# City Council Work Session

## Tuesday, September 18, 2012
## 6:00 p.m.
## City Council Chambers – Rouss City Hall

## AGENDA

**Call to Order**

**Items for Discussion:**

**Discussion:**

**R-2012-72:** Resolution – Approval of the Information Technology Strategic Plan – Tom Lloyd and BerryDunn Representatives (pages 2-155)

**R-2012-69:** Resolution – Approval and authorization to execute the new Water Supply Agreement with Middletown – Perry Eisenach (pages 156-170)

**O-2012-29:** AN ORDINANCE TO AMEND AND RE-ENACT SECTIONS 29-16, 29-19, AND 29-20 OF THE WINCHESTER CITY CODE PERTAINING TO UTILITY BILLING TERMS AND DEPOSITS – Perry Eisenach (pages 171-176)

**Motion** to approve Fund Balance Policies – Mary Blowe (pages 177-181)

**R-2012-71:** Resolution – Authorization to designate of a portion of Christianson Familyland Pavilion and Shuffleboard Court in Jim Barnett Park as a Skate Park – Brad Veach (pages 182-189)

**Report of Liaisons**

**Monthly Reports**

Police Department (page 190)
Fire & Rescue Department (page 191)

**Adjourn**

B-2012-72

# CITY OF WINCHESTER, VIRGINIA

## PROPOSED CITY COUNCIL AGENDA ITEM

**CITY COUNCIL/COMMITTEE MEETING OF:** 9-18-12 **CUT OFF DATE:** 9-11-12

**RESOLUTION** _XX__ **ORDINANCE** ___ **PUBLIC HEARING** ___

**ITEM TITLE:** Resolution to Approve the Information Technology Strategic Plan

**STAFF RECOMMENDATION:** Approve the 5 year strategic plan

**PUBLIC NOTICE AND HEARING:** None

**ADVISORY BOARD RECOMMENDATION:**

**FUNDING DATA:** Funding to be provided annually through the normal budget process.

**INSURANCE:**

The initiating Department Director will place below, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The Director's initials for approval or disapproval address only the readiness of the issue for Council consideration. This does not address the Director's recommendation for approval or denial of the issue.

| DEPARTMENT | INITIALS FOR APPROVAL | INITIALS FOR DISAPPROVAL | DATE |
|---|---|---|---|
| 1. Zoning/Engineering | AMG / KBH | / | 9/5/12 |
| 2. Police/Utilities | | / | 9/5/12 |
| 3. Treasurer/Fire | | / | 9/5/12 |
| 4. Finance/Parks | | / | 9/5/12 |
| 5. City Attorney | | | 9/10/2012 |
| 6. City Manager | | | 9-12-12 |
| 7. Clerk of Council | | | |

Initiating Department Director's Signature: _____ 9/10/12, Date

Received SEP 10 2012

APPROVED AS TO FORM: _____ 9/10/2012 CITY ATTORNEY

Staff Report

**Title:** Resolution to Approve the Information Technology Strategic Plan

**Background**:

At its January 2011 retreat Council initiated a process to conduct an IT assessment and to create a IT strategic Plan. A committee comprised of two councilors, three citizen members, the City Manager, and City and Schools Technology directors was established in May 2011. The committee conducted an initial survey of City agencies and developed a request for proposals to engage a consultant to conduct the assessment and create a strategic plan. A contract with Berry, Dunn, McNeil & Parker (BerryDunn) was executed in January 2012. From March through June BerryDunn held meetings with staff agencies to conduct the assessment develop and prioritize issues, and develop and prioritize initiatives to address City needs.

**Current Situation:**

BerryDunn has completed development of the five year strategic plan. The plan includes planning cost estimates for the initiatives in the plan.

**Recommendation:**

Approve the Information Technology Strategic Plan

**Fiscal and Policy Implications:**

The plan is a policy document to guide technology investment. The plan contemplates a substantial financial investment of the five year period to eliminate existing deficiencies and to provide new services. The plan provides a mechanism to update and revise the plan so that it remains a viable tool.

Resources for the plan will be addressed during each budget cycle. The FY 2013 budget provides $500K seed funding.

