the various tools to be used for the project. Tools include the documents, templates, and methodologies for each component of projects, but also include the applications that should be used to manage the project. The Policy should identify how applications should be used. Examples of project management applications and uses include:

- Microsoft Project – *developing and maintaining the project schedule, resources, and budget*
- Microsoft SharePoint – *acting as a document repository, as well as a communication and reporting mechanism*
- Microsoft Outlook – *communicating and scheduling*
- Microsoft Excel – *developing documents and deliverables, tracking progress, developing the budget, and more*
- Microsoft Word – *developing documents and deliverables, including project communications*

Task 5: Implement the Approach for Requesting New Projects

As projects and initiatives are completed, and new projects are identified, the Town should develop a mechanism for departments and end-users to request new IT-related projects. This mechanism should be documented in the Policy. Mechanisms for requesting new projects could be as formal as developing and submitting a business case to the eGovernment Team for review, or as simple as sending an email to a member of the eGovernment Team for consideration. Whatever mechanism is developed, the eGovernment Team should be involved with the evaluation of all IT-related project requests, and have a process in place to identify how individual projects fit into the overall IT project portfolio, and alignment with IT and Town-wide strategy.

Task 6: Obtain Project Management Certification (optional)

With the identification of a number of complex projects to be implemented over the next five years and beyond, it is recommended that the individual(s) who will act as project manager(s) for the IT-related projects obtains certifications related to project management. A common project management certification is the PMP certification, which is through the PMI. Obtaining the certification will allow the project manager(s) to have a solid grasp of the IT project management framework, which should help to improve the efficiency and success of IT projects.

Initiative Source Information	
Functional Area:	Management and Operations
Priority Ranking:	3 of 11
Related Strategic Information Technology Issue and Opportunities	
M5	The Town has a limited IT project management structure.

Initiative B – Implement an IT Project Management Framework								
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 Critical	 High		 Medium		 Medium		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Total Budget	0	0	\$0	\$0	0	0	\$0	\$0
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	\$0	\$0	\$0	\$0	\$0			
Budget Description:	The budget for this initiative does not include any costs for third-party resources, hardware, or software. Budget estimates and resource-hour estimates for optional Task 6 – Obtain Project Management Certification are not included.							
Action Items to Implement Project or Initiative								
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Obtain formal authority through administrative policy for the eGovernment Team to develop policies and oversee IT project management at the Town. <input checked="" type="checkbox"/> Identify a Best Practice Project Management Framework to Follow <input checked="" type="checkbox"/> Implement the Chosen Project Management Framework and Develop and Document Project Management Policies and Procedures <input checked="" type="checkbox"/> Implement the Components of the IT Project Management Methodology <input checked="" type="checkbox"/> Implement the Approach for Requesting New Projects <input checked="" type="checkbox"/> Obtain Project Management Certification (optional) 								

Initiative B – Implement an IT Project Management Framework

Anticipated Benefits

- Increased success of initiative implementations
- Defined structure and approach to project management and related activities (communication management, risk management, etc.)
- Repeatable, proven process for project management
- Defined project roles and responsibilities

M – Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)

Initiative M - Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)

Initiative Description:

The purpose of this initiative is to implement an organization-wide ERP solution to replace the Town’s current core financials, HR/payroll, community development/permitting, and work orders/fixed assets applications. Applications at the Town are not currently integrated, leading to manual and paper-based processes in order to share information between systems. Similarly, some of the applications that support the primary operations of the Town are outdated and/or not being used. This has led to inefficient workarounds; “shadow systems,” such as MS Excel databases to replicate activities that should be performed in Town applications; and additional manual and paper-based processes. The Town should implement an ERP system (e.g., an end-to-end solution) that allows for a tight integration between the Town’s primary business processes.

Task 1: Requirements Gathering

The Town should begin by identifying the departments that would benefit from the use of an ERP system and include those departments as stakeholders in the requirements-gathering process. The Town will then need to develop functional and technical requirements for the new system. The Town should document the requirements in a structured format and develop the requirements based on industry standards. One source the Town should consider for guidance when developing requirements is the Institute of Electrical and Electronics Engineers (IEEE), which has developed standards for documenting technical requirements (must be a complete sentence, must be able to stand on its own). The Town should involve all stakeholders in the requirements-gathering process and allow for multiple opportunities for review.

Task 2: Request for Proposal

The Town should develop a Request for Proposal (RFP) for the ERP system. The RFP should include the requirements developed by the Town. In addition to functional and technical requirements, the Town should also include requirements for a structured project management and implementation approach by the vendor, including a project plan and schedule and other planning documents, such as a training, testing, and implementation plans. The Town should offer a pre-bidders’ conference as part of the procurement process, which will allow vendors the opportunity to ask additional clarifying questions.

Once the Town has received the RFP responses from vendors, the proposals should be scored using a predetermined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to the Town. The stakeholder group should be part of the evaluation process; however, scoring should be limited to the eGovernment Team, and a select few system end users.

Initiative M - Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)

Task 3: System Evaluation and Selection

Once the Town has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system for the Town. The demonstration process should include a scripted demonstration agenda that requires vendors to demonstrate their systems based on the Town business and technical requirements.

A scripted demonstration approach will also allow the Town to compare the vendors as they demonstrate similar business processes. The eGovernment Team should be included in the demonstration process, as well as other Town staff that will use the future system. Scoring of the demonstrations should follow a similar scoring process to that used during the proposal scoring phase. At the completion of the demonstration process, the Town should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process.

Once the Town has determined a preferred vendor based on the results of the scoring and evaluation process, it will be important that the Town conduct a thorough review of the vendor's proposed contract. Reviewing critical contract terms and conditions, including payment terms, license agreement, payment milestones, and deliverables, will be important to define to assist in mitigating some of the challenges that can occur during implementation.

Task 4: System Implementation

The Town should identify a dedicated project manager to manage the day-to-day implementation activities and serve as the primary contact for the vendor's implementation team. The identified project manager should be able to commit 15–20 hours each week toward the system implementation, with some weeks requiring greater or less time, depending on the timing of implementation activities.

In addition to identifying a project manager, a Town Project Management Team should also be established to monitor implementation activities. This Project Management Team should consist of three to five members and include functional representatives from each department, but with a focus on Administration and Community Development. The project manager and Project Management Team should regularly communicate project status updates to the eGovernment Team. In addition to updates to the eGovernment Team, regular communications to stakeholders within impacted departments will be a valuable change management tool that will help ensure a successful implementation.

Other Considerations:

There are other steps in a structured system procurement that the Town may want to consider as this project is started. The Town should follow their procurement rules when considering whether or not to include any of the steps below:

- *Reference checks.* Reference checks for the vendor and the proposed system can be a valuable tool to assist the Town in further evaluating the system and vendor.
- *Site visits.* Site visits, if feasible based on the Town's timeline and budget, can also assist in evaluating a system. A site visit to a location using the proposed software will provide the Town's evaluation team an opportunity to see the system in use at a similar environment and allow Town staff the opportunity to ask question related to implementation and business process issues.

The Town's evaluation team can evaluate proposed system costs during the initial review of the proposal responses or wait and evaluate costs at the completion of the software demonstration process. If feasible, issuing a request for a Best and Final Offer (BAFO) from the top two vendors following demonstrations will allow vendors to refine pricing based on what they learned through the demonstration process. The BAFO process would better inform evaluation team members during the final round of scoring.

There are a limited number of ERP vendors who also provide Asset Management and Work Order functionality through a single application or a pairing of complementary applications. Opportunities for a

Initiative M - Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)

collaborative procurement exist, but may limit vendor responses. An option for the Town to consider would be to develop Asset Management and Work Order requirements during Task 1 of this initiative and allow vendors to respond to all or some of the requested functional areas in the RFP.

Initiative Source Information

Functional Area:	Management and Operations, Applications, Technical
Priority Ranking:	4 of 11

Related Strategic Information Technology Issue and Opportunities

M3	Many manual and paper-based processes exist in the current environment.
A4	There is limited software interoperability across common Town applications.
A1	The Town does not currently have a fully functioning Permitting and Inspections system.
T2	The ability to connect to the Town's network while in the field is not present for all staff members.
M1	Laserfiche is not being utilized to its fullest potential.
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.
M7	Technology training at the Town is limited.
A2	The use of Incode could be improved Town-wide.
A5	Department specific applications are not meeting Town needs.
A3	Mobile functionality is not meeting the needs of field staff and remote activities.
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others.
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.

Prioritization Category Rankings

Town Rankings		BerryDunn Rankings		
Strategic Issue and Opportunity Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
 Critical	 Critical	 High	 Difficult	 Established

Estimated Budget

Initiative M - Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	300	900	-	\$242,375	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	\$150,000	-	-	-	\$30,000
Total Budget	300	900	\$0	\$392,375	0	0	\$0	\$30,000
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
\$-	\$229,875	\$192,500	\$30,900	\$31,827	\$485,102			
Budget Description:	<p>The budget for this initiative includes the one-time estimates for a third-party consultant to assist with the requirements and RFP development (\$0-\$67,375), as well as the one-time implementation services and software estimates to be provided by the selected ERP vendor (\$175,000+\$150,000=\$325,000). Recurring software estimates are for 20% annual maintenance. The budget structure is based on an on-premise solution. A vendor-hosted or software as a service (SaaS) solution would have a similar total cost, but structured in a different manner. Total budget by year is based on the third-party consultant in Tasks 1 and 2 (\$26,250), plus half of the one-time implementation estimate (\$162,500). Years 2-5 are for the recurring maintenance (\$30,000), plus a 3% increase per year.</p>							
Action Items to Implement Project or Initiative								
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Requirements Gathering <input checked="" type="checkbox"/> Request for Proposal <input checked="" type="checkbox"/> System Evaluation and Selection <input checked="" type="checkbox"/> System Implementation 								
Anticipated Benefits								
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reduction in the use of disparate applications (i.e., increased integration between business functions and departments) <input checked="" type="checkbox"/> Increased security and workflow functionality <input checked="" type="checkbox"/> Enterprise-wide view of the entire core financials, human resources, payroll, community development, and work order processes <input checked="" type="checkbox"/> Increased opportunity to leverage GIS data <input checked="" type="checkbox"/> Increased mobile and field access, reducing paper-based and redundant processes <input checked="" type="checkbox"/> Increased efficiencies utilizing electronic functionality <input checked="" type="checkbox"/> Reduced risk to the Town associated with using outdated applications <input checked="" type="checkbox"/> Improved operational efficiency and streamline internal processes 								

N – Replace the Parks and Recreation Application

Initiative N – Replace the Parks and Recreation Application

Initiative Description:

The purpose of this initiative is to replace the Town's current parks and recreation application. Parks and Leisure Services (PALS) currently uses RecDesk to manage parks and leisure operations. Staff reported that the application does not meet the Town's needs, causing departmental staff to perform manual, inefficient workarounds to complete tasks. Staff also reported that the application does not interface with Incode, causing staff to manually enter data into Incode. The Town should replace the current parks and recreation application with a more robust, COTS application that provides increased functionality and the ability to interface with other Town applications.

Task 1: Requirements Gathering

This initiative should begin with PALS developing functional and technical requirements for the new system. PALS should document the requirements in a structured format and develop the requirements based on industry standards. One source PALS should consider for guidance when developing requirements is IEEE, which has developed standards for documenting technical requirements (must be a complete sentence, must be able to stand on its own). PALS should involve all stakeholders in the requirements-gathering process, including key stakeholders from other departments that would interact with the system (such as Finance staff) and allow for multiple opportunities for review.

