Five-Year Information Technology Strategic Plan

January 12, 2010

Prepared for the Town of Wayland in collaboration with: **Berry, Dunn, McNeil & Parker**

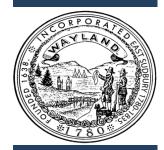


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Acknowledgements

Berry, Dunn, McNeil & Parker would like to thank the Town of Wayland for allowing us to participate in the development of the Town's Information Technology Strategic Plan. Although it is impossible to thank every individual contributor, we would like to recognize a few project participants who helped make the development of this plan possible.

- > Fred Turkington, Town Administrator
- > John Senchyshyn, Assistant Town Administrator/HR Director
- John Moynihan, Public Buildings Director
- > Gwen Sams-Lynch, Information Technology Manager

In addition, we would like to thank all Town Department Leaders and their 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 development of a plan. We truly appreciate the level of cooperation, support, and feedback we received from the employees of the Town.

Executive Summary

In August 2009, the Town of Wayland issued a Request for Proposal (RFP) to procure consulting services to assist the Town in developing a town wide comprehensive five-year Strategic Information Technology Project Plan. More specifically, the Town was seeking a Strategic Plan that would include:

- A comprehensive assessment of current conditions;
- Recommended actions
- Cost estimates
- Prioritization of actions; and
- An Implementation Plan that will be incorporated into the Capital Planning Process for FY2011 through FY2015.

The Town required that the consultant develop a technology plan that would guide the implementation of technology initiatives identified during the project.

The Town engaged Berry, Dunn, McNeil & Parker (BDMP) to facilitate development of an Information Technology Strategic Plan and to establish a framework to carry the technology planning process forward. The project began in September of 2009 and concluded in January of 2010.

During the course of the project, numerous meetings were facilitated by BDMP with Town staff members and the Project Team (John Senchyshyn Assistant Town Administrator, John Moynihan Public Buildings Director and Gwen Sams-Lynch Information Technology Manager) to define a list of prioritized strategic issues. The Strategic Issues were organized into three categories:

- ➤ **Technology Issues:** Technology Issues are related to problems with the way that technology is used to assist with internal day-to-day business processes of the Town's departments.
- **Business Issues:** Customer Service Issues are related to problems with the way that technology is used by customers of the Town's departments.
- ➤ Management and Operations Issues: Management Issues are related to how the Town approaches technology planning, acquires new technology (hardware and software), and how it manages the technology it has in place today.

The Town and BDMP collaboratively developed a list of technology initiatives to address the strategic issues that were identified. The table below summarizes the final list of projects and initiatives that were identified by the Town and BDMP and ultimately recommended by BDMP to include in the five year plan.

#	Town of Wayland Initiatives List
1	Update Server and IT Infrastructure Including Back Up Procedures
2	Add IT Resources to Support Future IT Initiatives
3	Complete Town Fiber Project Begun by Schools
4	Improve Internet Performance and Network Connectivity

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#	Town of Wayland Initiatives List
5	Update Town IT Policies and Procedures Including IT Purchasing, IT Support, Acceptable Use and Training
6	Update Town Telephone System to Newer Technology
7	Develop Patch Management Plan for Critical System Updates
8	Develop Disaster Recovery Plan
9	Assess Email System and Spam Filters to Improve Efficiency
10	Server Virtualization
11	Provide IT Training to Staff for Common Computer Tasks
12	Implement PC Replacement Program of Every 3 Years
13	Expand Use of MUNIS Capabilities Including Payroll
14	Implement Town Website with eGov Services
15	Implement Town-Wide IT System Management Policies for System Uptime Monitoring and Asset Tracking
16	Integrate Key Town Systems to Increase Interoperability Among Departments
17	Implement Parks Department Software System for Asset and Service Request Tracking
18	Implement and Integrate Utility Billing System with Town Systems
19	Implement Document Management System
20	Improve Library Wireless Access for Public Use
21	Develop Public Health Nurse Information Database
22	Provide Real-Time Access to GIS for Public Safety
23	Establish Public Access Kiosk at the Town Hall for Citizen Research of Town Information and Bill Payment
24	Procure Laptop Computers for Inspectors (Assume 3)

Table 1: Final List of Strategic Initiatives

The cost of each Initiative was estimated during this process and a high level budget and plan was established for a five year planning horizon. The chart below provides a summary of the total plan spending level by year, and a five year total.

	Year 1 FY2011	Year 2 FY2012	Year 3 FY2013	Year 4 FY2014	Year 5 FY2015	Five Year Total
New IT Capital	\$178,400	\$155,000	\$230,000	\$100,000	\$225,000	\$888,400
New IT Operating	\$70,000	\$99,000	\$74,000	\$90,000	\$79,000	\$412,000
New IT Spending	\$248,400	\$254,000	\$304,000	\$190,000	\$304,000	\$1,300,400
Est. Recurring Annual IT Costs	\$512,000	\$536,840	\$562,240	\$592,640	\$611,640	

Table 2: Initiative Budget by Year

Average IT spending for government organizations similar to the Town of Wayland typically range between 2% to 5% percent of the annual budget. The Town's current level (Fiscal Year 2010) of IT related spending is approximately 1.74% of the Town budget, which is below the average investment level. In accordance with the Town's IT mission and goals, and supported by guidance from the Town Administrator, the Town desires to implement proven, leading edge technologies. Based on guidance from the Town Administrator and the Town Project Team during the planning process, an appropriate IT spending range would provide for a minimum of 3.0% to 3.5% of annual Town budget. The first year of the five year plan targets IT spending at approximately 3.0% while the last year targets spending at approximately 3.5% of Town budget.

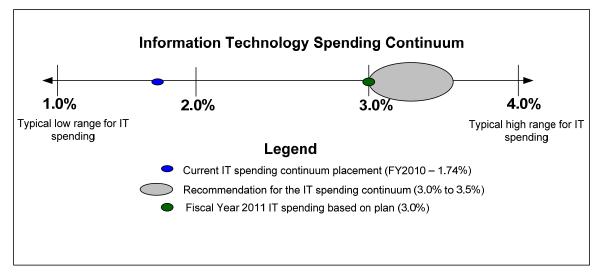


Figure 1: IT Spending Continuum

The plan's average five-year IT spending (3.0%) represents approximately \$200,000 to \$325,000 additional IT spending in each year of the plan over the current levels of IT expenditures. Planning for information technology investments requires the Town of Wayland to adopt, understand, and successfully manage future strategic initiatives that will enable the Town to meet its objectives.

Conclusions:

Based on recent and current IT spending, the Town has been under-spending on IT in comparison with other organizations. Lower IT spending has helped the Town focus on other important budgetary issues in the past. It is now time to increase focus and spending on IT in order for the Town to provide for reliable, effective technology tools for Town staff and to fully realize the opportunities available to leverage technologies to improve Town operations.

Based on the assessment and fact finding activities conducted by BDMP, we recommend that the Town increase annual spending on IT to a minimum of 3.0% of annual Town budget. The Town must "catch up" on IT spending to account for the lack of IT spending in past years. BDMP has recommended as part of this plan, that the Town address the critical IT infrastructure initiatives identified in year one of the plan. Implementing the initiatives and recommendations described in year one, will allow the Town to update the existing IT infrastructure and establish the framework for other critical IT initiatives recommended in subsequent years of the plan.

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In order to complete many of the initiatives recommended in this plan, the Town must add an additional IT resource to enhance support and assist with completing the initiatives. The Town's current level of IT staffing does not provide sufficient resources to provide adequate support for Town hardware and applications as well as plan for and implement the projects and initiatives recommended in the plan. BDMP recommends that the Town begin the process of advertising for an additional IT resource as soon as funding is approved.

Adopting and implementing the initiatives and recommendations included in this updated five-year plan will require significant financial and human resources, but likely the most difficult challenge the Town will face will be cultural in nature. Many of the recommendations included in this plan will impact a large number of employees, which will require the Town to continue to encourage, facilitate, and proactively manage change.

The Town has taken the first step to plan, fund, and implement an IT Strategic Plan designed to address the needs the Town. The next goal of this project will be more difficult for the Town to attain; it must now adopt the plan and carry-out regular plan maintenance with the Town Project Team adopting and participating in Town-wide IT governance. A successful technology improvement plan is as much about the development and implementation of a continuous planning process as it is about development of the plan itself.

1.0 Introduction

This section provides the background and objectives for the project, describes how the report has been structured, and documents the approach utilized on this project in order to develop the Strategic Plan.

1.1 Project Background

In August 2009, the Town of Wayland issued a Request for Proposal (RFP) to procure consulting services to assist the Town in developing a town wide comprehensive five-year Strategic Information Technology Project Plan. More specifically, the Town was seeking a Strategic Plan that would include:

- A comprehensive assessment of current conditions;
- Recommended actions
- Cost estimates
- Prioritization of actions; and
- ➤ An Implementation Plan that will be incorporated into the Capital Planning Process for FY2011 through FY2015.

The Town required that the consultant develop a Strategic Plan that will guide the implementation of the technology initiatives identified in the project. At a minimum, the Town requested that the consultant:

- Gather input from 3 key groups of stakeholders at the Town:
 - o Town Staff
 - Department Heads
 - Citizen Input; and
- > Assess the current network infrastructure and include recommendations for appropriate improvements in the final report.

A critical objective in the approach used for this Information Technology Strategic Planning Project was to help the Town understand their current environment and plan for future improvements as they relate to the Capital Planning Process for FY2011 through FY2015.

1.2 Report Format

This document is presented in four major sections described below:

- 1. **Introduction:** This section describes the layout of the document and depicts the planning process that the Town undertook to develop the Strategic Plan.
- 2. **Planning Framework:** This section describes the current technology environment in the Town, presents the list of Strategic Issues that were documented as a result of conducting this study, and presents and goals for this plan.

- Town-wide Technology Initiatives: This section describes the recommended Strategic Initiatives that were developed as a result of the planning process to address Strategic Issues described in the previous section.
- 4. **Implementing the Technology Plan:** This section describes the costs and timeline for plan Initiatives discussed in the previous section, presents the potential impact of the plan on the Town, and provides guidance for implementing the initiatives and carrying the planning process forward.

1.3 Work Performed

The Town of Wayland engaged Berry, Dunn, McNeil & Parker (BDMP) to facilitate development of an Information Technology Strategic Plan and to establish a framework to assist in the Capital Planning Process for FY2011 through FY2015. The project began in September of 2009 and concluded in January of 2010. The project included three onsite meetings with the Town to conduct interviews, facilitate individual and group work sessions, and develop the final report.

At the start of the project, a Town Project Team was established as owners of this project to provide guidance, assist in prioritizing strategic issues and initiatives, review the final report and ultimately be responsible for providing governance and oversight of the final plan as well as future updates. The Project Team included: John Senchyshyn Assistant Town Administrator, John Moynihan Public Buildings Director and Gwen Sams-Lynch Information Technology Manager. The Project Team felt that participation from members of each Town Department would be instrumental in gaining support and buy-in for the initiatives that would be developed as a result of this project.

Prior to the first onsite meeting, BDMP requested and reviewed existing technical and non-technical documentation from the Town which included network diagrams, PC inventories, prior planning and assessment reports, estimates from IT vendors to perform infrastructure updates and email usage statistics. BDMP also issued a SWOT (Strengths, Weaknesses, Opportunities and Threats) questionnaire to all Town department heads. The SWOT questionnaire is designed to elicit feedback from departments related to potential areas for improvement and areas related to IT that are considered strengths in the Town. BDMP reviewed the SWOT responses prior to meeting with department heads in order to develop specific interview questions related to the SWOT responses.

During the first visit to the Town, interviews were conducted with 19 Department heads to identify issues and needs related to technology, workflow and operations. These interviews allowed BDMP to identify strategic issues in the Town's current operations and technology environment. In addition, BDMP met with the Technology Focus Group and a citizen representative related to Cable TV operations to understand their perspective on technology issues and needs of the Town.

Following the first visit, a summarized list of strategic issues identified by both BDMP and meeting participants was developed. A strategic issue is a challenge or problem that relates to the use and/or management of technology, workflow of the office, or the customer's experience. The draft list of strategic issues was then sent to the Project Team for review in preparation of the second onsite meeting.

Prior to the second visit, the Department heads were asked to complete technology initiative worksheets to describe technology projects that they felt would address the list of strategic issues. BDMP summarized the initiatives worksheets provided by the

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Department Heads into a draft list of initiatives in preparation for a work session during the second visit.

During the second visit, the draft list of strategic issues was reviewed and discussed by the Department heads as part of a "strategic issue prioritization work session". As a result of this work session, the strategic issues were updated, confirmed and prioritized. The final list of issues identified during this work session is presented in Section 2.2 (Strategic Issues). An "initiative work session" was also facilitated during the second visit. The purpose of this work session was to discuss the draft list of initiatives, understand Department heads opinions of the initiatives, confirm the descriptions of the initiatives and brainstorm additional initiatives that had not yet been documented.

Following the second visit, BDMP correlated each confirmed strategic initiative to the strategic issues it addressed, and ranked the initiatives by:

- Strategic Issue Rank;
- Cost Benefit;
- Ease of Implementation; and
- Maturity of the Technology.

These four categories were weighted based upon their importance to the Town. Strategic Issue Rank and Cost Benefit both received weights of 30%. Ease of Implementation and Maturity of Technology both received weights of 20%. The rational for these weights was that the Town is most interested in initiatives that solve many issues in a cost-efficient manner. Following the confirmation of the list of preliminary initiatives, BDMP made recommendations as to the order and priority of the projects to be included in the plan. Those recommendations include the final list of projects and initiatives that are includes in this plan.

The results of the work sessions, research activities, and existing documentation were combined to create this Strategic Information Technology Plan. A draft of this report was sent to the Project Team for review in advance of the fourth and final visit. During the final visit, the draft report was presented to the Project Team, feedback was received, and the report was updated. The report was then submitted in final.

2.0 Planning Framework

This section describes the current organization and technology environment in the Town of Wayland, presents the list of strategic issues that was documented as a result of conducting this project, and presents the mission and goals for the Strategic Plan.

2.1 Current Technology Environment

Town of Wayland

The Town Administrator is responsible for the Town's overall operations on a daily basis. There are 19 Departments including the Selectmen's Office, with Department heads reporting either directly or indirectly to the Town Administrator. The current Town Departments are listed below:

Town of Wayland Departments			
Assessing Department	Police Department		
Building Department	Public Buildings Department		
Conservation Department	Public Health Department		
Council on Aging	Recreation Department		
Department of Public Works	Selectmen's Office		
Finance Department	Surveying Department		
Fire Department	Town Clerk's Office		
Information Technology	Treasurer/Collector		
Library	Youth and Family Services		
Planning Board	Wayland Schools		

Table 3: Department List

Information Technology Department

Based on the current Town organizational charts, the Information Technology Manager oversees the development, implementation and support of information technology for the Town. The current organizational chart for the Information Technology Department is depicted below:

Town of Wayland Information Technology Department Organizational Structure

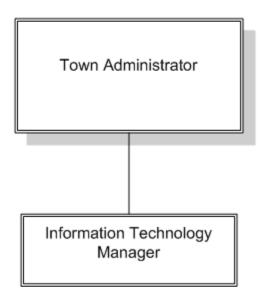


Figure 2: IT Department Organizational Chart

The Town has approximately 120 personal computers to support its employees between the Town Hall, the Public Safety Building and other remote locations (e.g., the public works building). Most of these computers are connected to local and wide area networks that enable Town employees to access information and applications and carry out daily business processes including standard word processing, e-mail and other office automation tools used by nearly all of the Town's regular computer users.

Departments also use specific software applications to conduct their work and serve their constituents including, for example, MUNIS for financial reporting, payroll, human resources, permitting and inspections, and accounts payable, VADAR for Tax (Real, Personal and Excise) billing and Vision Appraisal for assessing to name a few.