**Discussion:**

The plan identifies strategic initiatives, proposes alternate solutions for consideration, and estimates costs. Additional study by the City is needed to select the best solution and to develop detailed projects that take into account the intertwined dependencies among the projects.

# RESOLUTION TO APPROVE THE INFORMATION TECHNOLOGY STRATEGIC PLAN

WHEREAS, the Common Council expressed the desire to assess City information technology capabilities with the intention of improving the City's capabilities; and

WHEREAS, the City engaged Berry, Dunn, McNeil & Parker (BerryDunn) to conduct a needs assessment; and

WHEREAS BerryDunn has prepared a five year strategic plan to address technology needs identified during the needs assessment; and

WHEREAS the Technology Working Group consisting of City staff members has reviewed the plan and has recommended plan approval; and

WHEREAS funding for strategic initiatives will be identified through normal appropriation procedures.

NOW therefore be it RESOLVED, that the Information Technology Strategic Plan is approved as the guiding document for information technology improvements and the City Manager is hereby authorized to implement the plan and to make schedule adjustments as may be required to complete prerequisite projects prior to commencing major projects.

*BerryDunn Presentation to the*
*City Council of Winchester, Virginia*

# STRATEGIC TECHNOLOGY PLANNING PROJECT

Tuesday, September 18, 2012

BerryDunn

# AGENDA

1. Introductions
2. Project Approach
3. Top Five Strategic Initiatives
4. IT Strategic Plan Funding Levels
5. Updating the IT Strategic Plan
6. Questions and Discussion

# INTRODUCTIONS

BerryDunn team members present today:

**Chad Snow, PMP, CFE**
Project Manager

**Seth Hedstrom, CAPM**
Lead Business Analyst

Additional BerryDunn team members:

**Gary Soucy**
Lead Technical Analyst

**Brandon Milton**
Business Analyst

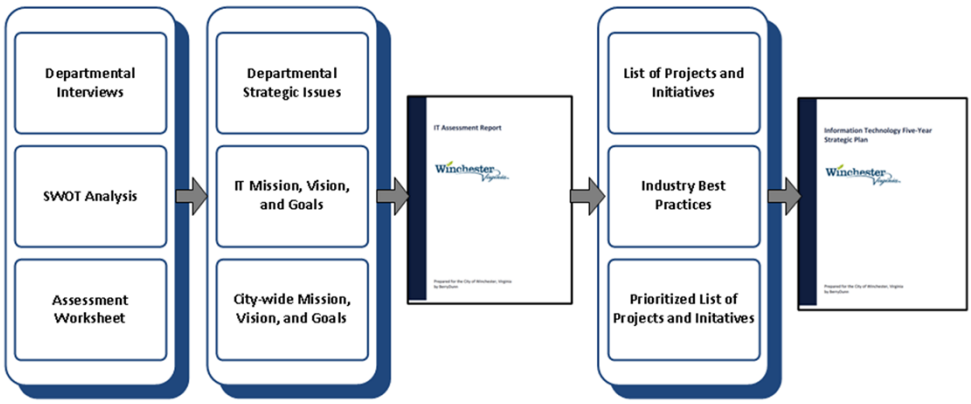
**Timothy Masse**
Project Principal

BerryDunn

## PROJECT APPROACH


BerryDunn

# PROJECT APPROACH

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5

# TOP FIVE STRATEGIC INITIATIVES

| Top Five Strategic Initiatives | | |
|---|---|---|
| **No.** | **Initiative** | **Timeframe** |
| **1** | L: Select and implement a City-wide email and calendaring application. | FY 2013 |
| **2** | B: Reorganize the IT Department to align resources with the needs of the City, fill vacancies in the department, and identify a resource with a security focus. | FY2013 |
| **3** | A: Develop and implement an enterprise-wide hardware replacement and operating system update schedule with standardization to include desktops, laptops, tablets and servers. | FY2013 |
| **4** | D: Develop and implement an enterprise-wide disaster recovery and business continuity plan. | FY2013 |
| **5** | F: Develop and implement technology purchasing and project management policies and procedures to include promoting standardization of technologies, the selection and prioritization of technology projects, and change management. | FY2013 |