Task 2: Request for Proposal

PALS should develop an RFP for the system. The RFP should include the requirements developed by PALS. In addition to functional and technical requirements, PALS should also include requirements for a structured project management and implementation approach by the vendor, including a project plan and schedule and other planning documents, such as a training, testing, and implementation plan. PALS should offer a pre-bidders' conference as part of the procurement process, which will allow vendors the opportunity to ask additional clarifying questions.

Once PALS has received the RFP responses from vendors, the proposals should be scored using a predetermined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to PALS. The stakeholder group should be part of the evaluation process; however, scoring should be limited to PALS, and a select few system end users and eGovernment Team members (i.e., the Evaluation Team).

Task 3: System Evaluation and Selection

Once the Evaluation Team has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system. The demonstration process should include a scripted demonstration agenda that requires vendors to demonstrate their systems based on PALS business and technical requirements.

A scripted demonstration approach will also allow the Evaluation Team to compare the vendors as they demonstrate similar business processes. The Evaluation Team should be included in the demonstration process, as well as other Town staff that will use or interact with the future system. Scoring of the demonstrations should follow a similar scoring process to that used during the proposal scoring phase. At the completion of the demonstration process, the Evaluation Team should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process.

Once the Evaluation Team has determined a preferred vendor based on the results of the scoring and evaluation process, it will be important that the Town conduct a thorough review of the vendor's proposed contract. Reviewing critical contract terms and conditions, including payment terms, license agreement,

Initiative N – Replace the Parks and Recreation Application

payment milestones, and deliverables, will be important to define to assist in mitigating some of the challenges that can occur during implementation.

Task 4: System Implementation

The Town should identify a dedicated project manager to manage the day-to-day implementation activities and serve as the primary contact for the vendor’s implementation team. The identified project manager should be able to commit 15–20 hours each week toward the system implementation, with some weeks requiring greater or less time, depending on the timing of implementation activities.

In addition to identifying a project manager, a Town Project Management Team should also be established to monitor implementation activities. This Project Management Team should consist of three to five members, primarily from PALS, but also some representation from the EGovernment Team and other key stakeholders. The project manager and Project Management Team should regularly communicate project status updates to the eGovernment Team. In addition to updates to the eGovernment Team, regular communications to impacted stakeholders will be a valuable change management tool that will help ensure a successful implementation.

Other Considerations:

There are other steps in a structured system procurement that the Evaluation Team may want to consider as this project is started. The Evaluation Team should follow their procurement rules when considering whether or not to include any of the steps below:

- *Reference checks.* Reference checks for the vendor and the proposed system can be a valuable tool to assist the Evaluation Team in further evaluating the system and vendor.
- *Site visits.* Site visits, if feasible based on PALS timeline and budget, can also assist in evaluating a system. A site visit to a location using the proposed software will provide the Evaluation Team an opportunity to see the system in use at a similar environment and allow staff the opportunity to ask question related to implementation and business process issues.

The Evaluation Team can evaluate proposed system costs during the initial review of the proposal responses, or wait and evaluate costs at the completion of the software demonstration process. If feasible, issuing a request for a BAFO from the top two vendors following demonstrations will allow vendors to refine pricing based on what they learned through the demonstration process. The BAFO process would better inform evaluation team members during the final round of scoring.

Initiative Source Information

Functional Area:	Applications
Priority Ranking:	8 of 11

Related Strategic Information Technology Issue and Opportunities

M3	Many manual and paper-based processes exist in the current environment.
A4	There is limited software interoperability across common Town applications.
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.
A5	Department specific applications are not meeting Town needs.
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others.

Initiative N – Replace the Parks and Recreation Application								
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 Medium	 Medium		 Medium		 Medium		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	0	120	\$0	\$21,000	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	\$0	\$44,000	-	-	\$0	\$11,000
Total Budget	0	120	\$0	\$65,000	0	0	\$0	\$11,000
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	\$65,000	\$11,000	\$11,330	\$11,670	\$99,000			
Budget Description:	The budget for this initiative includes the one-time implementation services provided by the vendor (\$0–\$21,000), as well as the software (\$44,000). Recurring estimates are for maintenance at 20% of one-time software (\$11,000). Total budget by year includes the high implementation estimate in Year 2 (\$65,000). Years 3–5 include the high estimate for annual maintenance.							
Action Items to Implement Project or Initiative								
<input checked="" type="checkbox"/> Requirements Gathering <input checked="" type="checkbox"/> Request for Proposal <input checked="" type="checkbox"/> System Evaluation and Selection <input checked="" type="checkbox"/> System Implementation								
Anticipated Benefits								
<input checked="" type="checkbox"/> Improved PALS operations <input checked="" type="checkbox"/> Increased satisfaction for Town residents <input checked="" type="checkbox"/> Improved integration with other Town applications (Financials and GIS)								

G – Increase the Use of the Town's Document Management System (DMS)

Initiative G - Increase the Use of the Town's Document Management System (DMS)

Initiative Description:

The purpose of this project is to increase the use of the Town's DMS (Laserfiche) throughout the Town. The Town has made a large and ongoing investment in Laserfiche, but has not promoted the functionality or invested in resources and licenses to maximize the application's use. A well-implemented DMS can reduce or eliminate the need for paper, improve document search functionality in other applications, enable the sharing of documents and data across departments and with external stakeholders, and reduce the risks and issues associated with paper storage. The Town should increase the use of Laserfiche through training, adjusting permissions and adding licensing as needed, promotion of the application's capabilities, and integrations with other Town applications.

Task 1a: Identify Areas of Use

The Town should identify the specific users that currently do not have access, but should. The Town should also identify areas where Laserfiche could be integrated with current or future applications, for more seamless functionality. Most modern commercial off the shelf (COTS) applications, such as an ERP system that provides core financials, human resources, and community development functionality, have built in integration points between their systems and Laserfiche. These integration points should be identified and leveraged while implementing *Initiative M – Implement an ERP Solution*, and during subsequent application implementations and replacements.

Task 1b: Retain an External Organization to Scan and Index Paper Documents into Laserfiche

At the same time the Town is identifying increased areas for use of Laserfiche, the Town should retain a third-party to provide scanning and indexing services to scan paper documents into the system and organize them in an efficient manner. The Town could look into scanning and indexing internally, however, it could require significant staff time due to the volume of the documents, which could impact internal operations.

Task 2: Develop an Approach to Maintain the Use of Laserfiche

Once Laserfiche has been rolled out Town-wide, and end-users in each department have access to Laserfiche, and as the third-party resource is scanning the paper documents into the system, the Town should develop an approach to maintain the use of Laserfiche in each department. This approach should include end-users training, in collaboration with *Initiative C – Implement a Technology Training Program*, to educate end users on the benefits and use of the application. Training should be targeted enough to teach staff the specific functionality, but also basic enough that staff are able to understand the basic functionality. The Town should consider regular refresher training, due to the complexity of the application for end users, as well as training for internal IT resources to support the application.

Also, as part of the approach to maintain the use of Laserfiche, the Town should develop policies and procedures to describe why and how departments should use the application. Policies should identify documents to be scanned and indexed, and procedures should describe how they should be handled.

Task 3: Monitor and Improve the Use of Laserfiche

The eGovernment Team should periodically check in with departments to ensure the continued use of Laserfiche. Moving from a paper-based environment to electronic could be met with resistance by staff. The eGovernment Team should develop an approach to ensure that the application is continuing to be used efficiently and effectively and that developed policies and procedures are being adhered to.

Initiative Source Information

Functional Area:	Application
Priority Ranking:	5 of 11

Initiative G - Increase the Use of the Town's Document Management System (DMS)								
Related Strategic Information Technology Issue and Opportunities								
M3	Many manual and paper-based processes exist in the current environment.							
A4	There is limited software interoperability across common Town applications.							
M1	Laserfiche is not being utilized to its fullest potential.							
M2	Resources have not been allocated to scan documents into Laserfiche.							
A2	The use of Incode could be improved Town-wide.							
A5	Department specific applications are not meeting Town needs.							
A3	Mobile functionality is not meeting the needs of field staff and remote activities.							
M10	Disaster recovery has incomplete processes and no formal documented policy.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 High	 High		 High		 Difficult		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	0	290	\$0	\$50,925	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	\$6,000	\$11,500
Total Budget	0	290	\$0	\$50,925	0	0	\$6,000	\$11,500
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	-	\$50,925	\$11,500	\$11,500	\$73,925			
Budget Description:	The budget for this initiative includes one-time costs to obtain professional services to scan and index the paper documents (\$50,925). The low end estimate is \$0 if the Town decides to scan and index using internal labor. Recurring software costs are for the annual cost of 23 additional Laserfiche licenses, assuming there are currently 12 licenses and a need for a total of 35 (\$500 per license; low end is 12 licenses, high end is all 23							

Initiative G - Increase the Use of the Town's Document Management System (DMS)

additional licenses). Total budget by year includes the high estimate for one-time third-party resources for scanning in Year 1 (\$50,925), and the high estimate of recurring cost of additional licenses in Years 2–5 (\$11,500 per year).

Action Items to Implement Project or Initiative

- Identify Areas of Use
- Retain an External Organization to Scan and Index Paper Documents into Laserfiche
- Develop an Approach to Maintain the Use of Laserfiche
- Monitor and Improve the Use of Laserfiche

Anticipated Benefits

- Improved efficiencies in department business processes
- Decrease some manual and paper-based processes that exist in the current environment
- Reduced need for paper document storage
- Expanded document retention capabilities
- Increased disaster recovery processes and formal documented policy availability
- Increased software interoperability across common Town applications

C – Implement a Technology Training Program

Initiative C – Implement a Technology Training Program

Initiative Description:

The purpose of this project is to implement a technology training program to address the many challenges that were identified at the Town that stemmed from limited IT training. Areas include, but are not limited to, the inability to generate reports in applications, lack of knowledge of GIS capabilities at the Town, little to no use of Laserfiche, lack of security best-practice knowledge, and unnecessary reliance on manual and paper-based processes for regular business functions. The Town should benefit from developing and implementing a technology training program that addresses the already defined training opportunities at the Town and creates a framework for identifying and implementing additional training opportunities in the future. An emphasis of the technology training program should be ongoing training and developing a culture of learning and improvement. An internal IT resource could lead the IT training program.

Task 1: Develop a Technology Training Strategy and Program

A workgroup should be established to develop a technology training strategy and program for the Town that is reviewed and approved by administration and the eGovernment Team. The scope of the technology training program that is developed should consist at a minimum of the following types of training:

- New Hire Training – procedures for onboarding new hires and getting them up to speed with current technology at the Town, including the use of relevant applications, requesting IT help, and learning about policies relating to technology
- Ongoing “Refresher” Training – procedures for identifying, developing, and conducting refresher training on a regular basis for common Town technology activities (e.g., MS Excel tips and tricks, Incode best practices, etc.)
- Training Related to Technology Changes – procedures for conducting training for changes in technology (e.g., training on a newly implemented version of Laserfiche, training on using new tablets in the field, etc.)

Initiative C – Implement a Technology Training Program

As part of the training program, the Town should encourage employees to seek out training opportunities of interest/relevance to them, and annually budget for each employee to have the ability to obtain the training. Opportunities could include in-person classes, webinars, self-study, or other means.

Task 2: Develop a Mechanism for Identifying Training Opportunities

The Town should develop a process to identify new or refresher training opportunities. The process could be as basic as sending out a quarterly web survey to Town staff to solicit ideas for training, or periodically conducting a gap analysis through interviewing staff to identify areas of need. The key to the success of the technology training program is to regularly identify opportunities for staff to develop new ways to increase efficiency, and following through and successfully providing the training.