The Town's IT hardware and software are primarily supported by one IT Manager, a Public Safety Officer who also has patrol responsibilities, and a Fire Department Captain. The Public Safety Office personnel are largely responsible for IT support of Public Safety operations, while the IT Manager focuses on Town Hall support. Primary responsibilities of the IT Manager include:

- Oversight of daily operational activities of technology systems and establishing Town-wide standards for information technology;
- Responsibility for all aspects of systems and networking, PC support, administrative applications, security, back-ups and internet communications;
- Management of the Local Area Network and Wide Area Network;
- ➤ Maintenance of all documentation relating to the IT infrastructure;

- Procurement of IT related components, hardware, and software applications for Town Departments; And
- Administration of all IT related policies and procedures.

Information technology is a tool that enables organizations to perform their work in a more efficient and effective manner. In recent years, the Town has made commitments in technology to better serve the departments, citizens, businesses, and organizations that comprise the community at large. In recent years, the Town has accomplished technology goals and objectives including:

- Developing a Citizen-lead Technology Advisory Group
- > Investing in MUNIS
- Undertaking an Information Technology Strategic Planning Project

2.2 Town-wide Strategic Issues

The first phase of interviews was conducted with Department Heads to identify issues and needs related to technology, workflow, and operations. The discussions focused on understanding the business workflow, areas of user frustration, duplicate data entry, and other inefficiencies perceived by users with the current systems and business processes. A meeting was also held with with the Town's Technology Focus Group and a citizen representative for Town cable TV operations to better understand their perspective on technology issues and needs of the Town.

As a result of this work, a list of strategic issues was identified and documented by BDMP. A strategic issue is a challenge or problem that relates to the use and/or management of technology, workflow of the Department, or the customer's experience. The strategic issues represent the challenges and needs of an organization. This is a necessary first step when developing any multi-year information technology plan that identifies specific technology solutions, projects, and related investments for an organization. This list of strategic issues was reviewed and discussed as part of a facilitated "strategic issue prioritization work session" by the Department heads. As a result of this work session, the strategic issues were prioritized, updated and confirmed.

Below is the final, prioritized list of strategic issues that have been gathered as a result of on-site meetings, telephone conferences, and the prioritization work session. The strategic issues have been organized into three categories as described below:

- ➤ **Technology Issues:** Technology Issues are related to problems with the way that technology is used to assist with internal day-to-day business processes of the Town's departments.
- ➤ **Business Issues:** Business and Customer Service Issues are related to problems with the way that technology is used by internal and external customers of the Town's departments.
- ➤ Management and Operations Issues: Management Issues are related to how the Town approaches technology planning, acquires new technology (hardware and software), and how it manages the technology it has in place today.

The Department heads and BDMP ranked the Strategic Issues during the "strategic issue prioritization work session". The results of the individual rankings were aggregated

and a score for each strategic issue was assigned. The higher the score assigned to the strategic issue, the more critical the issue is to the Town.

Below are the definitions for the priority rating used in the prioritization work session and the final priority rating for the Strategic Issues presented on the following pages.

- ➤ Critical priority issues should be addressed during the first year of the updated Strategic Plan.
- ➤ **High** priority issues should be addressed during years 2 and 3.
- ➤ **Medium** priority issues should be addressed in years 4 and 5.

The resulting list of strategic issues, documented in the tables below, guided the development of the initiatives identified in Section 3.0 (Town-wide Technology Initiatives).

	sue mber	Issue Description	Issue Score	Issue Priority
		Technology Issues		
T1	Office Office docum or 6	Town offices currently use different versions of Microsoft products. Town staff reported that different versions of Microsoft (2000, 2007 etc) are in use, making sharing MS Word and Excel ents difficult. Also, PC's are replaced on as needed basis, usually 5 at a time. Supporting different types of software can make shooting, PC management, and overall maintenance difficult and	38	High
Т2	The Town's Internet and network connectivity is unreliable, slow, or out for extended periods of time. Several departments reported that the Town's Internet connection is down frequently, sometimes for extended periods of time, creating customer service, public safety (license and records checks) and internal business process issues. For example, the Police Department reported that when the network connection between the Public Safety building and Town hall is down the, officers are not able to complete critical public safety tasks such as querying vehicle and driver license information.			Critical
Т3	No dedicated Wide-Area-Network (WAN) exists between outlying Town buildings and the Town Hall, other than the Public Safety building. Without dedicated WAN connectivity between all Town buildings, system access and collaboration among departments is very difficult. Additionally, data security is an issue with the work-arounds necessitated by not having a Town-wide WAN.		Critical	
T4	The Town Hall telephone system is outdated. The current telephone system at the Town Hall uses a Centrex service and end-of-life telephones. Only refurbished telephones with a short warranty period can be purchased when one breaks.		Critical	
Т5	being being system	ps are not being housed offsite. Backup tapes and backups performed to the Network-Attached Storage (NAS) device are not transported offsite on a regular basis. It is important to house a backup's offsite in order for the Town to recover in the event of a ophic failure at Town Hall.	37	High
Т6	depart depart	al department specific servers are located in open areas in the ment they serve. Lack of physical controls for servers in ments such as Assessing and the Treasurer's Office leave them offible to damage, unauthorized access, or theft.	34	High

	ssue Issue Description	Issue Score	Issue Priority
Т7	Many users are saving work files on their indi Saving files on a local PC leaves users susceptible event of a computer failure and makes it difficult collaboratively.	to data loss in the	Medium
Т8	Sharing data with the School Department is diffusion as Youth and Family services and Department of with the school or rely on data from schools to perfurently, extensive effort is needed to share necessecurity and confidentiality is at risk.	of Public Health work form their functions. 26	Medium
Т9	The Town Library's Information Technology of integrated with those of the rest of the Town. Supperformed by Library staff and IT expenditures an approved by the IT department.	port for Library IT is	Medium
T10	The current Public Safety communications susceptible to outages caused by tree limbs conditions. Because infrastructure lines are not buri are frequent in rain, snow and heavy wind storms.	and other natural	Medium
	Business Issues		
B1	The ability to accept credit card payments over the exist in all departments at the Town. Currently department is able to accept credit card payments at the ability to accept credit card payments over the volume Town services, the inability to accept credit card counter, at the Treasurer's office for example, has for refuse payment from citizens attempting to pay with credit in all the treasurer of the treasure	only the Recreation to the counter. While web exists for some payments over the forced Town staff to	High
B2	The Town's current website lacks conscomprehensive, and does not contain content that citizens. The Town is currently using Front Page website. Each department is responsible for maintaining and it was reported that a standard policy that does content and format for each department does not ecurrently limited by the amount of information and under the current web site. In addition, a citizen sel would allow citizens the ability to request document permits, receive answers to basic questions (FAQ), vi and agendas and request Town services (work ordunder the current website design.	e for the Town-wide ng its own web page escribes acceptable exist. Customers are e-services available lf service portal that nts, apply for Town lew meeting minutes	Critical
В3	Lack of integration between key Town systems data entry for Town staff, and reduces the amo available to customers. It was reported by several some critical Town systems such as RRC (for Personal appraisal, GIS and VADAR are not integrated and their instances of redundant data entry, limit the numb processes available to citizens and do not facilitate view of data across multiple systems. In addition, but in the MUNIS system must be rekeyed into the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of permits averages 400 per year that multiple view of the Ass number of the Ass numb	sunt of information al departments that al Property), VISION refore create several per of eGovernment a single centralized alding permits issued because system. The sust be entered into ent frequently needs	Critical
B5	The Town does not have a centralized syste meeting rooms. Meeting space for the Town is multiple calls and/or e-mails must be made in order to space for internal or public use.	at a premium, and	Medium

	sue mber	Issue Description	Issue Score	Issue Priority
В6	Aging senior frequer wide a capabi	omputer lab located adjacent to the offices of the Council on (COA) is not highly reliable and accessible for use by the citizens of the Town. The computer lab is for senior use and is ntly used in conjunction with COA staff to assist residents with a array of functions. Computers in the lab do not have sufficient lities to meet the needs of users, and when problems occur, the lab equently be closed until problems are resolved.	26	Medium
В7	access locked record and fin funds i	Town departments that collect fees and fines do not have a to the Town's financial system and often store money in drawers and safes for several days before the funds are led in MUNIS. Many Town departments that collect funds for fees les reported that they will issue paper receipts and then store the in locked drawers and desks sometimes up to two weeks prior to the being deposited and recorded in MUNIS.	36	High
В8	suppo interna making staff re	own is heavily reliant on paper based records and forms to rt internal and external business processes. Many of the Town's I business processes are paper based. Town staff are currently g paper copies of records and storing them in file cabinets. Many ported that they are running out of storage space and that retrieving ocuments is becoming increasingly difficult.	43	Critical
В9	systen cumbe the exi	is a reported lack of functionality in the existing Water Billing in which makes billing customers time consuming and ersome. It was reported by the Department of Public Works, that sting Water Billing system (VADAR) is time consuming to use, lacks reporting capabilities, and requires multiple steps to complete basic ses.	35	High
B10	to ass that the system	arks Department reported a lack of appropriate software tools ist with primary functionalities. The Parks Department reported e lack of a Cemetery management system and a service request for tree maintenance creates a reliance on paper based processes inefficient and time consuming.	27	Medium
B11	Town's	Meeting Minutes and Agendas are not being posted on the swebsite in a timely manner. Certain laws dictate the advance of board meetings, agendas, and minutes. Currently there is not procedure for communicating and posting this information.	26	Medium
		Management and Operations Issues		
M1	that do staff re is cum using t	own's payroll process is a paper-based, centralized process bees not leverage existing technology at the Town. Many Town ported that the current paper-based time entry and payroll process bersome and time consuming. Town staff indicated a desire to try he MUNIS decentralized payroll functionality instead of the current based process.	24	Medium
M2	not ex was re proced remote for req widely and er known	rehensive Information Technology policies and procedures do ist and IT capabilities are not communicated with the Town. It eported by Town staff and also observed that policies and ures related to many aspects of Town IT do not exist. For example, access to email is an option for Town staff, however the process uesting access and using the remote access email capability is not known. In addition, a common IT support help desk phone number, nail address is not commonly used by staff since it is not widely that a support email address exists. Additionally, a disaster ry plan along with related policies and procedures does not exist.	38	High

	sue mber	Issue Description	Issue Score	Issue Priority
	exist. standa compli	ition, a documented confidentiality policy related to IT does not Many departments maintain data that is subject to confidentiality rds, such as Youth and Family services needing to maintain HIPAA ance. Currently, there are no policy policies for managing ential information.		
М3	A lack of centralization of IT purchases creates issues and challenges for the IT staff. It is currently not a Town wide policy that all IT purchases for hardware and software applications be approved by the IT department. Some departments reported that they will purchase software applications and notify the IT department after go-live of the acquisition. This creates challenges for the IT department to support, back up and maintain these systems.			High
M4	The Town has a Help Desk work order system that has been acquired and installed, but is not in use. Utilizing the work order system is important in order to help organize and prioritize issues. It also assists in spotting support trends and documenting problem resolutions for future reference. Allowing users to enter their own tickets would help prevent the IT staff from being interrupted while they are working on another task. The system could be setup to provide automated messages to the users to let them know of the status and completion of their work order.		27	Medium
М5	Training resources or professional development opportunities related to IT are not widely available. Some existing systems, including standard office desktop products, are not being fully leveraged due to a lack of training opportunities. There appears to be a significant need for software application, technology-related training, and professional development for all Town employees.		40	Critical
M6	Safety Safety public Public the To	departments, their systems are supported by internal Public resources. The internal Public Safety resources have regular safety duties and are not assigned on a full time basis to support all Safety applications and technologies. The current environment at own's Public Safety building includes over two dozen software ations and 17 laptops that are supported by a part time IT resource.	32	Medium
M7	The Town's Information Technology Department consists of only one full time equivalent (FTE). It appears that IT staffing is not appropriate enough to support the number of Town systems, PC's and IT related technology tools.		46	Critical

Table 4: Strategic Issue List

2.3 Mission and Goals

The following sections outline the mission and goals for the Town and the Information Technology department. These guiding principles were developed by the Project Team and BDMP as well as the Town Administrator during the course of the project. During this time of rapid change and innovation, this plan and these principles will be essential tools as the Town moves forward in pursuit of its mission and goals.

Mission

A mission statement is a written statement of purpose that is used to communicate why an organization exists. It serves to guide business processes and decisions and the interaction with others. Understanding the overall mission of both the Town of Wayland and the Information Technology Department helps to guide the development of initiatives intended to solve the information technology issues that may exist at the Town.

Information Technology Strategic Plan

Town of Wayland Mission Statement

(Revised November 23, 2009)

The mission of the Town of Wayland is to deliver the highest quality municipal services in a fiscally responsible an operationally responsive manner to the citizens that it serves. The Town Administrator will maximize the potential for Wayland's volunteer boards and commissions and professional staff to respond effectively to community and individual citizen needs through the use of long-term strategic planning and enhanced communications with residents.

Table 5: Town Mission Statement

IT Department Mission Statement

(Revised November 23, 2009)

The mission of the Town of Wayland's Information Technology Department is to provide an information technology environment with seamless delivery of services to Town Hall staff and the community. The Department has a vision to maintain leadership in technology by teamwork, mutual respect, honesty, dedication and commitment to all constituents.

Table 6: IT Department Mission Statement

Goals:

Goal setting is used to convert the strategic mission into performance targets to help guide the organization to successfully achieving its objectives over the course of the next five years. Goals represent a commitment to achieving specific outcomes and results in the Town.

Number	Town of Wayland Goals (Revised November 23, 2009)		
1	Work collaboratively with the Finance Committee, to reduce costs while maintaining current level of services and to reduce structural deficit inherent in Proposition 2 ½ in a climate of rising retirement, health insurance, and energy costs		
2	Pursue and implement structural changes in service delivery systems using techniques such as consolidating operations with the School Department and collaborating with comparable municipalities.		
3	Complete implementation of phased consolidation of Facilities Management operations.		
4	Complete review for potential financial and information management service sharing, including grant administration, purchasing, benefit administration, payroll and accounts payable functions with schools.		
5	Continue discussions with comparable communities on areas for potential collaboration on service delivery, operations and equipment purchases.		
6	Support Finance Committee initiative to update long-range financial strategy for the Town.		
7	Support efforts to improve energy efficiency and explore alternative energy sources.		
8	Continue with Department of Public Works reorganization.		

Number	Town of Wayland Goals (Revised November 23, 2009)		
9	Pursue litigation strategy to assure compensation from responsible entities for structural and design deficiencies identified and repaired at Public Safety Building.		
10	Complete permit process for Town Center development, including construction of wastewater treatment facility.		
11	Improve and enhance communication with residents through print media and electronic methods.		
12	Review and expand opportunities for public transportation through MetroWest Regional Transit Authority (MWRTA).		

Table 7: Town Goals

Number	IT Department Goals (Revised November 23, 2009)
1	Identify IT projects and priorities to support the Town of Wayland Five Year Strategic Plan
2	Maintain a robust and flexible IT infrastructure
3	Manage within IT budgets, always looking for ways to decrease costs and seek out efficiencies
4	Maintain excellent Help Desk service to Town Hall and Public Safety personnel
5	Provide an Information Technology environment that will build and retain a strong IT infrastructure
6	Improve the IT assessment process to constantly reassess our Information Technology Mission
7	Work with other Town personnel to share ideas and strategies to improve efficiency and effectiveness of IT support and management Town-wide
8	Collaborate on system-wide initiatives while representing the needs of Town Hall

Table 8: IT Department Goals

3.0 Town-wide Technology Initiatives

This section summarizes all initiatives developed as a result of the planning effort, includes an overview of the form used to present initiatives, and provides the completed descriptions for all initiatives developed for the Strategic Plan.