## 1 – CITY-WIDE EMAIL AND CALENDARING

**Current Environment:**

- The City is currently utilizing a POP3 email server hosted by a local service provider
- Challenges include insufficient storage space, severely limited email attachment size, no calendar sharing, limited smart-phone compatibility and frequent service interruptions or downtimes

**Initiative Summary:**

- Purchase, install and administer its own, in-house MS Exchange server
- Designate a member of the IT Department as the Exchange Administrator

**Benefits:**

- Increased security with locally stored data
- Centralized control of email and calendaring
- Improved flexibility related to expansion
- Improved performance and expanded capabilities to end users

## 2 – IT DEPARTMENT ORGANIZATION

**Current Environment:**

- Unfroze and filled one position in March 2012
- Second position remains frozen since 2008
- Existing staff must work outside their customary responsibilities
- Limits ability operate in a proactive manner

**Initiative Summary:**

- Reorganize the IT Department to align resources with City needs
- Follow an iterative approach to implement organizational changes and increasing the FTE count to 8.5 FTE in FY2016
- Develop and document updated job descriptions and identify a resource to focus on security

**Benefits:**

- Improved service delivery
- Improved staff retention through effective, ongoing training programs
- Improved productivity with existing IT tools
- Improved ability to leverage emerging technologies
- Highly trained work force

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8

## 3 – HARDWARE REPLACEMENT & STANDARDS

**Current Environment:**

- Hardware is not currently purchased based upon a schedule
- Hardware is not currently purchased in alignment with technical standards
- There are multiple instances of outdated workstations (141 of 356 workstations are greater than 4 years old)
- Existing workstations vary in versions of technologies

**Initiative Summary:**

- Inventory City hardware requirements based upon application needs and supported technologies
- Develop technology standards for all hardware
- Develop replacement schedule for hardware
- Commit necessary funding to support the schedule long-term

**Benefits:**

- Improved standardization
- Assurance that hardware will not reach end-of-life
- Reduction in unexpected support and maintenance costs
- Increased security by using current technologies

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9

## 4 – DISASTER RECOVERY/BUSINESS CONTINUITY PLANS

**Current Environment:**

- No enterprise-wide Disaster Recovery or Business Continuity Plans currently exist
- Some plans exist for specific applications or certain business processes but not with an enterprise wide perspective

**Initiative Summary:**

- Conduct a Risk Assessment
- Document Business Processes
- Develop Disaster Recovery and Business Continuity Plans
- Regularly test and update plans

**Benefits:**

- Increased risk mitigation
- Improved business continuity
- Decreased downtime in the event of a disaster
- Preservation of critical data
- Broadened knowledge of City-wide business processes

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## 5 – TECHNOLOGY PURCHASING/PROJECT MANAGEMENT

**Current Environment:**

- Technology purchases are made with varying input from the IT Department
- Purchases are not always made with alignment with City standards for technologies
- A methodology to manage technology projects does not exist

**Initiative Summary:**

- Develop policies and procedures related to purchasing and project management

**Benefits:**

- Increased ability to support purchased technologies
- Increased standardization of purchased technologies
- Documented project objectives will ensure projects meet business expectations
- Increased likelihood of project success

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## ADDITIONAL INITIATIVES AND PROJECTS

| Year | No. | Initiative/Project |
|---|---|---|
| Year 2 FY2014 | 1 | SunGard Needs Assessment |
| | 2 | Network Improvements Action Plan |
| | 3 | Technology Training |
| | 4 | Treasurer and COR Needs Assessment |
| Year 3 FY2015 | 1 | Time and Attendance Application |
| | 2 | Remote Meeting Technologies |
| | 3 | Physical and Environmental Controls |
| | 4 | Virtualization Strategy |
| Year 4 FY2016 | 1 | Council Meeting Application |
| | 2 | Mobile Telephone Policy |
| Year 5 FY2017 | 1 | GIS Policy |

# FUNDING LEVELS

- The projects and initiatives in the IT Strategic Plan each contain budget estimates.
- Budget estimates are composed of needed hardware, software, and professional services costs where external resources will be leveraged.
- Many of the projects will be completed by internal resources and so do not have direct costs for services associated with them.