Task 3: Plan and Conduct Initial Training

In conducting fact-finding to develop this IT Strategic Plan, a number of training opportunities were identified. These areas include, but are not limited to:

- How to generate reports in Incode and other Town applications
- Available GIS capabilities at the Town
- Benefits and uses of the Town’s DMS, Laserfiche
- Security best practices
- Productivity and efficiency tips and tricks

Initial training could be conducted by external resources; however, there can be value in keeping the training in-house and having SMEs, such as departmental employees, provide the training to their peers.

Task 4: Maintain and Improve Upon the Technology Training Program

Technology is always changing, and the needs of departments and employees are as well. Once the initial technology training strategy and program have been developed, the Town should continue to maintain the program. Maintaining the program could involve the following activities on an annual, quarterly, or monthly basis:

- Encourage staff to identify training opportunities and submit ideas to supervisors, the eGovernment Team, or potential IT staff
- Dedicate an employee, or a team of employees (such as a subset of the eGovernment Team), to take ownership of the training program and track performance and success
- Consider including training as an evaluation criteria in employee performance reviews to encourage training
- Regularly review the training approach and modify/refine as needed

Initiative Source Information

Functional Area:	Management and Operations
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Priority Ranking:	6 of 11
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Related Strategic Information Technology Issue and Opportunities

M3	Many manual and paper-based processes exist in the current environment.
M1	Laserfiche is not being utilized to its fullest potential.
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.
M7	Technology training at the Town is limited.
A2	The use of Incode could be improved Town-wide.

Initiative C – Implement a Technology Training Program									
A5	Department specific applications are not meeting Town needs.								
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others.								
M8	There is limited IT policy and procedures documentation.								
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.								
Prioritization Category Rankings									
Town Rankings					BerryDunn Rankings				
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology		
 High	 High		 High		 Medium		 Established		
Estimated Budget									
Total Budget Breakdown									
Budget Category	One-Time				Recurring				
	Time		Budget		Time		Budget		
	Low	High	Low	High	Low	High	Low	High	
Internal Costs	-	-	-	-	-	-	-	\$17,500	\$35,000
Professional Services Labor	-	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-	-
Total Budget	0	0	\$0	\$0	0	0	0	\$17,500	\$35,000
Total Budget by Year									
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost				
-	-	\$0	\$35,000	\$35,000	\$70,000				
Budget Description:	The budget for this initiative is for recurring training dollars for each employee on an annual basis for 35 employees (the low end is \$500 per employee; high end is \$1,000 per employee). Total budget by year includes \$0 in Year 3 to develop the strategy and program. Years 4–5 include the high estimate for recurring training dollars per employee (\$35,000).								
Action Items to Implement Project or Initiative									
<input checked="" type="checkbox"/> Develop a Technology Training Strategy and Program <input checked="" type="checkbox"/> Develop a Mechanism for Identifying Training Opportunities <input checked="" type="checkbox"/> Plan and Conduct Initial Training <input checked="" type="checkbox"/> Maintain and Improve Upon the Technology Training Program									

Initiative C – Implement a Technology Training Program

Anticipated Benefits

- Increased technology training at the Town
- More informed and educated staff
- Increased staff engagement and moral
- Improved employee retention
- Decreased manual and paper-based processes
- Increased utilization of Laserfiche
- Increased communication and promotion of GIS functionality and resources to staff
- Increased use of enterprise and department-specific applications
- Increased IT policy and procedures documentation
- Decreased reliance on MS Excel for daily job functions

D – Implement Security Measures to Reduce Town Vulnerabilities

Initiative D – Implement Security Measures to Reduce Town Vulnerabilities

Initiative Description:

The purpose of this project is to implement security measures to reduce Town vulnerabilities. Risks and vulnerabilities have been identified, including, but not limited to, the storage of passwords and other sensitive information, limited mobile device security and encryption, and access to the Town network from public spaces. The Town should remediate these vulnerabilities, and develop a strategy for identifying and remediating additional risks on an ongoing basis. Included in the strategy should be regular training for Town staff.

Task 1: Remediate the Identified Security Vulnerabilities/Risks

Identified security vulnerabilities/risks include, but are not limited to:

- Potentially sensitive information stored on network folders, with limited permissions in place
- Ability to gain access to the Town’s network in publicly accessible spaces (i.e., computers in council chambers)
- Limited mobile device security and encryption on personal devices hosting Town data (i.e., MS Outlook on staff phones without passcode locks)

Some identified risks could be remediated through training and awareness to Town staff in *Initiative C – Implement a Technology Training Program*. Other identified risks could include some level of investment to remediate. The Town should focus on quick wins and then move on to the more challenging risks.

Task 2: Perform a Security Risk Assessment

The Town should obtain the services of a consulting firm to perform a security vulnerability and risk assessment of the Town’s technology infrastructure. In addition to assessing the vulnerabilities and risks, the assessment should also provide a clear plan of action that will remediate risks while balancing operational and economic costs of protective measures versus the likelihood and impact of the risks identified.

Given the added cost of network penetration testing, the Town should consider this option at a later date to focus on correcting the issues discovered by the initial security vulnerability and risk assessment.

Task 3: Perform Risk Remediation

Utilizing the recommendations provided, the Town should follow the plan of action to systematically implement security measures.

Initiative D – Implement Security Measures to Reduce Town Vulnerabilities

Task 4: Maintaining Security

The Town should revisit the network security vulnerability posture on an annual basis and perform an assessment at a minimum of every three years. The Town should also consider security as an ongoing training topic in the Technology Training Program.

Initiative Source Information

Functional Area:	Management and Operations, Technical
Priority Ranking:	7 of 11

Related Strategic Information Technology Issue and Opportunities

M9	Security measures are not documented or widely communicated across the departments.
T2	The ability to connect to the Town's network while in the field is not present for all staff members.
M7	Technology training at the Town is limited.
T4	Mobile devices are not encrypted.
M8	There is limited IT policy and procedures documentation.
M10	Disaster recovery has incomplete processes and no formal documented policy.

Prioritization Category Rankings

Town Rankings		BerryDunn Rankings		
Strategic Issue and Opportunity Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
 Medium	 Medium	 Medium	 Difficult	 Established

Estimated Budget

Total Budget Breakdown

Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	100	200	\$17,500	\$35,000	-	-	-	-
Hardware	-	-	\$2,000	\$6,000	-	-	\$400	\$1,200
Software	-	-	\$1,000	\$3,000	-	-	\$200	\$600
Total Budget	100	200	\$20,500	\$44,000	0	0	\$600	\$1,800

Total Budget by Year

Initiative D – Implement Security Measures to Reduce Town Vulnerabilities					
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost
-	-	\$44,000	\$1,800	\$1,854	\$47,654
Budget Description:	<p>The budget for this initiative includes one-time estimates for a third-party resource to perform a security risk assessment (\$17,500–\$35,000) and hardware and software for potential tools for remediation (\$3,000–\$9,000 for spam filters, storage area networks, antivirus, etc.). Recurring hardware and software estimates are 20% of the one-time estimates (\$600–\$1,800 annually). Total budget by year includes the high estimate for third-party resources, as well as hardware and software in Year 3 (\$44,000). Years 4–5 include the high estimate for maintenance costs of potential hardware and software, increasing at 3% per year (\$1,800 plus 3% per year).</p>				
Action Items to Implement Project or Initiative					
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Remediate the Identified Security Vulnerabilities/Risks <input checked="" type="checkbox"/> Perform a Security Risk Assessment <input checked="" type="checkbox"/> Perform Risk Remediation <input checked="" type="checkbox"/> Maintaining Security 					
Anticipated Benefits					
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Security measures are documented and widely communicated across the departments <input checked="" type="checkbox"/> Increased ability to connect to the Town’s network while in the field in a secure manner <input checked="" type="checkbox"/> Technology training at the Town is increased <input checked="" type="checkbox"/> Improved staff knowledge of security best practices <input checked="" type="checkbox"/> Mobile devices are encrypted <input checked="" type="checkbox"/> Increased IT policy and procedures documentation <input checked="" type="checkbox"/> Increased disaster recovery documented policy <input checked="" type="checkbox"/> Reduce risk of economic loss to the Town 					

F – Implement Increased Mobile Functionality for Internal Town Stakeholders

Initiative F – Implement Increased Mobile Functionality for Internal Town Stakeholders

Initiative Description:

The purpose of this project is to implement increased mobile functionality for field staff, such as mobile internet connectivity, and implement mobile-optimized devices and applications for boards, committees, and field staff. Field staff are currently utilizing pen and paper, as well as fillable PDF and other low-tech means, for researching information and entering data. Board and committee members are provided hardcopy agenda packets. The limited mobile functionality has led to inefficient business processes. Selecting and implementing updated software applications, such as an ERP software solution, as well as agenda management and parks and recreation software, should also aid in increased mobile functionality.

Task 1: Determine Full Scope of Requirements

It is recommended that this initiative is conducted following *Initiative M – Implement an ERP Solution*. This is due to the fact that the implementation of the ERP solution could result in solving many of the Town’s needs related to mobile functionality.

Once the ERP solution has been implemented, or while it is ongoing, the Town should conduct an informal study to determine where additional mobile functionality is needed to improve business processes. This could include additional hardware, such as smartphones, tablets, laptops, or MiFi devices. This could also include additional software and infrastructure, such as virtual private network (VPN) capabilities to securely “tunnel” into the Town’s network from remote locations, or the implementation of a Citrix environment to provide similar “tunneling” functionality.

Task 2: Determine Method for Installation and Distribution

The Town should consider the best method for providing additional functionality. This could range from Bring Your Own Device (BYOD) to Town-provided devices, third-party resources, or in-house. Careful consideration should be made towards the security of information, interoperability, and the ability to maintain and provide troubleshooting activities for devices. A clear understanding of associated policies should be established to minimize confusion.

Task 3: Training

Each member utilizing mobile functionality should be trained to gain understanding of the device and/or software, and the steps required to connect to and interface with the network.

Task 4: Maintaining

Roles and responsibilities should be established and reviewed on an annual basis to assure devices are properly maintained, including appropriate levels of security to the network and use of the device.

Initiative Source Information

Functional Area:	Technical
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Priority Ranking:	9 of 11
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Related Strategic Information Technology Issue and Opportunities

M3	Many manual and paper-based processes exist in the current environment.
T2	The ability to connect to the Town’s network while in the field is not present for all staff members.
A3	Mobile functionality is not meeting the needs of field staff and remote activities.
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others.

Initiative F – Implement Increased Mobile Functionality for Internal Town Stakeholders								
A5	Department specific applications are not meeting Town needs.							
T4	Mobile devices are not encrypted.							
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 High	 Medium		 Medium		 Medium		 Leading Edge	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	-	-	-	-	-	-	-	-
Hardware	-	-	\$5,000	\$15,000	-	-	\$1,000	\$3,000
Software	-	-	\$500	\$6,000	-	-	\$100	\$1,200
Total Budget	0	0	\$5,500	\$21,000	0	0	\$1,100	\$4,200
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	-	-	\$21,000	\$4,200	\$25,200			
Budget Description:	The budget for this initiative includes one-time estimates for mobile devices (\$500 per device, ten low estimate and 30 high estimate), and remote access software (\$500–\$6,000, depending on approach and scope). Recurring hardware and software estimates are for 20% maintenance per year. Total budget by year includes the high estimate for one-time hardware and software (\$21,000). Year 5 includes the high estimate for hardware and software maintenance (\$4,200).							
Action Items to Implement Project or Initiative								
<input checked="" type="checkbox"/> Determine Full Scope of Requirements <input checked="" type="checkbox"/> Determine Method for Installation and Distribution <input checked="" type="checkbox"/> Training <input checked="" type="checkbox"/> Maintaining								

Initiative F – Implement Increased Mobile Functionality for Internal Town Stakeholders

Anticipated Benefits

- Improved efficiencies for field staff
- Reduced need to drive back to Town Hall for research and data entry
- Improved productivity for employees working remotely
- Reduced paper for agendas
- Improved security for mobile devices
- Increased employee satisfaction with technology and flexibility in work arrangements
- Improved employee retention

J – Implement an Agenda Management Application

Initiative J – Implement an Agenda Management Application

Initiative Description:

The purpose of this project is to implement an agenda management application that reduces the manual labor needed to generate and print the packets, and provides an opportunity for agendas to be organized and viewed electronically by Board and committee members. Agenda packets for the Board and various committees are currently generated and distributed manually. The Town estimates that printing and distributing agenda packets just for Board meetings costs over \$12,000 a year. An agenda management application should also include video recording and broadcasting functionality. The Town should implement an agenda management application to reduce reliance on manual processes required to post Board and committee videos to YouTube.