This section summarizes the initial list of initiatives that were developed to address the comprehensive list of strategic issues outlined in Section 2.2 of this report. The initiatives are designed to address the strategic issues over the next five years.

3.1 Technology Initiatives Reference Table

The table below summarizes all of the initiatives developed collaboratively between BDMP and the Town. This is a prioritized draft list and is meant to demonstrate the entire breadth of initiatives identified. The final list of projects and initiatives described in section 3.3 of this plan is a result of BDMP's recommendations for projects that should be undertaken to address the strategic issues identified and represents a smaller list of projects than those represented in the table below. The final list of recommended projects in section 3.3 includes 24 initiatives that were further developed and refined from the initial list of initiatives below.

	Initiative Summary	Strategic Issue
A	Add IT resources. Add additional Information Technology resources at the Town to improve internal IT support and allow for the maintenance and implementation of future IT initiatives.	T2, M6, M7, B6
В	Implement Backup Procedures. Implement Town-wide system backup procedures for all systems and files and store back up data offsite.	T5, M2
С	Complete Town-wide Fiber Network. Complete the installation of a Town wide fiber network initiated by the School Department.	T3, T8, T9
D	Improve Network Performance. Improve Internet and network connectivity performance for all Town office locations (Town Hall, Public Safety etc).	T2, T9, T10
E	IT Training. Provide IT related training opportunities to Town staff to not only include training on commonly used technology products (Word, Excel, Outlook) but also common IT tasks such as printer maintenance and use of communication tools.	T1, B2, M2, M5
F	Re-Issue IT Policies and Procedures. Update and Re-Issue Town IT Policies and Procedures to include policies for IT related purchases, IT support, remote access, acceptable use and training.	T7, T9, M2, M3, M4
G	Update Server Infrastructure. Update the existing server and IT infrastructure to include consolidating servers in a central, climate controlled location, with system monitoring capabilities, racks and wire management as well as replacing the existing network switching infrastructure.	Т6
н	PC Replacement Program. Implement a PC replacement program where Town PC's are replaced on a recurring basis to assist with standardization of operating systems etc.	T1
I	Update Telephone System. Update the Town Hall telephone system to a newer technology.	T4
J	Department Interoperability Improvement. Increase interoperability between Town departments through increased data sharing, integration of key systems, and enhanced workflow.	T3, T8, B3, B5
K	MUNIS Expansion. Expand the use of MUNIS for other uses at the Town including online payroll and cash receipts entry.	B3, B7, M1
L	Server Virtualization. Implement server virtualization where appropriate.	

	Initiative Summary	Strategic Issue
М	Improve Town Website. Implement a Town website that offers eGov services for Town citizens including online access to payment history, assessment history, ability to pay bills, request Town services, submit requests for inspections etc.	B1, B2, B11
N	Disaster Recovery Plan. Develop a Disaster Recovery Plan for Town systems.	M2
0	Patch Management Plan. Create a patch management plan for issuing critical updates and patches to Town PC's.	M2
Р	Parks Department Software. Implement needed software tools at Parks Department including asset tracking (trees), service requests, and cemetery management.	B10
Q	Assess Email Filtering System. Examine the Town's current email system and related SPAM filtering to determine if settings and parameters can be changed to improve efficiencies.	T1
R	Network Monitoring Procedures. Implement Town wide IT system management procedures including monitoring network systems for uptime and performance as well as labeling and cataloging Town computer hardware.	T2
S	Library Wireless Access. Enhance public access to the Library's secure wireless network.	
т	Public Health Database. Develop a resource database (MS Access or a COTS product) for Public Health Nurse that includes information on Town seniors, nursing statistics, and number of clients served.	
U	Public Access Kiosk. Establish a public access kiosk in Town Hall to assist Town citizens with obtaining Town information, answering FAQ's and paying for Town services via credit card.	B1
V	Utility Billing System. Implement a new utility billing system that will integrate with other Town systems.	B9
W	Document Management System. Implement a Document/Records Management System.	B8
х	System Consolidation. Improve efficiency across Town departments for major business processes such as financial processing, inspections, permitting, assessing by consolidating these functions into one system.	В3
Υ	Laptop Computers for Field Inspectors. Provide inspectors with laptops for use in the field to capture permit and inspection information.	В3
Z	Improve GIS Access. Provide real time access to Wayland GIS information for Town Public Safety Departments.	Т3
AA	Library RFID System. Implement Radio Frequency Identification (RFID) technology at the Library to track books, assets and other Library materials.	

Table 9: Initial List of Initiatives

3.2 Overview of Technology Initiatives

Each initiative in Section 3.3 has been presented utilizing a standard form to document each planned initiative. An initiative may also be referred to as a project. Below, BDMP has provided a sample template that includes a description of each field in the form and its contents.

Town of Wayland IT Initiative										
Initiative number and name (from Sections 3.1, 4.1)										
	Initiative Description									
Description	of the in	nitiative)							
			Initiative S	our	ce Inform	ation				
Functio Area:	Functional Area: Technology Issues, Business Issues, Management & Operations Issues									
Priorit Rankin	_	X of 2	24, where X is	this	s initiative's	s ranking am	ong the 24 initiatives			
			Strate	egi	c Issue(s)					
#	Listir	ng of th	ne strategic i	ssu	ie(s) that t	this initiative	e addresses			
Initiative Ranking										
(Each initiative ranking will be colored Green, Yellow or Red to help the reader understand the challenges inherent in each initiative.)										
Strategio Ran		(Cost Benefit		Ease of Implementation		Maturity of Technology			
Rating Strategic Rank (BI Tow	Issue OMP &	В	Rating of the Cost Benefit (BDMP) (High, Medium, Low)		Rating of the Ease of Implementation (BDMP) (Easy, Medium, Hard)		Rating of the Maturity of the Technology (BDMP)			
(Very Higl Medi	h, High,	•					(Established, Leading Edge, Bleeding Edge)			
			Estimated	Ini	itiative Bu	dget				
FY2011	FY2	012	FY2013	I	FY2014	FY2015	5-Yr Total Cost			
\$X ₁	\$>	(2	\$X ₃		\$X ₄	\$X ₅	Sum (\$X ₁ -\$X ₅)			
Budge Descrip		_	•				ling the methodology er the next five years.			
		A	ction Items t	o Ir	nplement	Initiative				
☑ Checklis	st of the	action	items that are	ne	eded to im	plement the	initiative			
			Anticip	ate	ed Benefit	s				
☐ Checklist of the anticipated benefits that are expected from the initiative										

3.3 Prioritized Plan Initiatives

Town of Wayland IT Initiative

1 - Update Server and IT Infrastructure Including Backup Procedures

Initiative Description

This initiative should be handled in a four phase approach:

- ➤ Phase 1 Construct secure, climate controlled server room
- ➤ Phase 2 Upgrade network switching infrastructure
- ➤ Phase 3 Install and configure centralized tape backup system

Phase one should begin by constructing a partition wall in the IT area to separate all servers and networking equipment from the rest of the IT space. A separate locking door should be installed on this new server room at this time. In order to maintain a proper operating environment for all equipment, this room should have its own HVAC zone that can be controlled independently of any other zones in the building. During this phase it would also be appropriate to install two new equipment racks (one two post and one four post) along with wire management into which all IT infrastructure can be installed. The two post rack should be installed in a position that would allow the existing network patch panels to be transferred into the rack without requiring any additional cabling if possible. An open four post rack should also be installed at this time. This rack will house a new tape backup system (phase 3), a new UPS battery backup to replace the large number of battery backups currently in use, and new server hardware that will be obtained during phase three and four of this initiative. This four post rack should also be installed with a keyboard, video, mouse (KVM) console so that all physical servers can be accessed from one central location.

Phase two of this initiative focuses on upgrading the Town's switching infrastructure. The Town's current data switches are unmanaged and therefore do not allow for the configuration of networking services such as Quality of Service and Virtual Local Area Networks which are recommended for any voice over IP (VoIP) implementations. These unmanaged switches also make performing any sort of network monitoring or control very difficult. By installing one 24 port and two 48 port managed switches in place of the five current unmanaged switches, the Town will be better positioned to implement future technology-based initiatives. If the Town plans on implementing a VoIP telephone system in the future, we would recommend purchasing Power over Ethernet (PoE) switches that can be used to provide the necessary power to the telephone sets without requiring an external power supply.

Phase three addresses the Town's need for a centralized backup system and offsite backup tape storage. This implementation will include purchasing a tape library, backup tapes, backup software, and a rack mount server to run the backup software. The backup server and tape library should be installed in the four post rack and backup agents would be installed on each server to be backed up. The Town would then contract with a secure storage facility to pick up the backup tapes at Town Hall on a schedule of the Town's choosing for storage offsite.

Initiative Source Information									
Functional Area: Technology and Management & Operations Issues							ssues		
Prio	rity Rar	king:	1 of 2	4					
				Strate	egic Issue(s)				
T5	Backu	ıps are ı	not be	ing housed o	offsite.				
Т6	T6 Several department specific servers are located in open areas in the department they serve.								
M2	-			ormation Te	• • • •		procedures do not own.		
				Initiat	ive Ranking				
St	rategic Ranl			Cost Benefit		se of nentation	Maturity of Technology		
	Very H	igh		High	Ме	dium	Established		
				Estimated	Initiative Bud	dget			
FY	2011	FY20)12	FY2013	FY2014	FY2015	5-Yr Total Cost		
\$43	3,400	\$0)	\$0	\$0	\$0	\$43,400		
-			pricing Phase Serve UPS E Racks KVM I Rack Phase Install Phase Backu Tape	y listed below: 1 Telephone 2 And Wire Ma Rack Console Installation and 2 Ce Switches: \$890 ation and conf	ruction: \$8,00 o: \$1,600 nagement: \$1 : \$1,100 d setup: \$2,00 00 non PoE; \$ figuration: \$1,0 800 00 5,000	,500 ,00 (1 day) 612,500 PoE	mulated based upon		
				Action Items	to Implement	t Tasks			

- ☑ Develop Request for Proposal (RFP) based on initiative description.
- ☑ Receive RFP responses from at least 3 vendors.

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- ☑ Compare each vendors proposed approach with initiative description to ensure that at a minimum, the critical components described in each phase are included in each vendor's response.
- ☑ Using Town's current procurement processes, select vendor based on level of fit with required tasks in initiative to be completed, costs and approach to conducting each phase of the project(s).

Anticipated Benefits

- ☑ Secure climate controlled space improves physical security and longevity of network infrastructure.
- ☑ Organized server room makes troubleshooting and maintenance of IT equipment easier and more efficient.
- ☑ Fewer battery backup systems to maintain.
- ☑ Ability to monitor, controls, and troubleshoot network traffic.
- ☑ Ability to implement services such as VoIP that are not possible with current equipment.
- ☑ Simplify backup process by utilizing one software package and one set of tapes to back-up all of the Town's servers.
- ☑ Ability to perform backups on weekends and holidays.
- ☑ Offsite storage of backup tapes will help protect the Town from data loss in the event of a catastrophic event at Town Hall.

Town of Wayland IT Initiative

2 - Add IT Resources to Assist with and Support Future IT Initiatives

Initiative Description

This initiative is to add an additional IT resource to assist the existing IT Manager with supporting the Town's IT infrastructure. The Town currently has a single IT resource to support the existing IT infrastructure. In addition there are two resources from Public Safety that spend between 10% (Fire) and 30% (Police) of their time on IT related support tasks. The existing IT staffing level for the Town is not reflective of the number of PCs, hardware and software applications that need to be supported. In some cases, staff workstations can be down for 1-2 days due to the lack of an appropriate number of IT support resources. In addition, in order to accomplish many of the initiatives in this plan, an additional IT resource will need to be added to assist the existing IT Manager.

It is important that the Town also provide adequate training opportunities for the existing IT Manager (as part of Initiative #11) to ensure they have the opportunity to stay abreast of new technologies and software tools to help manage the Town's IT infrastructure. Some of the initiatives identified in this plan will require experience with technologies such as Voice Over Internet Protocol (VOIP), Server Virtualization etc. It will be important for the Town's IT department to continue to develop the existing skill set through further training and professional development in addition to augmenting skills through the addition of the new resource. The Town's IT department as a whole should possess the following skills (either through existing skill sets, training of existing staff or the addition of new IT resources):

- Network Administration
- PC support
- Server virtualization
- WAN, telecom, and network connectivity
- Implementing and/or supporting Voice Over Internet Protocol (VOIP) phone systems
- Enterprise-wide software applications
- IT Project Management

The Town should begin the process of recruiting an IT resource at the start of fiscal year 2011 so that a resource could be added midway through the year. While not ideal and not recommended as a long term solution, the Town could consider outsourced and/or part time resources to assist with the IT initiatives as an interim solution. This resource or combination of resources should at a minimum possess network administration experience, PC support skills and experience with server virtualization. This resource will allow the Town to shift some of the time spent by Public Safety resources on IT support back to the IT Department, though Public Safety should continue to provide internal support for specific Public Safety areas and systems. With an additional IT resource at the Town level, Public Safety can rely on Town IT for network, desktop PC, and computer infrastructure support which will allow them to focus on public safety

specific system and issues.								
Initiative Source Information								
Fun	ctional	Area:	Techr	nology, Busine	ess,	and Mana	agement & O	perations Issues
Prio	rity Ran	king:	2 of 2	4				
				Strate	gic	Issue(s)		
T2		own's ir ded per			k co	nnectivity	y is unreliab	le, slow, or out for
M6		ments,		IT staff has i systems are s				n the Public Safety blic Safety
М7		own's lı quivale			logy	Departm	ent consist	s of only one full
В6	The Council on Aging computer lab located adjacent to the offices of the Council on Aging (COA) is not highly reliable and accessible for public use.							
				Initiat	ive	Ranking		
St	rategic Rank		(Cost Benefit		Ease of Implementation		Maturity of Technology
	Very Hi	igh		High		Easy		Established
				Estimated	Initi	iative Bud	dget	
FY	2011	FY2	012	FY2013	F	Y2014	FY2015	5-Yr Total Cost
\$25	5,000	\$50,	000	\$50,000		50,000	\$50,000	\$225,000
This initiative will cost the Town a minimum of \$50,000 to add an IT resource with the skills needed to assist with the support the new IT infrastructure. \$25,000 will be spent in year one of the Plan, assuming the resource is added half way through the year. The cost will increase to a full salary of \$50,000 in the remaining 4 years of the plan. It should be noted that \$50,000 is likely the minimum the Town can expect to spend on a full time IT resource that possess the skills needed by the Town. The Town may find that they need to spend \$10,000 to \$15,000 more to secure a good candidate for this role.								
			that th	ey need to sp	end		•	
			that th candic	ey need to sp	end le.	\$10,000 1	to \$15,000 m	

- ☑ Develop a job description for the new IT resource that includes experience in:
 - Network Administration
 - PC support
 - Server virtualization
 - WAN, telecom, and network connectivity

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Information Technology Strategic Plan

- Implementing and/or supporting Voice Over Internet Protocol (VOIP) phone systems
- Enterprise-wide software applications
- Basic IT Project Management
- ☑ Advertise for the position in both local media resources as well as online with many of the IT related employment websites.
- ✓ Interview candidates (minimum of 3-4).
- ☑ Take candidates on tour of existing IT infrastructure and systems.
- ☑ Ask candidates to describe approach to addressing some of the issues and initiatives being considered and faced by the Town.
- ☑ While more costly and potentially less reliable, the Town could consider initially outsourcing some of the assistance that will be needed to implement/assist with the initiatives (phone upgrade, server virtualization, etc).

Anticipated Benefits

- ☑ Less reliance on external vendors for IT related support.
- ☑ Less downtime for Town systems, hardware and PCs.
- ☑ Less reliance on internal non-IT resources (Public Safety) to support IT environment.
- ☑ Ability to appropriately support future IT infrastructure and Strategic IT Plan initiatives.

Town of Wayland IT Initiative

3 – Complete Town Fiber Project Initiated by Schools

Initiative Description

In 2009 the Town of Wayland Public Schools began the process of connecting all Town Schools to a high speed fiber optic backbone. Connections points to the Town have already been installed at any point where these fiber lines pass Town buildings.

The Town's current Wide Area Network (WAN) consists of a collection of disparate Internet connections, VPNs, and a T1 line that vary depending on the Town facility location. The lack of a consistent, stable, well designed WAN has led to difficulties sharing data and otherwise working collaboratively among Town departments.

To help remedy this issue, we recommend that the Town take advantage of the opportunity presented by the Schools and connect three Town buildings to the fiber line including Town Hall, Public Safety and Highway. The Fiber project initiated by the Schools provides a tremendous opportunity for the Town to leverage work already being performed in the Town to establish a cost effective, high speed fiber optic network that will reduce Town IT infrastructure costs and improve network performance and reliability. Many towns and cities have established, or plan to establish, high speed fiber optic networks to connect Town facilities.

	Initiative Source Information									
Fun	unctional Area: Technology Issues									
Prio	rity Rar	king:	3 of 2	4						
	Strategic Issue(s)									
Т3	T3 No dedicated Wide-Area-Network (WAN) exists between the outlying Town buildings and the Town Hall, other than the Public Safety building.									
T8	Sharing data with the School Department is difficult.									
Т9	The Town Library's Information Technology functions are not integrated with those of the rest of the Town.									
				Initiat	ive	Ranking				
St	rategic Rank		(Cost Benefit		Ease of Implementation		Maturity of Technology		
	High	1		High	gh Easy		asy	Established		
				Estimated	Init	iative Bu	dget			
FY	2011	FY2	012	FY2013	F	Y2014	FY2015	5-Yr Total Cost		
\$85	5,000	\$	0	\$0		\$0	\$0	\$85,000		
	Budget The budget associated with this initiative is based on an estimate solicited by the Town from the contractor that installed fiber optic									

lines for the Schools. The budget estimate also includes equipment
for connecting the fiber line to 3 Town buildings (Town hall, Public
Safety and Highway) network infrastructure. According to the Town
and Schools, the budget for this project includes the equipment
costs associated with connecting the fiber line to the buildings
(switches etc.) computers.

Action Items to Implement Initiative

- ☑ Engage contractor to run fiber optic lines from existing connection points to Town buildings (Town Hall, Public Safety and Highway).
- ☑ Install and configure networking equipment to allow data connectivity between Town buildings.

Anticipated Benefits

- ☑ Fast, secure and reliable network communication among all Town buildings.
- ☑ Easier and more consistent communication between Town departments.
- ☑ Eliminates need for separate Internet Service Provider accounts at outlying Town buildings.
- ☑ Reduces costs on computer server equipment and support since servers can be centralized.
- Reduces or eliminates telecom costs since computer network traffic can be carried on Town owned lines instead of leased lines from telecom providers.

Town of Wayland IT Initiative

4 - Improve Internet Performance and Network Connectivity

Initiative Description

The Town Hall's connection to the Internet frequently goes down for extended periods of time. This affects many functions including the ability to send and receive e-mails, and prevents Town residents from conducting regular business.

As the Town and its residents increasingly depend on the ability to communicate electronically, it is important to improve Internet and network connectivity performance and reliability for all Town office locations (Town Hall, Public Safety building, etc.).

We recommend that the Town consider acquiring a new Internet connection with more bandwidth than their current T1 connection to ensure ample capacity for the carrying out the functions of the Town. We also suggest that the Town identify which outlying buildings require a redundant WAN connection back to Town Hall in the event of a primary WAN failure. We feel that at a minimum the Public Safety Building should have multiple paths back to the Town Hall in order to make sure those departments will be able to access the data they need after hours. Implementing initiative 3 – Fiber project, will provide a new, faster and more reliable way for the Public Safety building to connect to Town Hall. A leased line from a telecom provider should be included in the project to upgrade the Internet connection to establish this redundant WAN connection between the two buildings.

	Initiative Source Information									
Fun	Functional Area: Technology Issues									
Prio	Priority Ranking: 4 of 24									
	Strategic Issue(s)									
T2		own's Into			c connectivit	y is unreliab	le, slow, or out for			
Т9				Information st of the Tow		functions ar	e not integrated			
T10	The current Public Safety communications infrastructure is susceptible to outages caused by tree limbs and other natural conditions.									
				Initiat	ive Ranking					
St	rategic Rank		C	Cost Benefit		ase of mentation	Maturity of Technology			
	High			High	E	Easy	Established			
Estimated Initiative Budget										
FY	2011	FY201	12	FY2013	FY2014	FY2015	5-Yr Total Cost			
\$9	,000	\$9,00	0	\$9,000	\$9,000	\$9,000	\$45,000			

Budget Description

The estimated budget for this initiative is based on the expected recurring monthly cost for an upgraded Internet connection as well a redundant WAN connection between the Public Safety building and the Town Hall. The budget amount is for additional funding over the existing \$11,000 that is currently used to pay the current Internet/WAN provider on an annual basis.

Action Items to Implement Initiative

- ☑ Decide which Town buildings should have redundant connectivity to the Town Hall in case of a primary WAN failure.
- ☑ Solicit quotes from at least three telecommunications providers for new, faster (higher bandwidth) Internet uplink and backup Wide Area Network circuits for any Town buildings deemed to have a need for a redundant connection to the Town Hall.
- ✓ Install and test new Internet connection.
- ☑ Install and test any backup WAN circuits.

Anticipated Benefits

- ☑ More reliable and better performing Internet connection.
- ☑ Ability for remote sites to access mission critical data in the event of a primary WAN failure.
- ☑ Less downtime and improved reliability due to Internet and/or WAN outages.
- ☑ Greater employee productivity when working and relying on Internet resources.

Town of Wayland IT Initiative

5 – Update Town IT Policies and Procedures Including IT Purchasing, IT Support, Acceptable Use Policy and Training Procedures

Initiative Description

This initiative is to update the Town's existing IT related Policies and Procedures. The current IT Policies and Procedures are outdated, not widely understood or adhered to by all Town staff and do not address some critical IT related issues. This initiative will allow the Town to update the existing policies to address new IT issues as well as recurring issues that are impacting Town processes.

At a minimum the updated policies should address the following areas:

IT Purchasing: This section of the revised Policy and Procedure manual should describe that the Town has centralized all IT purchases and that software, hardware and any IT related equipment must be purchased with the involvement of the IT department. It is recognized that in some cases, subject matter expertise from the individual departments will be needed to evaluate and recommend department specific applications such as Library, assessing, GIS or public safety systems. However, IT must be involved to understand and advise on the implementation planning, support, ongoing maintenance, and overall impact the new system(s) or hardware will have on the existing IT infrastructure.

This section should also describe (in collaboration with Town Procurement) that new IT systems will follow a structured procurement process that includes functional and technical requirements definition, development of a Request for Proposal (RFP), vendor evaluation (product demonstrations in some cases), formal scoring, reference checks and a contract negotiation process.

IT Support: This section will address the procedure for requesting IT support. The methods for requesting IT support through phone and email should be documented as well as an escalation policy and expected response times. The IT department will use the existing IT support software to record, manage and prioritize IT support requests. The software will also allow the IT department to produce quarterly statistics related to number of support issues logged and the status of outstanding issues. Tracking this information will allow Town management to identify areas where additional training might be needed, hardware replacement needs, or where Town systems could be integrated for increased data sharing and interoperability.

In this section, the Town should also consider developing a policy that describes how IT support resources could be shared with other Town departments in specific instances. For example, the Library and Schools have resources that provide basic IT support. There may be times of increased support needs (i.e., PC rollout, new system implementations, etc.) when additional support resources are needed. The Town should consider that in some circumstances, collaborating with Library and School resources for support issues could be an option.

Remote Access: This section should describe the procedure for connecting remotely to

Town systems such as network drives, email, and other systems. The procedure for requesting access, applicable security forms to be completed; security protocols and logon and logoff procedures will be described in this section.

Acceptable Use: This section should describe the Town's acceptable use policy for the Internet and PCs. At a minimum, this section should describe in detail the policies related to use of email, internet browsing, downloading of files, storage of personal files on Town PCs, streaming media, storage and security of laptops, smart phones and other IT related equipment issued by the Town (i.e., cell phones, pagers etc.). In addition this section should describe the Town's policy on the usage of social networking sites. Municipalities across the country continue to develop policies related to municipal use of social networking. The trend continues to indicate that social networking for local government has been limited to mass notifications (similar to the Town's reverse 911 system), and for requesting services (i.e., work orders). Acceptable Use policies are commonly included in an organization's Employee Manual, in addition to existing as a standalone policy document. Including the Acceptable Use policy in the Employee Manual is often done to allow the organization to dismiss employees should they violate acceptable use policies since adherence to the Employee Manual is typically a condition of continued employment.

Disaster Recovery: This section should describe the how the Town's Disaster Recovery Plan will be implemented in the event of an emergency or unforeseen incident that impacts Town systems and/or IT infrastructure.

Initiative Source Information									
Functional Area: Technology Issues and Management & Operations Issues									
Prio	rity Ranking:	5 of 24							
	Strategic Issue(s)								
T7	T7 Many users are saving work files on their individual computers.								
Т9	The Town Library's Information Technology functions are not integrated with those of the rest of the Town.								
M2	Comprehensive Information Technology policies and procedures do not exist and IT capabilities are not communicated with the Town.								
М3	A lack of centhe IT staff.	tralization of IT purcha	ses creates issues ar	nd challenges for					
M4		s a Help Desk work ord is not in use.	der system that has be	een acquired and					
Initiative Ranking									
Strategic Issue Rank		Cost Benefit	Ease of Implementation	Maturity of Technology					
	Very High	Medium	Easy	Established					
Estimated Initiative Budget									

FY2011	FY2012	FY2013	FY2014	FY2015	5-Yr Total Cost
\$10,000	\$0	\$0	\$0	\$0	\$20,000

Cost Budget

The budget for this initiative assumes that the Town will hire an outside consultant to develop the IT policies and procedures for the Town. This is a onetime cost. Should the Town decide to develop the policies and procedures in-house in collaboration with the new IT resources; the cost will be \$0.

Action Items to Implement Initiative

- ☑ Determine if internal IT resources could develop revised IT Policies and Procedures. If it is determined that outside assistance is required than an RFP should be developed.
- ☑ Develop and issue RFP for assistance developing IT Policies and Procedures.
- ☑ Evaluate potential vendors based on past work products and experience developing the policies described in this initiative.
- ☑ Develop Policies and Procedures.
- ☑ Administer new Policies and Procedures through Town-wide department meetings.
- ☑ Update and reissue Policies and Procedures as needed.

Anticipated Benefits

- ☑ Greater control over IT resources and spending through centralized purchasing.
- ☑ Increased planning for support and maintenance of new systems due to centralized IT purchasing.
- ☑ Increased IT support efficiency through greater use of IT support system.
- ☑ Reduced liability to the Town due to acceptable use policy.
- ☑ Increased Internet availability due to reduction in non-acceptable use issues (i.e., streaming and downloading large files).
- ☑ Greater understanding of remote access capabilities and expectations.

Town of Wayland IT Initiative

6 – Update Town Telephone System to Newer Technology

Initiative Description

This initiative is to replace the current Centrex service and end-of-life telephones in use in the Town. Many modern telephone systems are more cost effective for the Town and provide an opportunity to leverage additional features not available with the current service.

The initiative is to procure a new telephone system for the Town including the purchase of 100-150 telephones. The Town should invest in a voice over IP telephone system that serves the Town Hall and other Town buildings. The Public Safety building currently utilizes a relatively new telephone system and would not need to replace it. The two phone systems can be connected via the future fiber optic network to allow desk to desk dialing between Town Hall and the Public Safety building. The Town has already begun investigating telephone systems, this work may be able to be leveraged when developing an RFP for a new telephone system.

	Initiative Source Information									
Func	Functional Area: Technology Issues									
Prior	ity Ran	king:	6 of 2	4						
	Strategic Issue(s)									
T4	T4 The Town Hall telephone system is outdated.									
Initiative Ranking										
Strategic Issue Rank			(Cost Benefit		Ease of Implementation		Maturity of Technology		
	Mediu	m		High		Easy		Established		
				Estimated	Init	tiative Bu	dget			
FY2	2011	FY2)12	FY2013	ı	FY2014	FY2015	5-Yr Total Cost		
\$50	,000	\$0)	\$0		\$0	\$0	\$50,000		
Budget cost of procuring and installing a basic VoIP or traditional telephone system for 100 – 150 telephone sets.						P or traditional PBX				
	Action Items to Implement Initiative									

- ☑ Develop Request for Proposal (RFP) for the replacement of the Town's current telephone system.
- ☑ Review RFP responses and select a vendor of choice based on their abilities, pricing, and solution proposed.
- ☑ Work with vendor to implement new telephone system.

Information Technology Strategic Plan

- ☑ Current, more reliable technology.
- ☑ Reduced cost per telephone extension by bringing the phone system in house.
- ☑ Better availability of support and replacement parts.
- ☑ Opportunities to introduce and leverage new features such as PC integration for faxing to the desktop.
- ☑ Enhanced level of administrative control since any configuration changes to the system can be performed in house.

7 – Develop Patch Management Plan for Critical System Updates

Initiative Description

The purpose of this initiative is to develop a patch management plan that will ensure systems are updated with the latest software releases. Currently updates are not performed in the Town in a systematic way and the result is different versions of software are in use and vulnerability of systems exists due to lack of security updates.

Once initiative number 1 is complete, the ability to install and push patch updates to servers and all workstations from a central location will exist. This will grant the administrator access to a repository of critical OS and application software patches and updates, which can then be deployed town wide once they have been tested successfully.

	Initiative Source Information							
Fun	ctional Area:	Management & Operations Issues						
Priority Ranking:		7 of 24						
	Strategic Issue(s)							
M2	M2 Comprehensive Information Technology policies and procedures do not exist and IT capabilities are not communicated with the Town.							
	Initiative Ranking							

Initiative Ranking							
Strategic Issue Rank	Cost Benefit	Ease of Implementation	Maturity of Technology				
Medium	Medium	Easy	Established				
Estimated Initiative Budget							

FY2011	FY2012	FY2013	FY2014	FY2015	5-Yr Total Cost
\$2,000	\$0	\$0	\$0	\$0	\$2,000

Budget	The budget for this initiative is derived from the purchase and
Description	implementation of an automated patch management solution.

Action Items to Implement Initiative

- ☑ Develop Request for Proposal (RFP) to implement a centralized patch management system.
- ☑ Review RFP responses and select a vendor of choice based on their abilities, pricing, and solution proposed.
- ☑ Work with vendor to implement new patch management system.
- ☑ Develop a structured patch deployment plan.

Information Technology Strategic Plan

- ☑ Time spent updating workstations individually will be decreased.
- oxdot Consistency of versions of software will ease support.
- $\ensuremath{\square}$ Timely updates to software will ensure reduced security risks.

8 - Develop Disaster Recovery Plan

Initiative Description

The Town of Wayland does not currently have a Disaster Recovery Plan. The Town has an obligation to its citizens and businesses to provide assurance that in the event of a disaster the Town will be capable of delivering its services.

As part of developing a Disaster Recovery Plan, the Town will need to conduct a risk assessment in order to prioritize the services it provides and determine how quickly these services would need to be restored after a catastrophic event. The Town will also need to decide through a cost-benefit analysis, the amount of resources they wish to invest in developing redundant offsite infrastructures for (i.e., computers, servers, office space, etc).

In addition to creating a Disaster Recovery Plan, the plan should be tested to make sure that in the case of an actual emergency, the Plan would address all necessary recovery considerations.