Task 1: Review Agenda Management Proposals and Obtain Updated Pricing/Proposals

The Town obtained proposals for agenda management software and implementation services in 2015. The Town should revisit the proposals and reach out to the vendors to obtain updated pricing and/or proposals, following the Town’s procurement guidelines. Included in updated pricing/proposals should be information on how the vendors will assist with training internal and external resources on the use of the new software, and the vendor’s overall approach to change management.

The Town should follow a structured system evaluation, selection, and contract negotiation process with the preferred vendor.

Task 2: Requirements Gathering

This initiative should begin with the Town developing functional and technical requirements for the new system. The Town should document the requirements in a structured format and develop the requirements based on industry standards. One source the Town should consider for guidance when developing requirements is IEEE, which has developed standards for documenting technical requirements (must be a complete sentence, must be able to stand on its own). The Town should involve all stakeholders in the requirements-gathering process, including key stakeholders from all departments that would interact with the system (such as Administration and Community Development) and allow for multiple opportunities for review.

Task 3: Request for Proposal

The Town should develop an RFP for the system. The RFP should include the requirements developed by the Town. In addition to functional and technical requirements, the Town should also include requirements for a structured project management and implementation approach by the vendor, including a project plan and schedule and other planning documents, such as a training, testing, and implementation plan. The Town should offer a pre-bidders’ conference as part of the procurement process, which will allow vendors the opportunity to ask additional clarifying questions.

Initiative J – Implement an Agenda Management Application

Once the Town has received the RFP responses from vendors, the proposals should be scored using a predetermined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to the Town. The stakeholder group should be part of the evaluation process; however, scoring should be limited to the Evaluation Team, which should consist of primarily key stakeholders in Administration and select eGovernment Team members.

Task 4: System Evaluation and Selection

Once the Evaluation Team has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system. The demonstration process should include a scripted demonstration agenda that requires vendors to demonstrate their systems based on the Town’s business and technical requirements.

A scripted demonstration approach will also allow the Evaluation Team to compare the vendors as they demonstrate similar business processes. The Evaluation Team should be included in the demonstration process, as well as other Town staff that will use or interact with the future system. Scoring of the demonstrations should follow a similar scoring process to that used during the proposal scoring phase. At the completion of the demonstration process, the Evaluation Team should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process.

Once the Evaluation Team has determined a preferred vendor based on the results of the scoring and evaluation process, it will be important that the Town conduct a thorough review of the vendor’s proposed contract. Reviewing critical contract terms and conditions, including payment terms, license agreement, payment milestones, and deliverables, will be important to define to assist in mitigating some of the challenges that can occur during implementation.

Task 5: Implement the Agenda Management Software

Once the Town has obtained updated pricing or proposals, identified a preferred vendor, and signed a contract, the Town should implement the application following the Town’s project management framework and implementation best practices.

The Town should identify a dedicated project manager to manage the day-to-day implementation activities and serve as the primary contact for the vendor’s implementation team. The identified project manager should be able to commit 15–20 hours each week toward the system implementation, with some weeks requiring greater or less time, depending on the timing of implementation activities.

In addition to identifying a project manager, a Town Project Management Team should also be established to monitor implementation activities. This Project Management team should consist of three to five members, primarily from Administration, but also some representation from the EGovernment Team and other key stakeholders. The project manager and Project Management Team should regularly communicate project status updates to the eGovernment Team. In addition to updates to the eGovernment Team, regular communications to impacted stakeholders will be a valuable change management tool that will help ensure a successful implementation.

During implementation, the Town should identify efficiencies through the use of increased technology, such as tablets for Board and committee members. Implementing agenda management software could be a good opportunity for the Town to introduce a paperless, or near paperless, agenda management environment.

Initiative Source Information

Functional Area:	Applications
Priority Ranking:	10 of 11

Initiative J – Implement an Agenda Management Application								
Related Strategic Information Technology Issue and Opportunities								
M3	Many manual and paper-based processes exist in the current environment.							
A5	Department specific applications are not meeting Town needs.							
A3	Mobile functionality is not meeting the needs of field staff and remote activities.							
T6	Town meetings are being recorded and posted to YouTube instead of using video software specific to the function.							
A8	The Town is developing Board and committee agenda packets manually, and hand delivering them to members.							
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 Medium	 Medium		 Low		 Medium		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	-	-	\$5,100	\$5,100	-	-	-	-
Hardware	-	-	\$2,500	\$2,500	-	-	-	-
Software	-	-	\$6,719	\$18,374	-	-	\$1,397	\$1,996
Total Budget	0	0	\$14,319	\$25,974	0	0	\$1,397	\$1,996
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	-	-	-	\$25,974	\$25,974			
Budget Description:	The budget for this initiative includes one-time estimates for professional services (\$5,100), hardware (\$2,500, five tablets at \$500), and software (\$6,719–\$18,374). Recurring budget estimates are for recurring maintenance (\$1,397–\$1,996). Total budget by year includes the high estimate for professional services, hardware, and software in							

Initiative J – Implement an Agenda Management Application	
	Year 5 (\$25,974). Subsequent years would include the high estimate for maintenance, plus a 3% increase per year (\$1,996 plus 3% per year).
Action Items to Implement Project or Initiative	
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Review Agenda Management Proposals and Obtain Updated Pricing/Proposals <input checked="" type="checkbox"/> Requirements Gathering <input checked="" type="checkbox"/> Request for Proposal <input checked="" type="checkbox"/> System Evaluation and Selection <input checked="" type="checkbox"/> Implement the Agenda Management Software
Anticipated Benefits	
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reduced internal labor hours developing and delivering agenda packets <input checked="" type="checkbox"/> Reduced paper <input checked="" type="checkbox"/> Increased querying for Town Board and staff members <input checked="" type="checkbox"/> Improved services for Town citizens, including increased ability to query agendas and videos

K – Implement an Organization-wide Intranet

Initiative K – Implement an Organization-wide Intranet
<p>Initiative Description:</p> <p>The purpose of this project is to implement an organization-wide intranet to address the Town-wide communication and information sharing that is currently limited to emails and posting documents on a shared network drive, which could be hindering collaboration between staff and departments and generating inefficiencies due to limited access to information. The Town should implement an intranet—a website that is only accessible to Town employees and other stakeholders with security permissions. The intranet can enable productivity as a document repository for important documents (such as IT helpdesk tutorials, HR forms, and Board and committee agendas), enhance Town-wide communications by allowing announcements and feedback to be posted and collected, and enable collaboration through automated tools and shared working documents. An intranet could be accomplished through implementing a SharePoint site.</p> <p>Task 1: Develop a Business Case for an Intranet</p> <p>Staff members should be queried to determine the documents already available that will provide benefits for the intranet users. Documents to consider should include HR forms and information, tutorials and instructions, and announcements.</p> <p>Task 2: Determine Intranet Platform</p> <p>The Town's eGovernment Team has conducted preliminary research on intranet opportunities and has identified the possibility of developing the intranet via a SharePoint site. The Town should collaborate with stakeholders to determine the functionality desired and weigh the cost of providing requested functionality. Other criteria to consider include ease of use and maintainability.</p> <p>Task 3: Establish Roles and Responsibilities for Ongoing Maintenance</p> <p>Prior to obtaining SharePoint licenses and soliciting third-party resources to assist with implementing the intranet, the Town should consider who will maintain the site. Maintenance could include the site itself and who will be responsible for updating content. Responsibilities for content could be divided between appropriate staff members with the ability to refresh content or could be limited to a single staff member. All stakeholders should have the ability to recommend content changes.</p> <p>Roles and responsibilities should be revisited once the intranet is established and on an annual basis to assure the assigned resources remain appropriate.</p>

Initiative K – Implement an Organization-wide Intranet

Task 4: Identify Approach to Implementing and Configuring the Intranet/SharePoint

The Town should conduct an analysis to identify the best approach to acquiring SharePoint licensing and implementation services. Often, the Microsoft representatives maintaining the organization’s current licenses (MS Office, etc.) can aid in identifying the best approach; however, other resources, such as TekLinks, may be able to direct the Town in the best course of action. Whatever approach is taken, the Town should plan to utilize third-party resources to assist in configuring the application to the Town’s specifications and then assisting in maintaining the intranet (i.e., permissions management, updates, etc.) on a recurring basis.

Task 5: Implement the Intranet

Once the approach to implementing the intranet has been defined and planned, the Town should work with the third-party resource to configure the application to meet the needs of the Town. A focus should be on flexibility and security permissions to allow for changes to be made as the needs of the Town change, while also maintaining the integrity of the application and documentation within.

Task 5: Training

Formal training should be provided for staff who will be responsible for uploading documentation and maintaining the site. Formal training should be comprehensive so that staff are comfortable with the nuances of the system. Informal training should also be provided to stakeholders who will be accessing and navigating the intranet. Informal training could be video or written tutorials, or a brief in-person training session to provide a high-level overview of navigation.

Task 6: Identify Approach to Maintaining the Intranet

The Town should clearly define an approach to maintaining and updating the intranet. This approach should lead to the development of formal policies and procedures, following the framework established in *Initiative H – Develop IT-Related Principles, Policies, and Frameworks*. These routine and reoccurring maintenance processes should be established to keep the site current. It is recommended that tasks and responsibilities are assigned to specific staff members and revisited on at least an annual basis.

Initiative Source Information

Functional Area:	Management and Operations, Applications
Priority Ranking:	11 of 11

Related Strategic Information Technology Issue and Opportunities

M5	The Town has a limited IT project management structure.
M9	Security measures are not documented or widely communicated across the departments.
M1	Laserfiche is not being utilized to its fullest potential.
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff.
M7	Technology training at the Town is limited.
T7	The Town has not implemented an organization-wide intranet.
M8	There is limited IT policy and procedures documentation.
M10	Disaster recovery has incomplete processes and no formal documented policy.
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place.