Initiative Source Information						
Functional Area: Management & Operations Issues						
Priority Ranking:	8 of 24					

Strategic Issue(s)

M2 Comprehensive Information Technology policies and procedures do not exist and IT capabilities are not communicated with the Town.

	Initiative Ranking							
Strategic Issue Rank		(Cost Benefit		Ease of Implementation		Maturity of Technology	
	Medium			Medium		Easy		Established
				Estimated	Init	tiative Bud	dget	
	FY2011	FY20	12	FY2013	ı	FY2014	FY2015	5-Yr Total Cost
	\$24,000 \$0		\$0		\$0 \$0		\$24,000	

Budget Description

The budget for this initiative is based on the cost for the Town to hire an outside consultant to assist in formulating an initial Disaster Recovery Plan for the Town. This Plan will then be reviewed internally on an annual basis and modified as needed.

Action Items to Implement Initiative

- ☑ Engage consultant to assist Town in creating a Disaster Recovery Plan.
- ☑ Implement any procedural and infrastructure changes required as a result of the Plan.

Information Technology Strategic Plan

Perform periodic reviews and tests of the Plan to confirm that it is sufficient to get Town operations up and running as soon as possible following a disastrous event.

- ✓ Increased risk mitigation.
- $\ \square$ Improved business continuity.
- ☑ Decreased downtime.
- ☑ Preservation of critical data.

9 – Assess Email System and Spam Filters to Improve Efficiency

Initiative Description

The purpose of this initiative is to reconfigure the parameters of the current email filtering software to improve email efficiency. It was reported that email size restrictions and spam filter specifications are not optimal and that many incoming and outgoing emails are being rejected. Additionally, many spam emails are not blocked and are filling up the email storage capacity and slowing the system. The current spam filtering system, GFI Mail Essential, is not configured to utilize its full capabilities. This initiative is to research what the parameters should be set to by gathering information from the email users, and making the appropriate adjustments to the filtering software.

Initiative Source Information							
Functional Area:	Technology Issues						
Priority Ranking:	9 of 24						
Strategic Issue(s)							

T1 Some Town offices currently use different versions of Microsoft Office products.

	Initiative Ranking								
Strategic Issue Rank		(Cost Benefit Ease of Implementation		Maturity of Technology				
	Mediu	m		Low		Easy		Established	
				Estimated	Init	tiative Bud	dget		
	FY2011	FY201	12	FY2013	I	FY2014	FY2015	5-Yr Total Cost	
	\$0	\$0		\$0		\$0	\$0	\$0	

Budget
Description

There is no budget estimated for this initiative. This initiative does not require the purchase of any hardware, software or components. It only requires the time of an IT staff person.

Action Items to Implement Initiative

- ✓ Examine email system configuration to determine the current limitations in place.
- ☑ Collect information from departments regarding needed capabilities of the system. This would include:
 - Incoming email size
 - Outgoing email size
 - Needed capacity of recipients in incoming email attachments
 - Needed capacity of recipients in outgoing email attachments
- Analyze collected information to establish parameters that satisfy all users of the email system.

Information Technology Strategic Plan

- ☑ Periodically review email system statistics and gather feedback from users as to the effectiveness of the set parameters.
- ☑ Should the current Spam filtering software become ineffective, request funding for and procure new Spam filtering software.

- ☑ Reduced number of rejected incoming and outgoing emails.
- ☑ Reduced time spent by staff working around inappropriate parameters.
- ☑ Spam emails will be filtered to the appropriate folder and relieve the storage capacities of the email system.
- ☑ System speed will improve without the burden of spam emails.

10 - Server Virtualization

Initiative Description

This initiative is a continuation of initiative #1 Update Server and IT Infrastructure.

This initiative would encompass the implementation of server virtualization for the Town. The Town will need to determine which server virtualization product they feel best meets their needs. Pricing can range from free for Microsoft's Hyper-V product which is built-in to the Windows Server 2008 R2 operating system to VMWare's vSphere product which costs approximately \$2500 per processor. With the assistance of a systems integrator, the Town would then purchase server and storage hardware to support the virtualization implementation, and the chosen server virtualization product would then be installed and configured in the Town's environment.

	Initiative Source Information							
Fun	Functional Area: Technology and Management & Operations Issues							
Priority Ranking: 10 of 24								
		,		Strate	gic	Issue(s)		
Т6	T6 Several department specific servers are located in open areas in the department they serve.							
				Initiat	tive	Ranking		
Strategic Issue Rank			(Cost Benefit		Ease of Implementation		Maturity of Technology
	Very H	igh		High		Medium		Established
				Estimated	Init	iative Bu	dget	
FY	2011	FY2)12	FY2013	F	FY2014	FY2015	5-Yr Total Cost
,	\$0	\$0)	\$55,000		\$0	\$0	\$55,000
D	Budget Description The overall budget for this initiative was formulated based upopricing listed below: Virtualization Hardware: \$35,000 Virtualization Licensing: \$0, Microsoft Hyper-V; \$10,000, VMWavSphere (4 CPUs) Professional Services for Virtualization Implementation: \$10,000 days)						V; \$10,000, VMWare	
Action Items to Implement Tasks							t Tasks	

Develop Request for Proposal (RFP) based on initiative description.

☑ Receive RFP responses from at least 3 vendors.

Information Technology Strategic Plan

- ☑ Compare each vendors proposed approach with initiative description to ensure that at a minimum, the critical components described are included in each vendor's response.
- ☑ Using Town's current procurement processes, select vendor based on level of fit with required tasks in initiative to be completed, costs and approach to conducting the project(s).

- ☑ Reduced expenditures on server and energy costs going forward by implementing server virtualization.
- When implemented in a high availability configuration, virtualized servers are less susceptible to downtime due to any single point of failure, resulting in improved uptime.

11 – Provide IT Training to Staff for Common Computer Tasks

Initiative Description

The primary objective of this initiative is to increase proper use and productivity of system tools and to reduce the number of support requests to the IT department. Technology training is a critical component of any municipal organization's ability to fully leverage the tools at hand. To do this, employees require introductory training on new technologies and refreshed training on existing technologies. This training will be most needed in coordination with PC deployments in FY 2012 and FY2015. Furthermore, an effective technology training program is most often supported by a strategy for training delivery. We recommend that the Town develop a technology training strategy that includes the following components:

- Ongoing training needs assessment. As the Town implements new technologies, employees' technology training needs will evolve; therefore, the training strategy should evolve to respond to these changing needs. The IT Department must be able to understand the current environment's training needs in order to develop successful training strategies. We recommend that the IT Department conduct an assessment of technology proficiencies geared at identifying the areas of greatest training need. This should be an on-going process that helps to identify what training classes should be provided to Town staff.
- Varied training delivery. Training should be provided using a variety of methods, including traditional classroom instruction, self-study, and computer-based delivery. On-line training, such as an Intranet portal, should be used whenever possible. In some cases, though, training should be supported through the use of the Town's training lab with workstations configured in the same manner as employee workstations.
- Seek external opportunities where appropriate. Outsourcing of technology training can be highly cost-effective, especially when training needs are particularly technical in nature (e.g., ArcIMS training). The Town should explore strategic partnerships or other cooperative arrangements with local area colleges, universities, and neighboring Towns. Opportunities are also available for professional seminars delivered via satellite/Internet technology, and many professional training courses are available in computer-assisted formats delivered at the desktop via Intranet.
- Designate Town Application Coordinators to support end-users. Application experts, often referred to as Application Coordinators, should be designated to provide technical oversight and guidance to all Town departments. These staff members would be those persons particularly skilled in an application, and will not necessarily be IT Department staff. In addition to responding to users' questions, Application Coordinators may also provide feedback to the Human Resources Department in regards to specific training needs in the Town. We recommend that the Town utilize the Intranet to communicate who the Application Coordinators of each application are and how to contact them.
- Training for IT Department Staff. We believe specialized training will be required for IT Department Staff to stay abreast of new technologies, software, and

Information Technology Strategic Plan

infrastructure developments that should be explored. The Town must recognize that often these training opportunities can be more expensive than typical software application training classes such as Microsoft Word.

	Initiative Source Information							
Fun	ctional A	Area:	Techr Issue:	•	, Business Iss	ues, Manage	ement & Operations	
Prio	rity Ran	king:	11 of	24				
				Strate	egic Issue(s)			
T1	Some produc		office	s currently	use differen	t versions	of Microsoft Office	
B2				website lac		•	comprehensive, and	
M2				ormation Te ities are not o			procedures do not own.	
M5		g reso		•	nal developr	nent opport	unities related to IT	
				Initiat	ive Ranking			
St	rategic I Rank		(Cost Benefit		se of nentation	Maturity of Technology	
	Very Hi	gh		Medium	E	asy	Established	
	Estimated Initiative Budget							
						dget		
FY	2011	FY20)12	Estimated FY2013	Initiative Bud FY2014	FY2015	5-Yr Total Cost	
	2011 \$0	FY20 \$10,0					5-Yr Total Cost \$20,000	
		\$10,0	DOO The boutside and pdescription	\$0 udget for this e resources, sourchasing traction, training	\$0 s initiative is sending emplaining tools. g will be not apply the sending tools.	\$10,000 derived from the street of the stree	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	
	\$0	\$10,0	DOO The boutside and podescription description descrip	\$0 udget for this e resources, sourchasing transition, training transition, training trainin	FY2014 \$0 s initiative is sending emplaining tools. g will be not apply tools. g UESTION ongoing issue	FY2015 \$10,000 derived from the street of th	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	
D	Budget escription	\$10,0	The boutside and pescrip deployallotted Act	FY2013 \$0 udget for this e resources, sourchasing traction, training ment occurs. d annually for	FY2014 \$0 s initiative is sending emplaining tools. g will be no QUESTION ongoing issue to Implement ilities of emplaining tools.	FY2015 \$10,000 derived from the street of th	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	
D C C	Budget escription	\$10,0	The boutside and personal description allotted tand continued assertion.	\$0 udget for this e resources, sourchasing traction, training ment occurs. d annually for etion Items to desired capablesistance for I lum.	FY2014 \$0 s initiative is sending emplaining tools. g will be no QUESTION ongoing issue point illities of emplaining	FY2015 \$10,000 derived from the street of th	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	
D C C D T	Budget escription	\$10,0	The boutside and personal description and contract and co	\$0 udget for thise resources, sourchasing traction, training traction ltems to desired capables is tance for l'allem. systems curre	FY2014 \$0 s initiative is sending emplaining tools. g will be no QUESTION ongoing issue point illities of emplaining	FY2015 \$10,000 derived from the street of th	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	
D C C D T	Budget escription	\$10,0	The boutside and personal description and contract and co	sources, sourchasing trace training tra	FY2014 \$0 s initiative is sending emplaining tools. g will be no QUESTION ongoing issue point illities of emplaining	FY2015 \$10,000 derived from the strain of th	\$20,000 In the cost of hiring site training facilities, ced in the initiative in years that PC some minimal \$s be	

Information Technology Strategic Plan

- ☑ Decreased support requests to the IT department.
- ☑ Reduced costs of repairs needed due to improper use of systems and hardware.
- ☑ Increase the importance of technology awareness Town-wide.
- ☑ Improve quality of information on the Town website with timely updates of content.

12 – Implement PC Replacement Program of Every 3 Years

Initiative Description

Based on the number of PCs estimated in the hardware inventory supplied by the Town and the date of their acquisition, in order to maximize and leverage the Town's bulk purchasing power, we recommend that the Town plan to replace computers based on a three-year hardware rotation plan.

Standardizing hardware manufacturers, servers, operating systems, and database environments can greatly simplify support and troubleshooting problems. Industry best practices for municipal government organizations suggest that PCs should be replaced at a minimum of every four years. Considering the current array of equipment in place, we recommend that the Town utilize a replacement schedule of three years. We also recommend that as the Town acquires and deploys new computers, that all PC purchases are completed utilizing minimum requirements for standard PC hardware and software configurations. The Town should document, update, and publish these minimum standards each year.

The Town of Wayland is currently running multiple versions of desktop productivity products including Microsoft Office 2003 and 2007. Versions of these products should be standardized across the Town. Although minimum standards should serve to guide PC purchases (laptop, desktop, and servers) in terms of hardware processing power and speed, some users will require computers that surpass the minimum standards. For example, exceptions may need to be established for high-end graphic and data process modeling applications such as for GIS. The Town should consider developing minimum standards for various types of computer users or Departments, as necessary.

Utilizing a single version of a standard desktop productivity suite across the organization facilitates sharing data, training, support and productivity gains. Backward compatibility issues can arise when staff members within the organization are running different versions of the same desktop productivity software (spreadsheet and word processing applications). Additionally, when sharing files electronically, either through shared network space or through email, using multiple software applications impairs effective document sharing. Installing more than one suite of applications on each computer unnecessarily increases costs to the Town for both support and software acquisition.

Initiative Source Information								
Functional Area: Technology Issues								
Prio	Priority Ranking: 12 of 24							
	Strategic Issue(s)							
T1	T1 Some Town offices currently use different versions of Microsoft Office products.							
Initiative Ranking								
St	rategic Issue	Cost Benefit	Ease of	Maturity of				

Town of Wayland, MAInformation Technology Strategic Plan

Rank				Imple	mentation	Technology
Medium			High	- 1	Easy	Established
	Estimated Initiative Budget					
FY2011	FY201	12	FY2013	FY2014	FY2015	5-Yr Total Cost
\$0	\$100,0	00	\$0	\$0	\$100,000	\$200,000
\$0	\$100,0	000	\$0	\$0	\$100,000	\$200,000

Budget Description

The budget for this initiative is derived from the cost of purchasing approximately 100 new PCs as well as configuring their software packages appropriately. This will include standard Microsoft Office packages, as well as additional productivity tools such as Adobe Acrobat. This project includes funds for approximately \$750 per PC and \$250 for office productivity software. The Town will need to continue replacing existing PC's on an as needed basis through June 2011, until funding is available for this initiative in July 2011.

Action Items to Implement Initiative

- ☑ Document and publish minimum PC standards to be updated each year.
- ☑ Determine how many PCs need to be replaced. Although most PCs will be replaced some of the newer PCs can be retained.
- ☑ Issue Request for Bids for PCs.
- ☑ Work with selected vendor to provide a standard Town of Wayland PC configuration and simplify and automate the new PC roll out.
- ☑ Procure and deploy PCs.

- ☑ Consistent hardware and software will:
 - Ease support of hardware and software
 - Simplify training of new systems for new and existing employees
 - Increase interoperability among Departments and staff within Departments
- ☑ Regular PC replacement will reduce unexpected support and maintenance costs.
- ☑ Improved purchasing power by ordering PCs in bulk.
- ☑ Hardware running the latest computer operating systems is more secure than those running outdated technology with known security flaws.

13 – Expand use of MUNIS Capabilities Including Payroll

Initiative Description

This initiative is to increase the use of the existing financial system (MUNIS) to reduce current manual and paper based processes. There are at least two areas where the Town could leverage existing MUNIS capabilities: online decentralized time entry for payroll processing and miscellaneous cash receipts entry. Currently the Town's payroll process is paper based and requires Town departments to complete paper time sheets that are collected and manually submitted to the Human Resources (HR) department for processing. The MUNIS system has the capability for individual users and departments to enter time and attendance information directly. The time entry records are then routed electronically to payroll for processing.

As the Town considers implementing decentralized time entry, it should choose one department to test the process with. The department should start by routing all paper time sheets to one user that will enter the time into MUNIS. The Town could consider eventually allowing individual users the ability to enter their time into MUNIS, but at a minimum, paper time sheets should be entered at the department level and then routed to payroll for processing. The testing process with the single department should be conducted for several payroll cycles. Reconciliation of accrual data should take place after each payroll cycle to verify totals and processing accuracy.