Initiative K – Implement an Organization-wide Intranet								
T1	The Town's workstation replacement program is inconsistent.							
Prioritization Category Rankings								
Town Rankings			BerryDunn Rankings					
Strategic Issue and Opportunity Rank	Department Priority		Cost Benefit		Ease of Implementation		Maturity of Technology	
 High	 Medium		 Low		 Medium		 Established	
Estimated Budget								
Total Budget Breakdown								
Budget Category	One-Time				Recurring			
	Time		Budget		Time		Budget	
	Low	High	Low	High	Low	High	Low	High
Professional Services Labor	0	74	\$0	\$13,000	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	\$5,500	\$11,000	-	-	\$1,100	\$2,200
Total Budget	0	74	\$5,500	\$24,000	0	0	\$1,100	\$2,200
Total Budget by Year								
Year 1	Year 2	Year 3	Year 4	Year 5	5-Yr Total Cost			
-	-	-	-	\$24,000	\$24,000			
Budget Description:	The budget for this initiative includes one-time professional services to assist with the implementation and configuration (\$0–\$13,000, \$0 would be if professional services are not needed), and software (\$5,500–\$11,000). Recurring costs include 20% software maintenance. Total budget by year includes the high estimate for one-time implementation services and software (\$24,000). Subsequent years would include recurring maintenance increased by 3% per year (\$2,200 plus 3% per year).							
Action Items to Implement Project or Initiative								
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Develop a Business Case for an Intranet <input checked="" type="checkbox"/> Determine Intranet Platform <input checked="" type="checkbox"/> Establish Roles and Responsibilities for Ongoing Maintenance <input checked="" type="checkbox"/> Identify Approach to Implementing and Configuring the Intranet/SharePoint <input checked="" type="checkbox"/> Implement the Intranet <input checked="" type="checkbox"/> Training <input checked="" type="checkbox"/> Identify Approach to Maintaining the Intranet 								

Initiative K – Implement an Organization-wide Intranet**Anticipated Benefits**

- Improved Town-wide communications
- Improved access to training materials for Town staff
- Improved access to Town policies and other important documents
- Reduced reliance on paper
- Improved project management
- Increased electronic workflow and electronic approvals

4.0 Implementing the Strategic Information Technology Plan

This section contains the budget and timeline for the Weighted Prioritized Plan Initiatives, funding considerations for the plan, and describes the approach to ongoing governance of the plan.

4.1 BUDGET AND TIMELINE

Section 3.0 of the IT Strategic Plan provided detailed descriptions for each initiative and what each entails, identified which strategic issues and opportunities are addressed by the initiative, estimated budgets and timing for the initiative, identified action items to implement the initiative, and listed anticipated benefits of the initiative.

The table on the following page summarizes the budget estimates for the recommended initiatives that have been 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, costs, and hours presented are estimates and will vary based on the Town budget, competing technologies, the availability of support resources, and the specific technical approach used to undertake an initiative.

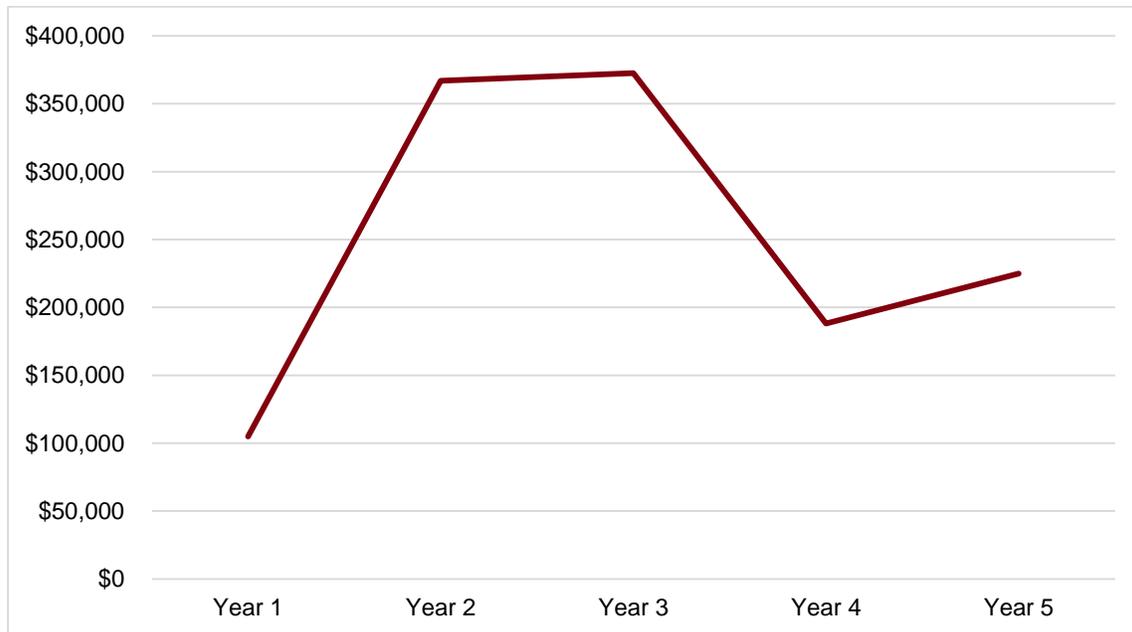
Each initiative in the table can be started and/or completed within a given fiscal year. Rather than attempting to determine exactly when a particular project would be undertaken, this table is intended to identify the fiscal year(s) that a project should be initiated. If a fiscal year has a zero presented for the initiative cost, this signifies no budget amount is expected, as existing internal resources will be utilized to complete the initiative. A dash symbol indicates that there are no planned activities for the initiative during the respective fiscal year.

Table 4.1: Project and Initiative Budget and Timeline Matrix

Project and Initiative Budget and Timeline Matrix							
ID	Strategic Initiative	Year 1	Year 2	Year 3	Year 4	Year 5	5 Year Total
Initiatives Starting in Year One							
A	Hire an Internal IT Staff Member	\$70,000	\$72,100	\$74,263	\$76,491	\$78,786	\$371,640
H	Develop IT-related Principles, Policies, and Frameworks	\$35,000	\$0	\$0	\$0	\$0	\$35,000
Initiatives Starting in Year Two							
B	Implement an IT Project Management Framework	-	\$0	\$0	\$0	\$0	\$0
M	Implement an Enterprise Resource Planning (ERP) Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	-	\$229,875	\$192,500	\$30,900	\$31,827	\$485,102
N	Replace the Parks and Recreation Application	-	\$65,000	\$11,000	\$11,330	\$11,670	\$99,000
Initiatives Starting in Year Three							
G	Increase the Use of the Town's Document Management System (DMS)	-	-	\$50,925	\$11,500	\$11,500	\$73,925
C	Implement a Technology Training Program	-	-	\$0	\$35,000	\$35,000	\$70,000
D	Implement Security Measures to Reduce Town Vulnerabilities	-	-	\$44,000	\$1,800	\$1,854	\$47,654
Initiatives Starting in Year Four							
F	Implement Increased Mobile Functionality for Internal Town Stakeholders	-	-	-	\$21,000	\$4,200	\$25,200
Initiatives Starting in Year Five							
J	Implement an Agenda Management Application	-	-	-	-	\$25,974	\$25,974
K	Implement an Organization-wide Intranet	-	-	-	-	\$24,000	\$24,000
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total Plan Initiatives Budget		\$105,000	\$366,975	\$372,688	\$188,021	\$224,811	\$1,257,495

The following figure depicts the five-year trend of the combined budget amounts for the Strategic Initiatives in each of the Plan years.

Figure 4.1: Five-Year Spending Levels



As the nature of projects in the first year require a high level of third-party resources, software costs, and an investment in new internal resources, the first three years of the plan reflect a large level of estimated funding needed. In subsequent years the funding gradually reduces as the software and implementation cost estimates transition to annual maintenance costs, and new initiatives require less significant investments.

In addition to new funding that may be needed to support new Strategic Initiatives that are identified, additional operational funding will need to be secured in cases where new application or technologies are implemented as part of the plan.

4.2 IT STRATEGIC PLAN GOVERNANCE

The Town should begin the implementation of the projects and initiatives contained in this plan during the current fiscal year. Planning, selecting, deploying, and management of improved systems, technology, and service delivery mechanisms will require strong leadership, clear strategic and tactical plans, and, where reasonable, comprehensive needs assessments to help identify the technologies that best address Town challenges.

Once new technologies and initiatives are implemented, the Town will need to actively communicate the new functionality or services, and their benefits, to both internal and external stakeholders. For example, the Town should not expect that a technology training program will be widely adopted, unless the benefits of the program are effectively communicated, and the training is easy to attend and/or obtain.

BerryDunn recommends that the Town includes the new internal IT resource (discussed in Section 3.4 -Initiative A) on the eGovernment Team in order to take a proactive role in implementing the projects and initiatives, and lead the communication efforts.

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

- Active executive management involvement and sponsorship will be critical to the successful adoption and continued support of the plan.
- Implementing a successful IT Strategic 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 Town'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 Town.
- Technical support staff will be critical to the success of the IT Strategic Plan's implementation. Internal stakeholders must be ready, willing, and able to use new technology and embrace effective change.

Updating the Plan

BerryDunn recommends that the Town review and update the plan twice a year. The review process should be managed by the eGovernment Team. The review meetings should address the following:

- a. The first update of the year should be to track the progress made against initiatives.

“BerryDunn recommends that the Town review and update the plan twice a year.”

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

It is anticipated 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 an IT project. The eGovernment Team should be responsible for assessing new projects as they are identified, and determine how they can be incorporated into the IT Strategic Plan.

Incorporating New Projects into the Plan

BerryDunn recommends that projects be selected and prioritized based on overall return on investment to the Town, funding and resource needs, overall benefit to the Town, other projects in progress, and the ability for the Town to dedicate appropriate resources to the project to increase the likelihood of success. The Town can use the methodology and tools provided during the development of this IT Strategic Plan by identifying and prioritizing critical issues impacting the Town’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.

Assessing Current Projects

As important as selecting and prioritizing projects to be added to the plan in the future, will be the process of assessing the overall status of “in progress projects.” BerryDunn recommends that the Town 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 scope, schedule, and budget of the project, also known as the “Triple Constraints.” Indicators can be assigned 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.

Table 4.2: Project Assessment Areas

Critical Assessment Areas		
No.	Assessment Areas	Description
1	Project Participants Understand Activities Remaining Prior to Go-Live	All project activities and tasks must be adequately communicated to the responsible individuals and adequate resources must be designated to complete them.
2	Design, Development, and Configuration Activities Are Complete	Design, development, and configuration activities must be completed in order for remaining project activities to occur. Design, development, and configuration activities that are completed after the official completion of appropriate User Acceptance Testing (UAT) would require additional testing.

Critical Assessment Areas		
No.	Assessment Areas	Description
3	Deliverables from Vendors Are Complete and Approved	All deliverables identified in the contract between the vendor and the Town must be provided and accepted (signed off) by the Town prior to live operation. In the event that modifications have been made to allow certain deliverables to be accepted after go-live, the deliverables schedule must be updated to reflect this. Deliverables that are intended to document the results of a testing phase, for example, should be used by the Town as a means by which the phase can be evaluated and whether or not the Town should proceed to the next phase.
4	Security Is in Place and Has Been Tested	A critical component of this project is the appropriate planning for and implementation of system security. There is a greater chance for increased security when it is incorporated at the beginning of an implementation than making an attempt to add security on later.
5	Interfaces Are Complete	This assessment area relates to the various interfaces that are being developed during the implementation of the system. The development of these interfaces is critical to ensure full system functionality to users. Interfaces should be tested along with the testing of other system functionality and signed off on by the Town.
6	Reports Are Complete	As part of the system implementation, the Town will identify standard reports needed in the system to replace the reports currently used. Areas where custom reporting needs exist will also need to be identified, and the vendor and the Town will need to develop a plan to create them. High-quality, reliable, properly formatted, and complete reports are often key indicators for how project stakeholders will ultimately define project success.
7	Testing Is Complete	The Town must be assured that appropriate testing methodologies have been implemented to prove that the system is capable of meeting expectations set in a Testing Plan delivered by the vendor. Furthermore, testing will prove that the system is able to operate in the live environment without significant system errors, defects, performance issues, or other issues that could jeopardize daily operations. The Town must sign off on the completion of UAT.
8	Department Readiness	This project activity considers those project tasks departments need to either complete or be aware of prior to go-live.
9	Training Is Complete	Town personnel need appropriate end-user training in preparation for live operation. Without proper training, Town staff will not be adequately prepared to perform their daily responsibilities in the new system environment.
10	Town Support Structure Is Established	With any enterprise-wide system implementation, there is a large impact on the support structure in the organization. The implementation of an enterprise-wide system has similar implications and may require some dedicated IT roles. Identifying and training these individuals is a critical activity in the project.