The second area the Town should implement additional MUNIS functionality is with miscellaneous cash receipts entry. Currently, there are several departments that collect cash and checks for miscellaneous Town fees (i.e., beach fees, public safety fees, building plan and permit fees) that are stored for up to two weeks in safes, locked desk drawers and other areas before they are entered into MUNIS. By installing MUNIS in the departments that collect fees, users will be able to record the funds immediately, eliminating the need to hold funds at the department level with long delays before entering the funds into MUNIS.

There are other functional areas offered by MUNIS that the Town could centralize eliminating some of the disparate systems. The MUNIS system offers Real Estate tax, Personal Property, Excise and Utility Billing modules. It was reported that some Town departments have participated in preliminary review sessions of these modules and that the functionality offered by MUNIS does not meet department needs. In order to eliminate MUNIS as an option for the revenue applications (tax, utility billing), the Town should develop functional and technical requirements for the revenue processes, submit the requirements to MUNIS for review and response followed by structured product demonstrations. Following this structured evaluation process the Town should be able to come to common agreement as to whether or not MUNIS meets the needs for revenue related billing.

Initiative Source Information	

Functional Area:

Business Issues, Management & Operations Issues

Prio	rity Ran	king:	13 of	24			
	Strategic Issue(s)						
В3	B3 Lack of integration between key Town systems creates redundant data entry for Town staff, and reduces the amount of information available to customers.						
В7	Some Town departments that collect fees and fines do not have access to the Town's financial system and often store money in locked drawers and safes for several days before the funds are recorded in MUNIS.						
M1				process is a g technology		•	d process that does
				Initiat	ive Rankin	1	
St	rategic l Rank			Cast Ranatit		ase of mentation	Maturity of Technology
	High			High Me		edium	Established
				Estimated	Initiative B	udget	
FY	2011	FY2	012	FY2013	FY2014	FY2015	5-Yr Total Cost
;	\$0	\$5,0	000	\$0	\$0	\$0	\$5,000
Co	Cost Budget The budget estimate for this initiative is for adding additional licenses for departments that collect Town funds to have MUNIS payment entry installed. Since the Town already owns the Payroll application, there is no additional cost associated with taking advantage of decentralized time entry other than a day of training and consulting by MUNIS.						
	Action Items to Implement Initiative						
					, implomen	imitiative	

- ☑ Schedule single day of training and consulting with MUNIS to implement decentralized payroll.
- ☑ Select Town department for beta decentralized payroll processing based on size (smaller department), diversity of schedules (some shift work or non-standard hours), and experience of staff in the department.
- ☑ Implement decentralized payroll entry in single beta department.
- ☑ Monitor accruals, time entry and other data to ensure accuracy.
- ☑ Address issues identified by beta department prior to rolling out to other departments.
- ☑ Phase in decentralized payroll entry to other departments over a period of 6-8 months.

Cash Receipts Entry:

☑ Identify departments that require MUNIS payment entry to record receipts (building department, public safety, COA).

Information Technology Strategic Plan

- ☑ Identify additional licensing costs with MUNIS and schedule installation of MUNIS in additional departments.
- ☑ Identify workflow and procedures for these new departments to enter receipts into MUNIS.

Other Potential Areas:

- ☑ Identify technical requirements for other areas of potential MUNIS use (Real Estate, Personal Property, and Excise).
- ☑ Submit requirements to MUNIS for response and determine level of fit.
- ☑ Identify potential costs for using these additional modules.
- ☑ Conduct structured demonstration process to assess feasibility of using these modules.
- ☑ Based on structured scoring process, department feedback and level of fit determine if it is feasible and in the Towns best interest to use these additional modules.

- ☑ Increased payroll efficiencies, and reduction in time required to process payroll.
- ☑ Decreased reliance on paper based payroll process.
- ☑ Greater use of online workflow approval and routing.
- ☑ Decreased risk of potential fraud due to timelier reporting of revenue.
- ☑ Decreased liability to individuals responsible for storing unreported funds at the department level.
- ☑ Increased availability of real time revenue reporting.
- ☑ Reduction of redundant data entry.
- ☑ Elimination of disparate systems
- ✓ Integration of billing and collection systems.
- ✓ Increased availability of data available to Town citizens.

14 – Implement Town Website with eGovernment Services

Initiative Description

This initiative is to implement a new Town website that offers eGovernment services including the ability to query Town data, request Town services, pay bills, access GIS information, view transaction history, and view meeting agendas and minutes. The Town's current website is maintained by individual department heads, lacks consistency across departments and does not facilitate eGovernment services. Implementing a new website will allow the Town the ability to offer more services to citizens through the web and reduce some of the phone and walk in traffic at the Town Hall.

This initiative should be planned for in two phases. Phase one will be to select and implement the website and phase 2 will be to integrate some of the existing Town systems with the website so that appropriate amounts of information can be displayed on the website.

For phase one, the Town should document the requirements for a new website across all departments. The Town should then issue a request for proposal that includes the documented requirements. The Town should develop a structured scoring method for the procurement process and review and score the RFP responses based on level of fit with the technical requirements, level of effort needed to support the website, and functionality offered by the vendor to support future integration of other systems. The Town should be provided with existing customers of the vendor with the ability to view the websites that are live for other municipalities of similar size.

Once the product and vendor is selected, support for the new website should be implemented in a centralized manner provided by a single resource, typically the IT department. Updates to the website will be made in accordance with newly developed Town policies and procedures. Submissions, timeliness of updates and content should be managed by the IT department.

Phase two of this initiative will include interfacing existing Town systems with web interface to allow access to and display of appropriate data. The Town will need to determine the type and content of data to be displayed, but typically GIS, assessment, payment history, frequently asked question, and permitting information is available at most "progressive" municipal websites. Phase two can take place 12-18 months after initial go-live and should follow an internal review process to agree on the type of data to make available.

Initiative Source Information				
Fund	Functional Area: Business Issues			
Prio	Priority Ranking: 14 of 24			
Strategic Issue(s)				
B1	The ability to	accept credit card payments over the counter does not exist in		

	all de	all departments at the Town.						
B2		The Town's current website lacks consistency, is not comprehensive, and does not contain content that may be useful to citizens.						
B11		Town Meeting Minutes and Agendas are not being posted on the Town's website in a timely manner.						
				Initiat	ive	Ranking		
Strategic Issue Rank				Cost Benefit		Ease of Implementation		Maturity of Technology
	High	1		High		Ме	dium	Leading Edge
				Estimated	Init	tiative Bu	dget	
FY	2011	FY20	12	FY2013	F	FY2014	FY2015	5-Yr Total Cost
	\$0	\$20,0	00	\$5,000	,	\$5,000	\$5,000	\$35,000
C	Cost Budget The budget for this initiative is based on an initial procurement a implementation cost, followed by periodic updates in the next thr years. The additional funds in the subsequent years are allocat to allow for integration and interface costs.					ates in the next three		
			Α	ction Items to) Im	plement	Initiative	
Ø D	evelop	requirem	ents f	or the website	٠.			
	evelop :	a reques	t for p	roposal.				
		•		•		fit, project	approach an	d client references.
				review proces				
	☑ View similar websites for existing clients.							
	☑ Select preferred vendor/website.☑ Implement website with centralized support.							
	•						aw wahaita t	o determine data to
	✓ Work with existing vendors of Town systems and new website to determine data to be displayed on the website.							
	o dispia	y GG OII II	10 44 61		ato	d Benefits	•	
[7] I.	noross	d officier	0) / fo ::	<u> </u>				
☑ lı	☑ Increased efficiency for Town citizens requesting services.							

- ☑ Ability to accept credit card payments.
- ☑ Greater access to Town information by citizens will potentially decrease phone and walk in traffic to the Town Hall.
- ☑ Ability to leverage newer technology as it becomes available.
- ☑ Ability to post meeting agendas and minutes in a more timely fashion.
- ☑ Centralized support and updating of the website will promote consistency of content.

15 – Implement Town-Wide IT System Management Policies and Procedures for Uptime and Performance Monitoring and Asset Tracking

Initiative Description

The purpose of this initiative is to implement network monitoring and asset tracking tools for IT related equipment. The Towns' current IT infrastructure does not include network monitoring tools which make it difficult to troubleshoot network issues and identify areas where improvements need to be made.

In addition, the Town does not have an inventory of IT assets and does not have the capability to track assets electronically. In today's environment, bar coding and tracking of assets electronically has become the standard. This initiative is to procure network monitoring and computer inventory software which is widely available, as well asset tracking software and equipment.

Initiative Source Information			
Functional Area:	Technology Issues		
Priority Ranking:	15 of 24		

Strategic Issue(s)

The Town's internet and network connectivity is unreliable, slow, or out for extended periods of time.

Initiative Ranking					
Strategic Issue Rank	Cost Ben	efit	Ease of Implementation		Maturity of Technology
Medium	Low		E	asy	Established
Estimated Initiative Budget					

FY2011	FY2012	FY2013	FY2014	FY2015	5-Yr Total Cost
\$0	\$5,000	\$0	\$0	\$0	\$5,000

Budget Description

T2

The budget for this initiative is derived from the cost to purchase system monitoring software and related equipment needed to implement an asset tracking software system, including bar code readers.

Action Items to Implement Initiative

- ☑ Procure industry-standard network monitoring software
- ✓ Inventory current IT assets in the Town
- ☑ Begin tracking IT assets using new tool and monitoring network performance

- ☑ Ability to identify workstations being utilized most heavily for possible upgrades.
- ☑ Ability to manage asset replacement based on older assets.
- ☑ Ability to electronically sign in and out shared assets.

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$\mathbf{\nabla}$	Reduced	lace of	25225
	Neurcea	เบออ บเ	asscis.

oxdot Ability to create and maintain an accurate inventory of computer hardware and software resources

16 – Integrate Key Town Systems to Increase Interoperability Among Departments

Initiative Description

This initiative is to integrate key Town systems in order to reduce the number of disparate systems and improve data sharing across the Town. Currently the Town has separate systems for billing (Real Estate, Excise, Personal Property and Utilities), permitting and inspections, Parks and Recreation, Assessing, Public Health, Schools and for Public Safety. There are some areas where sharing of data between systems is needed. For example, the Schools and Public Health may benefit by sharing certain demographic information as allowed by law. In addition the assessing and permitting system could share inspection and valuation data which would reduce or eliminate the need to manually key information into both systems. Integrating the existing VADAR and MUNIS applications for passing journal entry information would eliminate the need to manually key journal entries into MUNIS.

The Town should first agree upon the systems that will interface and what type of interface is needed (batch or real time). The Town should then determine the appropriate data elements to share by coming to common agreement among the departments requiring the data. The Town should discuss the data sharing needs with existing Town system vendors and determine whether or not they can provide the data interfacing capabilities or if an outside vendor will be needed.

If an outside vendor is required, the Town should develop a statement of work that describes the desired interfaces and issue an RFP for services. The Town should consider that interfacing multiple systems could be done over a period of 2-3 years and that all systems do not need to interface at the same time or at the same level of detail.

	Initiative Source Information				
Fun	Functional Area: Technology Issues, Business Issues				
Priority Ranking: 16 of 24					
	Strategic Issue(s)				
Т3	No dedicated Wide-Area-Network (WAN) exists between the outlying Town buildings and the Town Hall, other than the Public Safety building.				
Т8	Sharing data with the School Department is difficult.				
В3	B3 Lack of integration between key Town systems creates redundant data entry for Town staff, and reduces the amount of information available to customers.				
B5	B5 The Town does not have a centralized system for scheduling meeting rooms.				
	Initiative Ranking				
St	rategic Issue	Cost Benefit	Ease of	Maturity of	

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Rank			Impler	nentation	Technology
Very High		High	H	lard	Leading Edge
	Estimated Initiative Budget				
FY2011	FY201	2 FY2013	FY2014	FY2015	5-Yr Total Cost
\$0	\$0	\$10,000	\$0	\$0	\$10,000

Cost Budget

The budget for this initiative is to use the services of a systems integrator to develop a small number of interfaces between selected Town systems.

Action Items to Implement Initiative

- ☑ Agree upon data elements to be shared among Town systems.
- ☑ Develop specifications for sharing data including a non-technical document that describes how often data will be shared and whether the integration should be real time or by periodic batch processing.
- ☑ Work with existing vendors of Town systems to understand import and export capabilities.
- ☑ Develop statement of work for integration and hire a systems integrator to develop interfaces between selected Town systems where appropriate.

- ☑ Increased data sharing between departments will improve efficiencies.
- ☑ Increased planning accuracy for Council on Aging, Public Health, and other departments.
- ☑ Reduction in duplicate data entry.
- ☑ Improved customer service.
- $\ensuremath{\square}$ Improved reporting and analytics.

 17 – Implement Parks Department Software Systems for Asset and Service Request Tracking

Initiative Description

The purpose of this initiative is to procure and use software tools in the Parks Department to better serve the citizens of Wayland. The Parks Department has identified two software tools that would streamline existing processes and reduce the reliance on paper based processes. These tools are a Cemetery Management System and an Asset/Work Order system for tracking tree maintenance. Implementing these tools will increase efficiencies at the Parks Department.

This initiative consists of five phases:

- Phase 1: Assign resources to perform procurement and implementation of Asset Tracking and Service Request Management software;
- ➤ Phase 2: Research and document the current needs of the town to develop the system requirements, including integration specifications;
- Phase 3: Develop and Issue an RFP for the software;
- Phase 4: Evaluate systems and award contract to a vendor; And
- > Phase 5: Implement software.

Phase one of this initiative will assign a resource or group of resources that has the capacity to manage the procurement and implementation of the software. It is likely that a member of the Parks Department will work with another staff member with procurement or technical experience, or both. These resources will comprise the project team.

In phase two, the project team will document the current needs and translate this into the requirements of the future system. Integration capabilities will be a strong consideration as the Town strives to increase interoperability among Departments, and the systems they use. This requirements document will be a large part of the development of the RFP, which will be completed as phase three.

Phase four will consist of the evaluations of the received proposals. This may include demonstrations or site visits to similar organizations using the proposed software. At the end of this phase the vendor of choice will be selected.

Implementation of the new system will occur in phase five and the main priority will be effective integration, both from a technical and a workflow perspective.

Initiative Source Information				
Functional Area:	Business Issues			
Priority Ranking:	17 of 24			
Strategic Issue(s)				
B10 The Parks [Denartment reported a lack of appropriate software tools to			

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assist with primary functionalities.									
	Initiative Ranking								
Strategic Ran		(Cost Benefit		ise of mentation	Maturity of Technology			
Medi	um		Medium	E	asy	Established			
			Estimated	Initiative Bu	dget				
FY2011	FY20	12	FY2013	FY2014	FY2015	5-Yr Total Cost			
\$0	\$0		\$30,000	\$0	\$0	\$30,000			
Budge Descrip	et Stion 6	cost o hat ir Should effort curren suppo nitiati	f purchasing anternal resound an outside of would have to server controller this software #1, Update	and implemer rces will be contracted reso be request figuration in are in FY20 server and I	nting the soft used for thi source be ned ed. It is also the Town 013 following T Infrastructu	ed upon the expected ware. It is anticipated is selection process. eded, funding for that anticipated that the will be adequate to the completion of the completion of the completion of the completion.			
		A	ction Items to	o Implement	Initiative				
☑ Assign r	esources	to be	the project tea	am.					
☑ Conduct	☑ Conduct a current needs analysis and develop system requirements.								
☑ Develop	and issue	s RF	Р.						
☑ Evaluate	received	propo	osals.						
☑ Implement	nt system	١.							

- ☑ Increased inventory tracking and management capabilities.
- ☑ Increased validity of inventory data, and a reduction in the potential for human error created by manual inventory processes.
- ☑ Managing requests for service will ensure each request is addressed.
- ☑ Increased access to activity data for policy decision support as well as performance measures.