The indicators in the table below can be used to categorize the status of the assessment areas.

Table 4.3: Project Assessment Indicators

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

It will be important that the eGovernment Team has an active role in the projects contained in the IT Strategic Plan. However, the Team’s involvement will vary depending on the project. The table below summarizes involvement depending on the particular project. The eGovernment Team 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 4.4: IT Project Roles

IT Project Roles		
ID	Project Description	eGovernment Team Role (Lead or Participate)
A	Hire an Internal IT Staff Member	Participate
H	Develop IT-related Principles, Policies, and Frameworks	Lead
B	Implement an Information Technology Project Management Framework	Lead
M	Implement an ERP Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	Participate
G	Increase the Use of the Town's DMS	Lead
C	Implement a Technology Training Program	Lead
D	Implement Security Measures to Reduce Town Vulnerabilities	Lead
N	Replace the Parks and Recreation Application	Participate
F	Implement Increased Mobile Functionality for Internal Town Stakeholders	Lead
J	Implement an Agenda Management Application	Participate
K	Implement an Organization-wide Intranet	Lead

Success Factors for the Plan

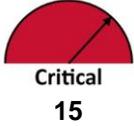
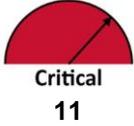
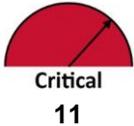
One of the critical success factors for the implementation of the IT Strategic Plan will be executive support for the projects in the plan. The Town should commit to undertaking the projects in this plan, which will require executive support to allocate the appropriate Town resources, as well as ensure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

To increase the likelihood of successful implementation of the projects and initiatives in this plan, it will be critical for the Town to obtain an internal IT resource to implement the recommended policies and project management practices, and to lead the project management and initiative implementation efforts.

It is also important that, over the next five years, the role of internal IT at the Town continues to be established, while assisting in the implementation of proven technology tools to solve technology challenges at the Town. This should include establishing clear roles for the eGovernment Team, the internal IT resource, and the Town's IT support vendor, and finding the right level of services and decision making authority for each. As the roles of each IT resource develop and evolve, the Town's IT resources should focus on problem solving, while balancing other organizational needs, such as security, access to data, and sharing of data. Some of the initiatives in this plan will assist IT initiatives in moving towards a proactive focus on IT planning.

Appendix A: List of Strategic Issues and Opportunities

This appendix contains the List of Strategic Issues and Opportunities confirmed as a result of the Strategic Issue and Opportunity Work Session.

Prioritized List of Strategic IT Issues and Opportunities - Detailed		
No.	Issue and Opportunity Description	Score
Management and Operations		
M4	<p>The Town does not have an internal IT support staff. The Town does not currently have any internal Town IT staff to perform basic support and helpdesk functions. Because of this, Town staff can either submit a ticket to TekLinks, the Town’s third-party contracted IT support, or find a way to resolve the issue on their own. Due to the timeliness and contracted obligations for TekLinks, Town staff will often try to resolve the issue on their own, or reach out to other internal staff that may be able to help. This workaround has led to staff with limited formal IT training taking on helpdesk support activities outside of their job descriptions. The current IT support challenges have also led to a number of technology initiatives being abandoned. It was reported that iPad’s are being underutilized or not used at all due to limited mobile device functionality and support, staff are not being properly trained or given access to applications necessary for their roles, and business processes that could easily be automated are being manually performed.</p>	
M3	<p>Many manual and paper-based processes exist in the current environment. Challenges with application integrations were reported to cause duplicate data entry, manual processes, and other inefficiencies. Specific examples of duplicate data entry and inefficient manual processes include the transfer of financial data from RecDesk to Incode, recording inspection results, information and document sharing between Engineering and Community Development, and the creation and delivery of Board and committee agenda packets. In addition, staff reported that so much paper is being stored, that hiring additional staff could pose challenging because physical space at the Town Hall is limited.</p>	
M5	<p>The Town has a limited IT project management structure. The Town has made progress emphasizing the importance of IT through the creation of the eGovernment Team. Despite this, and due to the lack of internal IT resources, the Town has limited structure in place for IT project management. The eGovernment Team is not formalized through administrative policy at the Town (e.g., limited authority), project managers and roles and responsibilities are not always well defined, and there is limited identification and cultivation of project champions (e.g., internal staff who take ownership and obtain the knowledge of the end product post project completion).</p>	
M9	<p>Security measures are not documented or widely communicated across the departments. Examples of security issues and vulnerabilities reported throughout the Town include a lack of end-point encryption, Human Resource files on the network that are not encrypted, network folders that include password files, access to the network on workstations in public spaces, sharing access information among co-workers, limited restrictions on software downloads and websites, work email on personal</p>	

Prioritized List of Strategic IT Issues and Opportunities - Detailed		
No.	Issue and Opportunity Description	Score
	devices without partitioning, and backup flash drives stored in unknown and unrestricted areas. The lack of coordinated efforts has caused security gaps.	
M1	Laserfiche is not being utilized to its fullest potential. Although a previous project resulted in files being added to Laserfiche, the system is not widely utilized by Town staff. Staff reported that the system can be difficult to use, the organization of files is not clearly understood, the scanning and retrieval process is time consuming, and, therefore, the application is not widely utilized. Staff members also reported that training provided during implementation was too advanced for staff, which impacted system adoption.	 High 10
M2	Resources have not been allocated to scan documents into Laserfiche. In addition to the general process of scanning files into Laserfiche, staff reported this task becomes increasingly difficult when scanning large volumes of documents and documents with larger dimensions. Staff members report difficulties finding adequate time to address scanning and Laserfiche processes.	 High 10
M6	GIS functionality and resources available to departments have not been widely communicated and promoted to staff. The Town's GIS has the ability to enhance operations and productivity; however, departments are generally unaware of the functionality and resources currently available to them. For example, PALS is using Google Maps to geotag objects within the parks, which GIS can do, and Public Works expressed interest in utilizing the ArcGIS Collector app, but were not aware their department has already been set up to use it.	 High 10
M7	Technology training at the Town is limited. Staff reported a number of areas where training has been limited and/or desired at the Town. Areas identified include Laserfiche training, Incode training (including report generation training), Microsoft Office and other productivity tool training, comprehensive onboarding and periodic refresher training for policies, processes, and other best practices.	 High 10
M8	There is limited IT policy and procedures documentation. Policies and procedures form the foundation for how the Town should operate and adhere to rules, regulations, and best practices related to IT. Currently, the Town has minimal policies and procedures for IT, leading to disparate decision making, security risks, and inefficiencies. Some examples of policies and procedures that are missing or need updating include mobile device management policy, document/file storage procedures, and disaster recovery policy and procedures.	 Medium 9
M10	Disaster recovery has incomplete processes and no formal documented policy. It was reported that activities are in place with TekLinks to provide regularly scheduled backups of the Town's servers. However, a formal disaster recovery plan is not in place to detail the actions required in the event of an actual emergency. With many processes being reported as manual, much information could become unavailable if the Town Hall were evacuated for an extended period of time.	 Medium 7

Prioritized List of Strategic IT Issues and Opportunities - Detailed		
No.	Issue and Opportunity Description	Score
Applications		
A4	There is limited software interoperability across common Town applications. The Town's current software architecture provides little to no integration between systems, (e.g., Incode, GIS, Laserfiche, RecDesk, and CivicPlus), limiting communications and information sharing, as well as causing entries to be manually duplicated from one system to another. The Town's primary application, Incode, which is used for managing financials, human resources, time entry and payroll, and other miscellaneous functions, does not integrate with any other applications at the Town, such as GIS, Laserfiche, RecDesk and CivicPlus, leading to inefficient processes, duplicate data entry, data entry errors, and paper documentation.	 Critical 15
A1	The Town does not currently have a fully functioning Permitting and Inspections system. Community Development staff use fillable PDF's and paper documents to record results in the field, and then bring them back to the office for a staff member to input the data into the application, despite the availability of iPads in the field. It was reported that both Community Development and Engineering staff perform permitting and inspection activities; however, Engineering does not utilize the current Permits LV system. Further, both departments reported difficulty sharing information amongst them, which could be due to the lack of a shared system.	 Critical 13
A2	The use of Incode could be improved Town-wide. It was reported that overall, staff are satisfied with Incode, the Town's ERP system. A number of areas were identified, however, that could be improved to increase efficiencies at the Town. Identified system challenges include reporting functionality in the human resources module, and the transfer of data from RecDesk to Incode. Staff also reported challenges with tracking budgets and expenditures. In some departments, they are using MS Excel to track this data because staff have not been granted access to Incode. Other challenges identified included an overall lack of training on Incode, which staff reported could be the primary cause of the underutilization of the system, and a lack of integration with other enterprise systems, which has led to manual workarounds.	 High 12
A5	Department-specific applications are not meeting Town needs. Department-specific applications are applications implemented at the Town that only one or a few department's utilize. The alternative are enterprise applications, such as Laserfiche or CivicPlus, which are or can be utilized Town-wide. Departments have made significant investments in software to improve operations and gain efficiencies; however, many applications are inadequate for department's needs. For example, RecDesk is used for managing much of PALS' operations; however, the system's reservation functionality (e.g., calendars and managing team rosters) lacks features necessary to be used properly. Community Development reported challenges with the permitting and inspections software, including an inability to use the system while in the field, and Engineering reported limited project management tools, such as lacking Microsoft Project and Adobe Pro, to be able to effectively manage ongoing Engineering projects and conduct electronic document markup. Public Works reported that inventory items, such as filters, oil, and road signs, are tracked manually, using paper logs, which has made it difficult to associate inventory with vehicles, and track history and trends of inventory. Administration staff reported challenges with Board and committee agenda	 High 12

Prioritized List of Strategic IT Issues and Opportunities - Detailed		
No.	Issue and Opportunity Description	Score
	packets, citing a lack of a modern system to assist with packet creation and distribution.	
A3	Mobile functionality is not meeting the needs of field staff and remote activities. Inspections are being conducted using paper forms and, in some cases, fillable PDFs that are then submitted to an administrative staff for input into the permitting system. Park inspections are also recorded using fillable PDFs. Street sign inventory is accomplished by physically identifying each sign and recording the information on paper, and monthly catch basin reports are completed in the same fashion. There is currently no standardized means for staff members to capture and save information directly to the network while working remotely or in the field. Despite having iPads and MiFi's available, and due to challenges and limitations of the underlying software and ease of use, field staff do not have adequate mobile functionality to efficiently perform their duties.	 High 10
A7	CivicPlus modules are not meeting some departmental needs, and are underutilized in others. The CivicPlus platform at the Town is primarily used to host the Town's website. The Town has also implemented a number of modules that are used for interacting with Citizens and performing workflow and other processes on the back end. Staff reported that although the website component of CivicPlus works great, the modules that have been implemented do not meet departmental needs. For example, the CivicPlus work order module (Request Tracker) was implemented primarily for the use of citizens requesting work to be performed; however, Public Works has also been able to implement the module for internal work orders. Public Works reported that CivicPlus can be challenging to use, including, but not limited to, an inability to easily display work order history. PALS is currently tracking work orders using fillable PDFs, and IT work orders are not being generated internally, unless it is through TekLinks' helpdesk ticketing system.	 High 10
A8	The Town is developing Board and committee agenda packets manually, and hand delivering them to members. It was reported that the development of Board and committee agenda packets is a time-consuming and manual process. It was also reported that the printed agenda packets are being hand-delivered to Board and committee members by Town staff, which can take time away from daily job duties.	 Medium 7
A6	Various departments rely on MS Excel for daily job functions that could be performed in enterprise applications already in place. Activities including, but not limited to, budgeting and budget tracking, human resources information tracking and reporting, and project accounting and grant management, are being managed in MS Excel instead of enterprise applications, despite the functionality available to do so.	 Medium 6
Technical		
T5	Wi-Fi in Town buildings is inadequate for regular business operations. It was reported that the wireless access points and associated hardware is outdated and leading to poor connectivity for some staff.	 Critical 15