18 – Implement Document Management System

Initiative Description

Certain Departments within the Town of Wayland have already recognized the need for a document management system (DMS), and many more could gain efficiencies from this type of system. In the Buildings department and others, a system was implemented in years prior and a significant effort was made to scan past property documents. Not all documents were scanned, however, and this inhibits the use of the system today.

A DMS can significantly streamline workflow within and among departments of the Town. Additionally, reducing the reliance on retaining paper documents will free space within the Town Hall. A DMS will also reduce the risk of data loss due to deteriorating stored paper. While some documents will still need to be retained in paper form, infrequent access and storage in environmentally controlled locations outside of the Town Hall will maintain integrity of the documents.

We recommend that the Town assess the DMS in place in the Buildings department to determine whether it can meet the needs of the Town. If it cannot, a requirements document should be developed as part of an RFP to issue requesting vendors to propose a DMS for the Town. The Town IT Department, along with identified Department staff should evaluate proposals and select a system of preference.

Once a DMS is selected to use, whether it be the existing system or another, standard policies need to be developed to address the imaging, tracking, retention and destruction standards. This will ensure than an organized and comprehensive approach is used. Additionally, it is strongly advised that the Town look to neighboring communities that have integrated a DMS to determine appropriate standards. Finally, training to all Town staff should be conducted to ensure appropriate and effective use of the DMS.

BDMP understands that there are significant legal issues, State laws and guidance on records management, web content management, file naming conventions, the State's records retention schedules and other recommended record retention policies at the State and National level. We recommend that the Town follow existing Commonwealth guidelines related to document imaging and records retention and management.

	Initiative Source Information								
Functional Area: Business Issues									
Priority Ranking: 18 of 24									
	Strategic Issue(s)								
В8		heavily reliant on papexternal business proc		d forms to support					
	Initiative Ranking								
St	rategic Issue	Cost Benefit	Ease of	Maturity of					

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Rank				Impler	nentation Technology	
Medium		Medium		F	lard	Leading Edge
			Estimated	Initiative Bu	dget	
FY2011	FY201	12 FY2013		FY2014	FY2015	5-Yr Total Cost
\$0	\$0 \$0		\$50,000	\$100,000	\$100,000	\$250,000
		ha h	daat far this i	nitiativa ia ma	- da .us of the	acat to purchase and

Budget Description

The budget for this initiative is made up of the cost to purchase and implement a document management system including the needed hardware, outsource back-scanning of historical documentation, and train Town employees on the use of the system. It is expected that the initiative will begin in FY2013 and be completed by the end of FY2015. FY2013 will begin with the internal work of developing the RFP and outsourcing the back-scanning of documents. FY2014 and FY2015 budgets are based upon the cost of purchasing and implementing the system and outsourcing the scanning of the remaining documents.

Action Items to Implement Initiative

- ☑ Determine adequacy of current DMS.
- ☑ If necessary, develop requirements and issue RFP for a new DMS.
- ☑ Evaluation proposals and select and implement a DMS.
- ☑ Establish policy on document management standards.
- ☑ Train Town staff on the use of the DMS.
- ☑ Back-scan historical documentation.

- ☑ A reduction in the abundance of paper-based systems throughout the Town coupled with the use of electronic media will create efficiencies for every Town department.
- ☑ Increased efficiency with computerized access to files.
- ✓ Increased document security.
- ☑ Improved compliance with State and Federal regulations.

19 - Improve Library Wireless Access for Public Use

Initiative Description

This initiative is to make the existing wireless network at the Library available for public use. The Library has reported that making the existing wireless network more accessible for citizens to use their own laptop computers would cut down on the use of the Library's desktop PCs. This initiative is to improve the current wireless network to accommodate more users as well as add additional security for the network.

The Library should upgrade the existing wireless network infrastructure by assessing whether or not existing routers need to be replaced and by adding appropriate network firewalls and security protocols. This initiative can be accomplished in house by using existing Town IT resources.

	Initiative Source Information								
Fund	Functional Area: None								
Prio	Priority Ranking: 19 of 24								
				Strate	egic Issue(s)				
N/A					None				
				Initiat	ive Ranking				
St	rategic Rank		(Cost Benefit		se of nentation	Maturity of Technology		
	Mediu	m		Low	Me	dium	Established		
				Estimated	Initiative Bu	dget			
FY	2011	FY2	012	FY2013	FY2014	FY2015	5-Yr Total Cost		
,	\$0	\$0)	\$0	\$4,000	\$0	\$4,000		
Co	ost Bud	get		udget for this		to purchase	e newer routers and		
			A	ction Items to	Implement	Initiative			
☑ A	ssess e	xisting r	outers	and bandwidt	h needed.				
☑P	urchase	and ins	stall ne	w equipment.					
☑ T	☑ Test security prior to opening network for public access.								
				Anticip	ated Benefits	S			
☑ G	reater u	ise of w	ireless	for Town citiz	ens.				
☑ L	ess relia	ance on	Library	/ PCs.					

20 – Develop Public Health Nurse Information Database

Initiative Description

The purpose of this initiative is to develop a centralized database of information for the Public Health Nurse. This database will include information from other Town departments and State agencies and will be accessible remotely.

The Town Public Health Nurse should determine the data elements to be stored in the database and where the source information will come from. In some cases, legal restrictions or ordinances will prohibit the sharing of certain data. For this initiative the Town could use an MS Access Database as opposed to a COTS product. The initiative will require IT assistance to populate the database and then assist with the periodic updates of the data.

The Town will also need the assistance of a resource familiar with MS Access that can assist with the initial creation of the database. This could take 1-2 days. The budget estimate provided below has included the cost for this resource.

estimate provided below has included the cost for this resource.								
	Initiative Source Information							
Fun	ctional	Area:	None					
Prio	Priority Ranking: 20 of 24							
				Strate	gic	Issue(s)		
N/A						None		
	Initiative Ranking							
St	Strategic Issue Cost Benefit Ease of Maturity of Implementation Technology						_	
	Mediu	m		Low		Ме	dium	Established
				Estimated	Init	tiative Bu	dget	
FY	2011	FY2	012	FY2013	I	FY2014	FY2015	5-Yr Total Cost
,	\$0	\$	0	\$0		\$3,000	\$0	\$3,000
Budget Description The budget for this initiative is derived from the cost to purchase the MS Access database and assistance from an outside database administrator to assist with initially setting up the database. This initial setup of the DB could take 1-2 days.								
			A	ction Items to	o Im	nplement	Initiative	
				ts and frequer atabase	псу	data will b	e updated	

☑ Procure assistance from outside resource to assist with development of database

structure

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- ☑ Import data into MS Access database
- ☑ Establish remote connection to database location on the Town network

- ☑ Single location of Public Health information
- ☑ Ability to access database information remotely.
- ☑ Increased reporting capabilities

21 – Implement and Integrate Water Billing System with Town Systems

Initiative Description

This initiative is to purchase, implement and integrate a new Water Billing system for the Town. It is reported that the Town's existing Utility Billing system does not meet the needs of the Town for billing, collection and reporting purposes. It was also reported that there are many steps and processes that must be run in order to perform a billing cycle. The existing system (VADAR) is outdated, runs on legacy technology and was not originally designed to accommodate Water Billing. If as a result of initiative #12 (Increase use of MUNIS), it is determined that MUNIS' Water Billing system does not meet the Town's requirements, the Town should assess other Utility Billing systems in the market. In order to implement this initiative the Town should plan for two phases. Phase 1 would be selection and implementation of the system and Phase 2 would be integration with other Town systems.

In Phase 1 the Town should document the functional and technical requirement needed for Water Billing. The Town should develop a request for proposal (RFP) and issue it to the vendor community along with the detailed requirements. As part of the review process, the Town should analyze the level of fit for each responding vendor to the technical requirements, but also assess the proposed project approach, implementation methodology, level of support and ongoing maintenance. The Town should develop scoring for all of these areas and develop a "short list" of vendors (2-3) to invite to conduct a scripted demonstration process that allows each vendor the ability to demonstrate their product and how it would meet Town billing, collection and reporting needs. As part of the evaluation process, the Town should also conduct reference checks and if possible a site visit where the proposed solution is installed. Once a finalist vendor is selected, the completion of this phase would be implementation and go-live.

Phase 2 should be the integration of the Water Billing system to other Town systems such as MUNIS (to post transaction activity), GIS, Assessing and Permitting. The Town should plan to work with the Water Billing vendor to understand the import and export capabilities of the new system and determine (based on recommendations from the vendor) the best way to share data with these other systems.

	Initiative Source Information								
Functional Area: Business Issues									
Priority Ranking: 21 of 24									
	Strategic Issue(s)								
В9		oorted lack of function billing customers time							
	Initiative Ranking								
St	rategic Issue	Cost Benefit	Ease of	Maturity of					

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Rank				Implen	nentation	Technology	
Medium			Medium	Ме	dium	Leading Edge	
			Estimated	Initiative Bu	dget		
FY2011	FY201	12	FY2013	FY2014	FY2015	5-Yr Total Cost	
\$0 \$0			\$0	\$150,000	\$0	\$150,000	

Cost Budget

This cost budget is the initial purchase and implementation of the Water Billing system.

Action Items to Implement Initiative

- ☑ Determine if MUNIS Water Billing can be used.
- ☑ Develop requirements for the future system.
- ☑ Develop a request for proposal.
- ☑ Review responses and compare level of fit, project approach and client references.
- ☑ Conduct scripted demonstration process.
- ☑ Conduct a site visit.
- ☑ Select preferred system.
- ☑ Implement the selected system.
- ☑ Work with existing vendors of Town systems and the new Water Billing vendor to determine integration points.

- ☑ Greater efficiency related to Water Billing and collections.
- ☑ Increased reporting capabilities.
- ☑ Ability to leverage newer usage reading technology (radio reads, wireless, etc.).
- $\ oxdot$ Improved reporting and analytical data.
- $\ensuremath{\square}$ Increased data sharing among Town systems.

22 – Provide Real-Time Access to GIS for Public Safety

Initiative Description

This initiative is to provide real time access to GIS data for public safety. Currently, limited GIS information is available through the Town's existing GIS web viewer. Providing real time access to GIS information for public safety will allow for better emergency planning, access to critical building and fire hydrant data as well as providing critical street level data during emergencies.

Once a dedicated WAN and improved internet connectivity is developed as part of initiative 4, the Town will have the infrastructure in place to support real time access to data, such as GIS. As part of this initiative, the Town should work with the existing GIS vendor (ESRI) to understand the options and costs associated with implementing a real time web interface (or viewer) for GIS information.

Initiative Source Information							
Functional Area:	Technology Issues						
Priority Ranking:	22 of 24						

Strategic Issue(s)

No dedicated Wide-Area-Network (WAN) exists between the outlying Town buildings and the Town Hall, other than the Public Safety building.

Strategic Issue Ranking Cost Benefit Ease of Implementation Technology Medium Low Hard Leading Edge Estimated Initiative Budget

FY2011	FY2012	FY2013	FY2014	FY2015	5-Yr Total Cost	
\$0	\$0	\$0	\$15,000	\$0	\$15,000	

Cost Budget

The cost budget for this initiative is for implementing a real time GIS web portal through the ESRI vendor currently in use.

Action Items to Implement Initiative

☑ Analyze options available from existing GIS vendor to determine ability to provide real time GIS information.

Anticipated Benefits

☑ Increased access to GIS data for more efficient emergency response planning and emergency management.

23 – Establish Public Access Kiosk at the Town Hall for Citizen Research of Town Information and Bill Payment

Initiative Description

This initiative is to implement a public access kiosk in the Town Hall for citizen access to Town information as well as offering the ability to pay Town bills. Currently the Town does not offer a public access kiosk (other than Assessing) for citizen inquiry or payment. This initiative would be to implement a kiosk in Town Hall. Similar to the initiative to implement a new Town website (initiative #13) the Town should select an external vendor to provide a kiosk that would allow for the presentation of restricted data with the ability to also pay for services. In some cases a custom interface will need to be developed to allow an import of periodic updates of data from existing Town systems (Vision, MUNIS, VADAR, GIS etc). This information would be stored at the kiosk for query by Town citizens.

In addition to storing and displaying data at the kiosk, the Town will need to partner with a credit card merchant to offer payment by credit card at the kiosk. If the Town has implemented a new website with credit card payments as an option, the Town could leverage the existing contract with that vendor to supply credit card processing capabilities at the kiosk.

The Town will need to come to agreement on the type of data to be displayed. In some cases, a basic export file from each system can be created an imported into the kiosk and a simple interface created to view the data. In other cases, a commercial off the shelf (COTS) product can be implemented that has real time access to data from other systems and has a pre defined user interface.

	Initiative Source Information								
Fun	Functional Area: Business Issues								
Prio	Priority Ranking: 23 of 24								
	Strategic Issue(s)								
B1	B1 The ability to accept credit card payments over the counter does not exist in all departments at the Town.								
	Initiative Ranking								
St	rategic Ranl		C	Cost Benefit	_	Ease of ementation	Maturity of Technology		
	Mediu	m		Medium	N	<mark>/ledium</mark>	Leading Edge		
	Estimated Initiative Budget								
FY	FY2011 FY2012 FY2013 FY2014 FY2015 5-Yr Total Cos						5-Yr Total Cost		
;	\$0	\$0		\$0	\$0	\$25,000	\$25,000		

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Cost Budget

The budget for this initiative is to purchase a COTS kiosk. This budget does not include credit card processing. This budget could be lower if the Town decides to hire an outside resource to program a basic interface and then import data from existing systems on a periodic basis.

Action Items to Implement Initiative

- ☑ Determine data elements to be displayed at the kiosk.
- ☑ Issue RFP for COTS kiosk and select vendor to provide functionality.
- ☑ Work with existing vendors of Town systems to develop or provide standard export files of data.
- ☑ Select a credit card processing merchant from existing website project or from existing Town bank.
- ☑ Test security prior to go-live.

- ☑ Improved self service functionality for citizens.
- ☑ Less reliance on Town staff to research and provide data to Town citizens.
- ☑ Ability to take credit card payments at the Town Hall without forcing residents to leave and go home to pay bills online.

24 - Procure Laptop Computers for Field Inspectors

Initiative Description

This initiative of procuring laptop computers for inspectors to use in the field will begin with developing a technical specification list based on the system requirements of the software. This will likely be a combined effort of a representative from the Department as well as an IT staff person.

Following the development of the specification document, a list of suitable computers will be created. The IT staff person will then select those that are most consistent with the IT environment in the Town and that can be most adequately supported. The final selection will be made with input from the end users based on ease of use.

It is anticipated that three computers will be purchased. Once purchased, training of inspectors on how to use the laptops in the field and dock them in the office for the information to be uploaded to the system will occur. This training will be lead by the vendor.

Initiative Source Information						
Functional Area:	None					
Priority Ranking:	24 of 24					

Strategic Issue(s)

Lack of integration between key Town systems creates redundant data entry for Town staff, and reduces the amount of information available to customers.

	Initiative Ranking									
Strategic Issue Rank				Cost Benefit Ease of Implementation		Maturity of Technology				
	Medium			Low		Medium		Leading Edge		
				Estimated	Ini	tiative Bu	dget			
	FY2011 FY2012			FY2013		FY2014	FY2015	5-Yr Total Cost		
	\$0 \$0			\$0		\$0 \$5,000		\$5,000		

Cost Budget

B3

The budget for this initiative is derived from the cost of purchasing three laptop computers, three additional instances of the software to be loaded onto the computers, and components to dock the laptops for information upload in the office.

Action Items to Implement Initiative

- ☑ Develop specification document for laptop computers
- ☑ Analyze list of suitable computers based upon the current IT environment

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- ☑ Determine preferred choice based upon workflow ease of use
- ☑ Purchase computers
- ☑ Train inspectors to use computers including docking for information upload in the office

- ☑ Data will be recorded more accurately in the field
- ☑ Data will be recorded more consistently and completely in the field
- ☑ Data will be inputted into the system more regularly
- ☑ Inspectors can reference historical data stored in the system while in the field
- ☑ Reliance on paper-based processes will be reduced

4.0 Implementing the Technology Plan

This section provides a high-level overview of the budget and timeline to implement the initiatives identified in the plan, summarizes the potential impacts to the organization as a result of carrying out the plan, and provides information regarding the funding level required to support the plan.