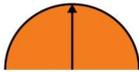
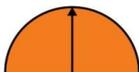
Prioritized List of Strategic IT Issues and Opportunities - Detailed		
No.	Issue and Opportunity Description	Score
T2	<p>The ability to connect to the Town’s network while in the field is not present for all staff members. Field workers are issued MiFi devices on an as-needed basis. Engineering staff reported they do not have MiFi’s to connect to the internet while in the field. When internet in the field is needed, they drive to the closest business with free Wi-Fi. Currently, when additional project, property, or case information is needed, staff must travel to the office, retrieve the information, and drive back to the work site. When remote access is available, remote connectivity to the network requires Citrix, issued on a limited as-needed basis. Community Development and Engineering staff reported the need to take pictures while in the field. A combination of tablet PCs and personal phones are used in conjunction with email, Dropbox, and manual file transfer to place pictures on the network where they can be accessed.</p>	 Critical 12
T4	<p>Mobile devices are not encrypted. Many mobile devices exist throughout the departments, including laptops, memory devices, (i.e., flash and thumb drives), tablet PCs, and cellular phones. The data residing on these devices is not encrypted, leaving the Town vulnerable to loss of sensitive and protected information. Email received on personal phones is neither partitioned nor encrypted.</p>	 High 11
T6	<p>Town meetings are being recorded and posted to YouTube instead of using video software specific to the function. It was reported that the process is inefficient to record, edit, and post recordings; and that citizens must search through the YouTube videos, which can sometimes be long, to view the content of interest.</p>	 High 10
T7	<p>The Town has not implemented an organization-wide intranet. It was reported that organization-wide communications are sent through email, and associated documentation, which could include training information, human resource updates, policies and procedures, or other announcements, are placed in a Town-wide network folder that has limited security functionality, and the folder can be challenging to navigate.</p>	 High 10
T3	<p>The Town has limited viable spare workstations available. Typically, viable temporary or replacement workstations are not available for employees if their laptop/desktop fails. When a workstation fails, TekLinks provides services to restore the system. Generally, while this is being accomplished, the employee is dependent upon a shared device, if available, and is without workstation configurations used to complete job functions.</p>	 Medium 9
T1	<p>The Town’s workstation replacement program is inconsistent. Current policy is unclear on how the Town should acquire new workstations such as computers, laptops, and associated hardware and software. Some staff receive laptops, and others desktops, which do not appear to be standardized across the Town. Devices that are not standardized and upgraded according to a well-defined plan can lead to increased support needs, additional training requirements, and inefficiencies related to daily operations. Laptops are provided on an as-needed basis, with shared laptops and PCs available. Staff members also reported difficulty using the shared devices, as roaming profiles are not present, causing limited functionality and connectivity to needed applications and network resources.</p>	 Medium 8

Appendix B: List of Strategic Projects and Initiatives

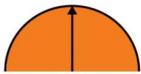
This appendix contains the List of Strategic Projects and Initiatives confirmed as a result of the Projects and Initiatives Work Session.

Prioritized List of IT Projects and Initiatives – Detailed		
ID	Project/Initiative Description	Priority
A	<p>Hire an Internal IT Staff Member. IT support at the Town is currently outsourced. Staff reported challenges with the timeliness of outsourced IT, a lack of face-to-face interactions, and limited detailed knowledge of the Town. The Town should solicit and hire a qualified candidate to take on basic IT and IT support activities. Ideally, this resource could also provide IT project management, develop IT policies and procedures, act as a liaison between the Town and third parties, provide IT training, and assist with website management. This position would not include GIS support responsibilities.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Community Development, Engineering, PALS, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M4, M5, M9</i> <i>High: M1, M6, M7</i> <i>Medium: M8, M10, T3, T1</i></p>	 <p>Critical</p>
H	<p>Develop IT-related Principles, Policies, and Frameworks. In the current environment, the Town has little to no principles, policies, and frameworks for governing and managing IT. The Town should develop principles, policies, and frameworks to guide the decision making and direction of IT at the Town, and safeguard against any negative events. Examples of principles, policies, and frameworks topics that should be developed include, but are not limited to: security, training, document retention, disaster recovery, and acceptable computer/device use.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Community Development, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, M5, M9</i> <i>High: M1, M6, M7, A2, A5, T4, T7</i> <i>Medium: M8, M10, T3, T1</i></p>	 <p>Critical</p>
L	<p>Replace the Permitting and Inspections Software Application. The Community Development department currently uses Permits LV. When field employees conduct inspections, they record the results on paper and then bring the documentation back to the office for input into the current system. Field staff do not have access to the system or network to look up history on parcels or any other relevant information and documents. The Town should implement a modern permitting and inspections software application that provides field staff the ability to record results electronically in the field, allows for research to be conducted remotely, and promotes collaboration through data and document sharing with other departments and external Town stakeholders.</p> <p>Departments Referencing Initiative: Community Development, Engineering, PALS, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, A4, A1, T2</i> <i>High: M1, M6, A5, A3</i> <i>Medium: A6</i></p>	 <p>Critical</p>

Prioritized List of IT Projects and Initiatives – Detailed

ID	Project/Initiative Description	Priority
B	<p>Implement an Information Technology Project Management Framework. With a lack of dedicated IT staff at the Town, it is Town leadership and department staff's responsibilities to identify and manage IT-related projects and initiatives. The Town should develop a formalized structure that defines how the Town identifies, prioritizes, assigns resources, and executes IT-related projects. The Town could leverage the eGovernment team and assign it additional authorities and responsibilities through formal administrative policy. An internal IT resource could assist in implementing a framework and lead IT project management efforts.</p> <p>Departments Referencing Initiative: Community Development, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M5</i></p>	 <p align="center">High</p>
C	<p>Implement a Technology Training Program. Many challenges were identified at the Town that stemmed from limited IT training, including, but not limited to, the inability to generate reports in applications, lack of knowledge of GIS capabilities at the Town, little to no use of Laserfiche, lack of security best practice knowledge, and unnecessary reliance on manual and paper-based processes for regular business functions. The Town could benefit from developing and implementing a technology training program that addresses the already defined training opportunities at the Town and creates a framework for identifying and implementing additional training opportunities in the future. An emphasis of the technology training program should be ongoing training, and developing a culture of learning and improvement. An internal IT resource could lead the IT training program.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Community Development, Engineering, PALS, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M3</i> <i>High: M1, M6, M7, A2, A5, A7</i> <i>Medium: M8, A6</i></p>	 <p align="center">High</p>
E	<p>Implement Interfaces Between Incode and Other Town-wide Applications. Incode does not currently integrate with any other applications at the Town (e.g., Laserfiche, GIS, RecDesk, CivicPlus, Permits LV, etc.), leading to manual and paper-based processes, duplicate data entry, and other inefficiencies. The Town should conduct an interface analysis of each potential integration, and develop interfaces or integration points between Incode and the various systems that provide the most cost benefit. As part of the analysis, the Town should also identify specific areas for business process improvements.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Engineering</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, A4</i> <i>High: M1, A2, A5, A3, A7</i> <i>Medium: A6</i></p>	 <p align="center">High</p>

Prioritized List of IT Projects and Initiatives – Detailed

ID	Project/Initiative Description	Priority
G	<p>Increase the Use of the Town’s DMS. The Town has made a large and ongoing investment in Laserfiche, the Town’s DMS, but has not promoted the functionality or invested in resources to maximize the application’s use. A well-implemented DMS can reduce or eliminate the need for paper, improve document search functionality in other applications, enable the sharing of documents and data across departments and with external stakeholders, and reduce the risks and issues associated with paper storage. The Town should increase the use of Laserfiche through training, adjusting permissions and licensing as needed, promotion of the applications capabilities, and integrations with other Town applications.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Community Development, Engineering, PALS</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, A4</i> <i>High: M1, M2, A2, A5, A3</i> <i>Medium: M10</i></p>	 <p align="center">High</p>
I	<p>Implement a Work Order and Asset Management System. Work orders and asset management are currently being performed using CivicPlus, MS Excel, and manual paper-based processes. Staff reported that CivicPlus can handle service orders from citizens, but does not provide the robust functionality needed to internally manage work orders and assets. The Town should implement a work order and asset management system to reduce reliance on CivicPlus, MS Excel, and manual processes.</p> <p>Departments Referencing Initiative: Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, A4</i> <i>High: A5, A3, A7</i> <i>Medium: A6</i></p>	 <p align="center">High</p>
D	<p>Implement Security Measures to Reduce Town Vulnerabilities. Risks and vulnerabilities were identified, including, but not limited to, the storage of passwords and other sensitive information, limited mobile device security and encryption, and access to the Town network from public spaces. The Town should remediate these vulnerabilities, and develop a strategy for identifying and remediating additional risks on an ongoing basis. Included in the strategy should be regular training for Town staff.</p> <p>Departments Referencing Initiative: Community Development, Engineering</p> <p>Strategic IT Issues Addressed: <i>Critical: M9, T2</i> <i>High: M7, T4</i> <i>Medium: M8, M10</i></p>	 <p align="center">Medium</p>