4.1 Budget and Timeline

Section 3.3 (Prioritized Plan Initiatives) provided a detailed description for each identified initiative. It provided a high-level description of what each initiative is intended to do and presents how the budget has been calculated, identifies which strategic issue(s) are intended to be addressed by the initiative, and provides a list of potential benefits for implementing the initiative.

The following page presents the Initiative Budget and Timeline Matrix. The timeline table provides a framework for budgeting project costs and for planning implementation timeframes over a five-year horizon. The budgets for each initiative described in section 3.3 are estimates and are not to be considered detail specification costs. In some cases, when a vendor is engaged to conduct an initiative they may have a different approach to performing the initiative which could result is lower or higher project costs.

Each identified initiative could be started or completed (or both) within a given fiscal year. Rather than attempting to determine exactly when a particular project would be undertaken, this table is intended to simply identify the fiscal year(s) a project should be initiated. If a fiscal year has a zero presented for initiative cost, this signifies no capital expenditure is expected, and only time commitment of the Town personnel will be required to complete the initiative. A blank or empty cell represents no activity and/or funding is required during the respective fiscal year for the initiative.

The Initiative Budget and Timeline Matrix translate the findings and recommendations presented in Section 3.0 into high-level action items that include budget estimates and implementation timeframes. The budgets and timelines presented have been estimated based on the work conducted during this project, prior experience with similar technology planning projects, research conducted for this project, knowledge of industry best practices, and feedback from the Town. We recommend these estimates be used for planning purposes only. Budgeted amounts should be regularly updated as the initiatives are implemented.

Strategic Initiative Budget and Timeline Matrix

	Town of Wayland Strategic Initiatives	Capital/ Operational	FY2011	FY2012	FY2013	FY2014	FY2015	5 Year Total
Strate	egic Initiatives Starting in Year One							
1	Update Server and IT Infrastructure Including Backup Procedures	Capital	\$43,400					\$43,400
2	Add IT Resources to Support Future IT Initiatives	Operational	\$25,000	\$50,000	\$50,000	\$50,000	\$50,000	\$225,000
3	Complete Town Fiber Project Begun by Schools	Capital	\$85,000					\$85,000
4	Improve Internet Performance and Network Connectivity	Operational	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$45,000
5	Update Town IT Policies and Procedures Including IT Purchasing, IT Support, Acceptable Use and Training	Operational	\$10,000					\$10,000
6	Update Town Telephone System to Newer Technology	Capital	\$50,000					\$50,000
7	Develop Patch Management Plan for Critical System Updates	Operational	\$2,000					\$2,000
8	Develop Disaster Recovery Plan	Operational	\$24,000					\$24,000
9	Assess Email System and Spam Filters to Improve Efficiency	Operational	\$0					\$0
Strate	egic Initiatives Starting in Year Two							
10	Server Virtualization	Capital		\$55,000				\$55,000
11	Provide IT Training to Staff for Common Computer Tasks	Operational		\$10,000			\$10,000	\$20,000
12	Implement PC Replacement Program of Every 3 Years	Capital		\$100,000			\$100,000	\$200,000
13	Expand Use of MUNIS Capabilities Including Payroll	Operational		\$5,000				\$5,000
14	Implement Town Website with eGov Services	Operational		\$20,000	\$5,000	\$5,000	\$5,000	\$35,000
15	Implement Town-Wide IT System Management Policies for System Uptime Monitoring and Asset Tracking	Operational		\$5,000				\$5,000
Initia	tives Starting in Year Three			<u> </u>	<u>.</u>			
16	Integrate Key Town Systems to Increase Interoperability Among Departments	Operational			\$10,000			\$10,000
17	Implement Parks Department Software System for Asset and Service Request Tracking	Capital			\$30,000			\$30,000
18	Implement and Integrate Utility Billing System with Town Systems	Capital			\$150,000			\$150,000
19	Implement Document Management System	Capital			\$50,000	\$100,000	\$100,000	\$250,000
Strate	egic Initiatives Starting in Year Four							
20	Improve Library Wireless Access for Public Use	Operational				\$8,000		\$8,000
21	Develop Public Health Nurse Information Database	Operational				\$3,000		\$3,000
22	Provide Real-Time Access to GIS for Public Safety	Operational			_	\$15,000		\$15,000
Strate	Strategic Initiatives Starting in Year Five							
23	Establish Public Access Kiosk at the Town Hall for Citizen Research of Town Information and Bill Payment	Capital					\$25,000	\$25,000
24	Procure Laptop Computers for Inspectors (Assume 3)	Operational					\$5,000	\$5,000
			FY2011	FY2012	FY2013	FY2014	FY2015	5 Year Total
	New IT Spending			\$254,000	\$304,000	\$190,000	\$304,000	\$1,300,400
	New IT Operational			\$99,000	\$74,000	\$90,000	\$79,000	\$412,000
New IT Capital Budget			\$70,000 \$178,400	\$155,000	\$230,000	\$100,000	\$225,000	\$888,400
New IT Capital Budget			Ψ170,700	Ψ100,000	Ψ200,000	Ψ100,000	Ψ220,000	Ψ000, +00

Table 10: Initiative Budget and Timeline Matrix

4.2 Funding

The previous section's Initiative Cost and Timeline Matrix laid out twenty four strategic initiatives over a five-year planning horizon. The matrix also indicated the estimated budget for each strategic initiative, the total yearly budget, and a five-year total budget. It also presented the operation and capital budget totals for each year.

Based on BDMP's assessment of the Town's current IT spending, as compared with similar organizations, the Town has been under-spending on IT. . Lower IT spending has helped the Town focus on other important budgetary issues in the past. It is now time to increase focus and spending on IT in order for the Town to provide for reliable, effective technology tools for Town staff and to fully realize the opportunities available to leverage technologies to improve Town operations.

The proposed project list and timeline requires an increase in capital funding in Year 1 to bring the Town's IT spending in line with other municipalities we have worked with. Overall the Town's spending on IT will increase significantly in Year 1. Spending in years 2 and 4 is largely made up of the PC Replacement Program initiative which will require the Town to spend \$100,000 to replace 80 to 100 of the Town's PC's.

The table below summarizes the operating and capital proposed spending over the next 5 years.

	Year 1 FY2011	Year 2 FY2012	Year 3 FY2013	Year 4 FY2014	Year 5 FY2015	Five Year Total
New IT Capital	\$178,400	\$155,000	\$230,000	\$100,000	\$225,000	\$888,400
New IT Operating	\$70,000	\$99,000	\$74,000	\$90,000	\$79,000	\$412,000
New IT Spending	\$248,400	\$254,000	\$304,000	\$190,000	\$304,000	\$1,300,400
Est. Recurring Annual IT Costs	\$512,000	\$536,840	\$562,240	\$592,640	\$611,640	

Table 11: Summary of 5 Year Spending and Required Funding

Spending on IT for an organization using proven, leading edge technology is typically between 3 and 4 percent of the total organization annual budget or revenues. The Town is currently only spending approximately 1.75% of the total budget on IT. The first year of the five year plan targets IT spending at approximately 3.0% while the last year targets spending at approximately 3.5% of Town budget.

4.3 IT Plan Governance

The Strategic Plan will greatly impact the operations of the Town. Undertaking this Strategic Plan will require a higher level of project management work compared to the past. Planning, selecting, deploying, and managing for improved systems will require strong leadership, clear strategic plans, and comprehensive tactical plans.

Once new technologies are implemented, the Town will need to actively communicate the services and benefits to both internal and external stakeholders. As an example, the Town should not expect that new electronic information services that provide additional resources via the Internet will be widely used unless the services are effectively communicated, trained, and promoted.

The Town should consider the following requirements that a plan of this magnitude necessitates:

- ☑ Active executive and management involvement and sponsorship will be critical to the successful adoption and continued support of the Plan.
- ☑ Allocating resources will become critical; establishing clear commitments from all Town departments will become increasingly important.
- ☑ Project goals and objectives should be communicated to stakeholders and progress should be proactively monitored.
- ☑ Business processes should be evaluated, and where necessary, redesigned to leverage new technologies in order to meet the Town's desired objectives.
- ☑ Management should be proactive in their change management roles as not all changes will be technical in nature. Adopting the plan may create shifts in responsibilities, process changes, and policy adjustments. Effective change management for Town staff will be a critical success factor.

IT Governance Resources

As described in previous areas of the plan, BDMP has recommended the collaboration of existing IT resources at the Town to support the overall IT environment and to assist with the implementation of the initiatives and projects in the plan. Leveraging existing IT resources to assist in the overall governance of the plan along with support from the new IT resource recommended by BDMP will provide the Town with the opportunity to involve an overall greater number of IT resources in support of the plan. The following summary describes the IT Governance Resources and their roles recommended by BDMP:

- 1. Town Administrator Provides overall executive level leadership and sponsorship of the plan.
- 2. Project Team Comprised of the Assistant Town Administrator, Public Buildings Director and Information Technology Manager. The Project Team will have overall responsibility for the management, implementation and oversight of the plan. The Project Team will be responsible for the bi-annual updates to the plan as well reassessing the order of upcoming projects and involving Town departments in the IT planning process in an on-going manner.

3.

- 4. Application Coordinators Application Coordinators could be designated to provide technical oversight and guidance to all Town departments. These staff members would be those individuals particularly skilled in an application, and will not necessarily be IT Department staff. In addition to responding to users' questions, Application Coordinators may also provide feedback in regards to specific training needs in the Town.
- 5. IT Leaders Group This group will be minimally comprised of the Town IT Manager, new Town IT resource, Public Safety IT resources, as well as IT resources from the Schools and Library. BDMP recommends that this group meet periodically (quarterly at least) to share strategies and ideas to improve overall IT support, communicate common concerns and problems as well as potential solutions to IT support issues.

IT Planning Governance

BDMP recommends that the existing Town Project Team actively lead the governance process of this plan. At a minimum, the Project Team should review the plan twice a year. The first update of the year should be to update progress made against projects. Progress made against the plan should be documented at the initiative level. The first update should occur during mid to late November so that the Project Team can update preliminary capital and operating budget amounts for the following fiscal year.

The second update during the year should take place in May and focus on reassessing upcoming projects and re-prioritizing the order of projects for the upcoming fiscal year. While individual department input is important, the overall decision to reprioritize projects should be made by the Project Team. For the spring update, the Project Team should reassemble and/or meet with Town department representatives to obtain their input and communicate plans for the upcoming year. In addition, the Strategic Issues list developed as part of the plan should be revisited to assess progress and to determine if changing business conditions introduce new challenges and issues.

Town of Wayland, MAAppendix A Project Participation List

Town of Wayland, MA Information Technology Strategic Planning Project Project Participant List								
Project Team								
1	John Senchyshyn, Assistant Town Administrator	HR Director						
2	John Moynihan, Public Buildings Director							
3	3 Gwen Sams-Lynch, Information Technology Manager							
_	Departments -	Representative(s)						
1	Assessing Department	Ellen Brideau						
2	Building Department	Daniel Bennett						
3	Conservation Department	Brian Monahan						
4	Council on Aging	JoAnn Kunz Susan Hatton						
		Margaret O'Brien						
5	Department of Public Works	Don Ouellette						
6	Finance Department	Michael DiPietro						
7	Fire Department	Chief Loomer Capt. Houghton						
8	Information Technology	Gwen Sams-Lynch MaryAnn DiNapoli						
9	Library	Ann Knight Kathleen Powers						
10	Planning Department	Sarkis Sarkisian						
11	Police Department	Chief Irving Officer Wilkins						
12	Public Buildings Department	John Moynihan						
13	Public Health Department	Steven Calichman						
14	Recreation Department	Nancy McShea Joann Kiburz						
15	Selectmen's Office	Fred Turkington						
16	Surveying Department	Alfred Berry Brendan Decker						
17	Town Clerk's Office	Lois Toombs Kathleen Siracusa						
18	Treasurer/Collector	Paul Keating Cheryl Kane						
19	Youth and Family Services	Lynn Down Dossie Kahn Muriel Sypek						
20	Wayland Schools	Leisha Simon						
	Town Citizens							
1	Technology Focus Group							
2	Cable Advisory Committee Representative							

Town of Wayland, MAInformation Technology Strategic Plan

	Town of Wayland Strategic Initiatives	Capital/ Operational	FY2011	FY2012	FY2013	FY2014	FY2015	5 Year Total
Strate	egic Initiatives Starting in Year One	<u> </u>						
1	Update Server and IT Infrastructure Including Backup Procedures	Capital	\$43,400					\$43,400
2	Add IT Resources to Support Future IT Initiatives	Operational	\$25,000	\$50,000	\$50,000	\$50,000	\$50,000	\$225,000
3	Complete Town Fiber Project Begun by Schools	Capital	\$85,000					\$85,000
4	Improve Internet Performance and Network Connectivity	Operational	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$45,000
5	Update Town IT Policies and Procedures Including IT Purchasing, IT Support, Acceptable Use and Training	Operational	\$10,000					\$10,000
6	Update Town Telephone System to Newer Technology	Capital	\$50,000					\$50,000
7	Develop Patch Management Plan for Critical System Updates	Operational	\$2,000					\$2,000
8	Develop Disaster Recovery Plan	Operational	\$24,000					\$24,000
9	Assess Email System and Spam Filters to Improve Efficiency	Operational	\$0					\$0
Strate	egic Initiatives Starting in Year Two			_				
10	Server Virtualization	Capital		\$55,000				\$55,000
11	Provide IT Training to Staff for Common Computer Tasks	Operational		\$10,000			\$10,000	\$20,000
12	Implement PC Replacement Program of Every 3 Years	Capital		\$100,000			\$100,000	\$200,000
13	Expand Use of MUNIS Capabilities Including Payroll	Operational		\$5,000				\$5,000
14	Implement Town Website with eGov Services	Operational		\$20,000	\$5,000	\$5,000	\$5,000	\$35,000
15	Implement Town-Wide IT System Management Policies for System Uptime Monitoring and Asset Tracking	Operational		\$5,000				\$5,000
Strate	egic Initiatives Starting in Year Three							
16	Integrate Key Town Systems to Increase Interoperability Among Departments	Operational			\$10,000			\$10,000
17	Implement Parks Department Software System for Asset and Service Request Tracking	Capital			\$30,000			\$30,000
18	Implement and Integrate Utility Billing System with Town Systems	Capital			\$150,000			\$150,000
19	Implement Document Management System	Capital			\$50,000	\$100,000	\$100,000	\$250,000
Strate	egic Initiatives Starting in Year Four							
20	Improve Library Wireless Access for Public Use	Operational				\$8,000		\$8,000
21	Develop Public Health Nurse Information Database	Operational				\$3,000		\$3,000
22	Provide Real-Time Access to GIS for Public Safety	Operational				\$15,000		\$15,000
Strate	egic Initiatives Starting in Year Five				<u> </u>			
23	Establish Public Access Kiosk at the Town Hall for Citizen Research of Town Information and Bill Payment	Capital					\$25,000	\$25,000
24	Procure Laptop Computers for Inspectors (Assume 3)	Operational					\$5,000	\$5,000
			FY2011	FY2012	FY2013	FY2014	FY2015	5 Year
								Total
	Total Year Budget			\$254,000	\$304,000	\$190,000	\$304,000	\$1,300,400
Operational Budget			\$248,400 \$70,000	\$99,000	\$74,000	\$90,000	\$79,000	\$412,000
		apital Budget	\$178,400	\$155,000	\$230,000	\$100,000	\$225,000	\$888,400