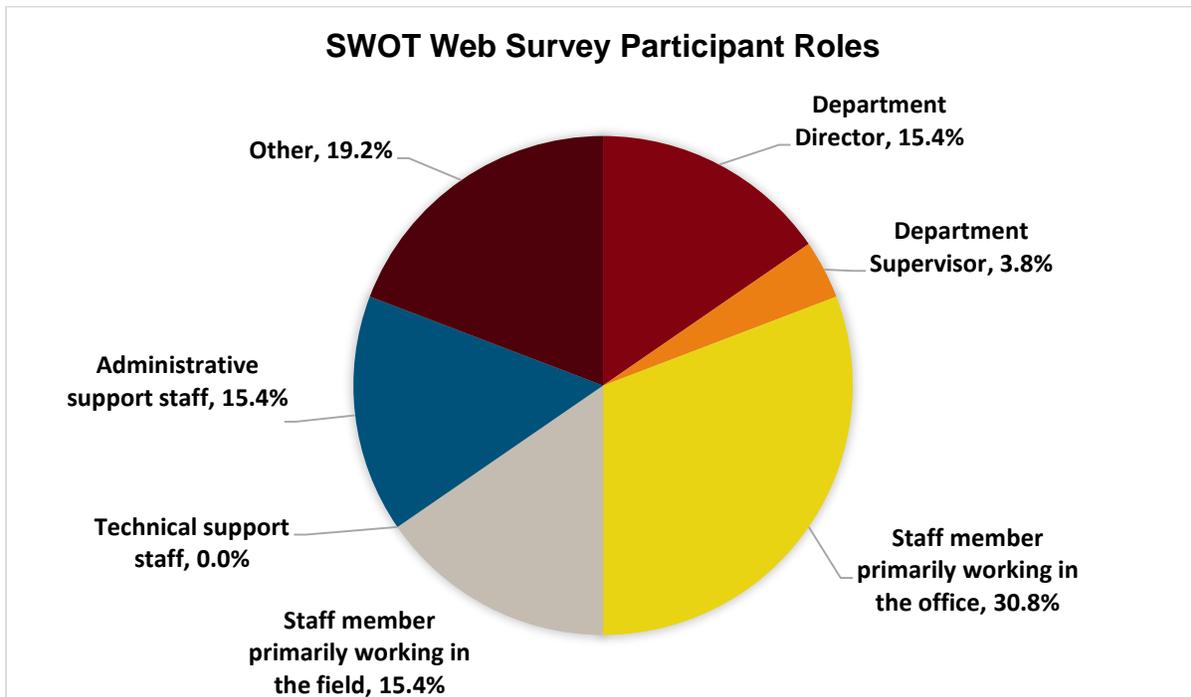
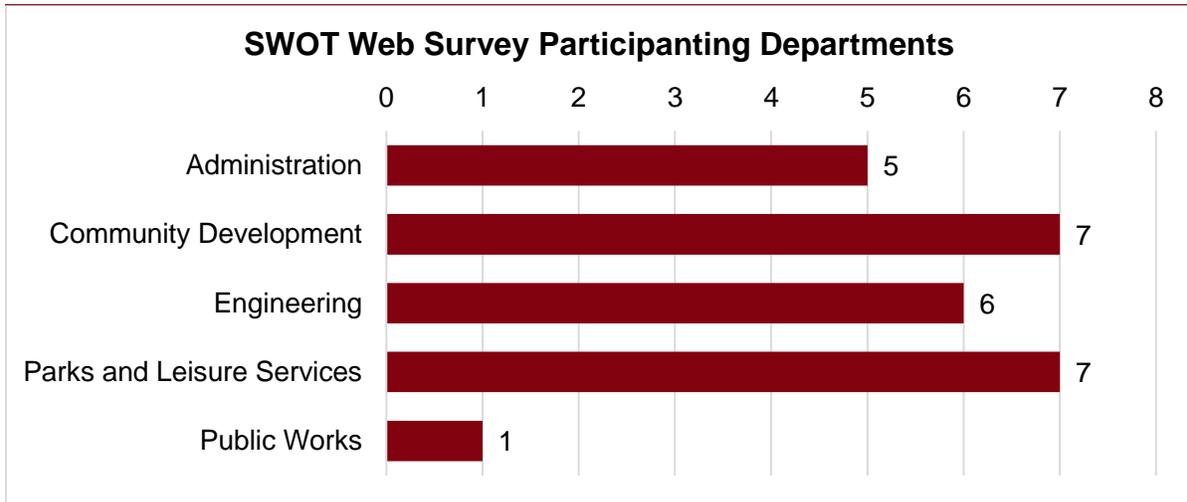
Prioritized List of IT Projects and Initiatives – Detailed

ID	Project/Initiative Description	Priority
F	<p>Implement Increased Mobile Functionality for Internal Town Stakeholders. Field staff are currently utilizing pen and paper, as well as fillable PDF and other low-tech means, for researching information and entering data. Board and committee members are provided hard copy agenda packets. The limited mobile functionality has led to inefficient business processes. The Town should implement increased mobile functionality for field staff, such as mobile internet connectivity, and implement mobile-optimized devices and applications for boards, committees, and field staff. Selecting and implementing updated software applications, such as a permitting and inspections application, agenda management software, and work order software, could also aid in increased mobile functionality.</p> <p>Departments Referencing Initiative: Administration, Arcadis, Engineering, PALS, Public Works</p> <p>Strategic IT Issues Addressed: <i>Critical: M3, T2</i> <i>High: A3, A7, A5, T4</i> <i>Medium: A6</i></p>	
J	<p>Implement an Agenda Management Application. Agenda packets for the Board and various committees are currently generated and distributed manually. The Town estimates that printing and distributing agenda packets just for Board meetings costs over \$12,000 a year. The Town should implement an agenda management application that reduces the manual labor needed to generate and print the packets, and provides an opportunity for agendas to be organized and viewed electronically by Board and committee members. An agenda management application should also include video recording and broadcasting functionality. The Town should implement an agenda management application to reduce reliance on manual processes required to post Board and committee videos to YouTube.</p> <p>Departments Referencing Initiative: Administration, Engineering</p> <p>Strategic IT Issues Addressed: <i>Critical: M3</i> <i>High: A5, A3, T6</i> <i>Medium: A8, A6</i></p>	
K	<p>Implement an Organization-wide Intranet. Town-wide communication and information sharing is currently limited to emails and posting documents on a shared network drive, which could be hindering collaboration between staff and departments, and generating inefficiencies due to limited access to information. The Town should implement an intranet—a website that is only accessible to Town employees and other stakeholders with security permissions. An intranet can enable productivity as a document repository for important documents (such as IT helpdesk tutorials, HR forms, and Board and committee agendas), enhance Town-wide communications by allowing announcements and feedback to be posted and collected, and enable collaboration through automated tools and shared working documents. An intranet could be accomplished through CivicPlus, or implementing a SharePoint site.</p> <p>Departments Referencing Initiative: Engineering</p> <p>Strategic IT Issues Addressed: <i>Critical: M5, M9</i> <i>High: M1, M6, M7, T7</i> <i>Medium: M8, M10, A6, T1</i></p>	

Appendix C: Project Participants

This appendix contains the list of departments that participated in the project during each on-site work session(s).

SWOT Web Survey Participation



Work Session 1: Fact-Finding Participation:

Fact-Finding Participants		
No.	Name	Department/Division
1	Allison Myers	Administration
2	Bettye Newby	Administration
3	Gary Palmer	Administration
4	Janet Curry	Administration
5	Jenn Hatmaker	Administration
6	Pam Hall	Administration
7	Carrie Smith	Arcadis GIS
8	Kyle McClain	TekLinks
9	Adam Price	Community Development
10	Alexis Crawford	Community Development
11	Ashley Miller	Community Development
12	Colin Cumeasty	Community Development
13	Dan Johnson	Community Development
14	Elliott Sievers	Community Development
15	John Householder	Community Development
16	Karen Richards	Community Development
17	Mark Shipley	Community Development
18	Darryl Smith	Engineering
19	David Sparks	Engineering
20	Greg Norman	Engineering
21	Lori Saal	Engineering
22	Scott Brewer	Engineering
23	Theresa Lawson	Engineering
24	Alden Rosner	Parks and Leisure Services
25	Arleen Higginbotham	Parks and Leisure Services
26	Ashley Lanham	Parks and Leisure Services
27	Chelsey Riemann	Parks and Leisure Services
28	Julia Barham	Parks and Leisure Services
29	Lauren Cox	Parks and Leisure Services
30	Ryan Rhodus	Parks and Leisure Services
31	Sue Stuhl	Parks and Leisure Services
32	Chris Brown	Public Works
33	Jennifer Brown	Public Works

Work Session 2: Strategic Issues and Opportunities Prioritization Work Session Participants, Work Session 3: Projects and Initiatives Prioritization Work Session Participants, and Work Session 4: Budget and Timeline Matrix Review Work Session Participants included most or all members of the eGovernment Team.

Appendix D: Map of Town-Wide Goals to IT-related Goals

This appendix contains the Map of Town-wide Goals and Objectives to IT-related Goals and Initiatives.

Map of Town-wide Goals and Objectives to IT-related Goals and Initiatives			IT-related Goals				
			Standardizing and integrating applications and equipment	Streamlining inefficient processes and identifying training opportunities	Improving mobile functionality in the field	Meeting citizen's digital expectations	Reducing paper use and storage
Town-wide Goals and Objectives			1	2	3	4	5
Maintain Financially Sound Town Providing Excellent Services	Responsible use of debt by Town Government	1					
	Town services provided in the most cost-effective manner	2	P	P	S	S	S
	Adequate revenues to support defined Town services, programs and facilities	3	P				
	Competitive compensation and benefits for Town employees	4	S	P			
	High customer satisfaction rating for Town services	5	S	S	P	P	
	Reliable delivery of Town services	6	P	P	P	P	P
	Well-planned and well-maintained Town facilities and infrastructure	7	P	S	S		
Strengthen the Local Economy	Increase number of visitors coming to Farragut	8				S	
	Residents shopping local—keeping sales tax revenues in the Town	9					
	Increase number of retail businesses in Farragut	10	S	S			
	Expand number of successful small businesses	11	S	S		S	

Map of Town-wide Goals and Objectives to IT-related Goals and Initiatives							
			IT-related Goals				
			Standardizing and integrating applications and equipment	Streamlining inefficient processes and identifying training opportunities	Improving mobile functionality in the field	Meeting citizen's digital expectations	Reducing paper use and storage
Town-wide Goals and Objectives			1	2	3	4	5
"P" = Primary Relationship "S" = Secondary Relationship (i.e., less strong relationship)							
	Have a reputation as positive climate for business—people want to have a business here	12	S	S	S	S	
Develop the Town's Historic Assets	Expand areas for Museum displays	13					
	Relocate and preserve Campbell Station Inn	14					
	Annex and develop Concord Village as a historic area	15					
	Develop Founders Park at Campbell Station as a historic area	16					
	Develop architectural standards and lighting throughout the Town	17					
	Develop a reputation as a historic destination	18					
	Preserve historic Pleasant Forest Cemetery	19					
Facilitate Future Growth, Development, and Redevelopment	Pursue modifications in the urban growth boundary	20					
	Expand Town limits through annexation	21					
	Develop Town infrastructure for future growth and development	22	S	S	S		S
	Appropriate land uses for future development	23	S	S	S		
	Future development consistent with Town's plans and standards	24	S	S	S		

Map of Town-wide Goals and Objectives to IT-related Goals and Initiatives

			IT-related Goals				
			Standardizing and integrating applications and equipment	Streamlining inefficient processes and identifying training opportunities	Improving mobile functionality in the field	Meeting citizen's digital expectations	Reducing paper use and storage
Town-wide Goals and Objectives			1	2	3	4	5
"P" = Primary Relationship "S" = Secondary Relationship (i.e., less strong relationship)							
	More beautiful corridors and development—signs, storefronts, landscaping	25	S		S		
Expand Leisure Amenities (Venues and Programs)	Expand park development	26	S	S	S		
	Extend the Greenway System	27					
	Develop a community center	28					
	Increase pedestrian connectivity within Farragut	29					
	Increase sports tourism through more local and regional tournaments	30	S	S			

Appendix E: Map of Initiatives to IT-related Goals

This appendix contains the Map of Strategic IT Projects and Initiatives to IT-related Goals and Initiatives.

Map of Strategic IT Projects and Initiatives to IT-related Goals and Initiatives						
		IT-related Goals				
		Standardizing and integrating applications and equipment	Streamlining inefficient processes and identifying training opportunities	Improving mobile functionality in the field	Meeting citizen's digital expectations	Reducing paper use and storage
Strategic IT Projects and Initiatives		1	2	3	4	5
"P" = Primary Relationship "S" = Secondary Relationship (i.e., less strong relationship)						
Hire an Internal IT Staff Member	A	S	S	S	S	S
Develop IT-related Principles, Policies, and Frameworks	H	P	P			S
Implement an IT Project Management Framework	B	P	P			
Implement an ERP Solution (Core Financials, HR/Payroll, Community Development, and Work Orders/Fixed Assets)	M	P	P	P	P	P
Increase the Use of the Town's DMS	G	P	P		S	P
Implement a Technology Training Program	C		P	S	S	S
Implement Security Measures to Reduce Town Vulnerabilities	D	S		S	S	
Replace the Parks and Recreation Application	N	P	P	P	P	P
Implement Increased Mobile Functionality for Internal Town Stakeholders	F	P	P	P	P	P
Implement an Agenda Management Application	J		P	P	P	P
Implement an Organization-wide Intranet	K		P		P	P