| Five-Year Initiative and Project Estimated Budget Levels | | | | | | |
|---|---|---|---|---|---|---|
| **Year** | **Year 1 FY2013 (6 Months)** | **Year 2 FY2014** | **Year 3 FY2014** | **Year 4 FY2016** | **Year 5 FY2017** | **5-Year Total** |
| **Estimated Budget** | $291,333 | $633,805 | $744,733 | $641,733 | $404,733 | $2,746,337 |

# FUNDING LEVELS

| Future IT Spending Levels | | | | | |
|---|---|---|---|---|---|
| **Year** | **Year 1 FY2013** | **Year 2 FY2014** | **Year 3 FY2014** | **Year 4 FY2016** | **Year 5 FY2017** |
| **Total Plan Initiatives Budget** | **$291,333** | **$633,805** | **$744,733** | **$641,733** | **$404,733** |
| **Est. Operational Budget** | $1,820,453 | $1,820,453 | $1,820,453 | $1,820,453 | $1,820,453 |
| **Operational Budget to Support Prior Year Projects** | 0 | 0 | $39,000 | $118,000 | $207,000 |
| **Total Operational Budget** | **$1,820,453** | **$1,820,453** | **$1,859,453** | **$1,938,453** | **$2,027,453** |
| **Total IT Spending** | **$2,111,786** | **$2,454,258** | **$2,604,186** | **$2,580,186** | **$2,432,186** |

| Future IT Spending Ratios | | | | | |
|---|---|---|---|---|---|
| **Year** | **Year 1 FY2013** | **Year 2 FY2014** | **Year 3 FY2014** | **Year 4 FY2016** | **Year 5 FY2017** |
| **Total IT Spending** | $2,111,786 | $2,454,258 | $2,604,186 | $2,580,186 | $2,432,186 |
| **City General Fund** | $78,985,000 | $78,985,000 | $78,985,000 | $78,985,000 | $78,985,000 |
| **IT Spending Ratio** | **2.67%** | **3.11%** | **3.30%** | **3.27%** | **3.08%** |

## UPDATING THE PLAN

The City Project Team and BerryDunn have developed a process to continually update and govern the IT Strategic Plan:

- ✓ Form an IT Steering Committee that will be responsible for providing oversight of the Plan
- ✓ Develop and document a process for which new projects will be incorporated into the Plan
- ✓ Leverage internal project tracking tool to track the progress and status of each project and initiative
- ✓ Review progress of projects and initiatives on a monthly basis
- ✓ Review and update the Plan twice a year
- ✓ Implement Strategic Initiatives to regularly update the Plan in future years including identifying new projects and initiatives

## QUESTIONS AND DISCUSSION

Thank you!

BerryDunn
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BerryDunn

# City of Winchester, Virginia

## Information Technology Strategic Plan

**Version 4**
September 7, 2012

**Prepared in collaboration with:**
City of Winchester, Virginia
15 North Cameron Street
Winchester, VA 22601

# City of Winchester
## Information Technology Strategic Plan

Table of Contents

| Version | Delivered Date | Update Reason |
|---|---|---|
| Draft 1 | June 27, 2012 | Draft 1 delivered to the City Project Team for review. |
| Version 1 | July 13, 2012 | Version 1 updated based on Project Team feedback |
| Version 2 | August 28, 2012 | Version 2 updated based on additional feedback |
| Version 3 | September 5, 2012 | Version 3 updated based on additional feedback |
| Version 4 | September 7, 2012 | Version 4 updated based on additional feedback |

**Table i: Version History of the Plan**

## Acknowledgements

BerryDunn would like to thank the employees of the City of Winchester for collaboratively working with us to develop this Information Technology Strategic Plan for the City. Special thanks go to the Project Team members listed below, whose time and commitment were essential to the development of this plan:

- Bob Elliott;
- Tom Lloyd; and
- Rob Shambaugh.

We would also like to thank the Department Directors and staff who participated in the development of the plan. Not only did department representatives participate in the planning process, but each department valued the opportunity to participate and demonstrated an understanding that a successful information technology strategic plan is as much about participating in the process as it is about the final plan. We truly appreciate the level of cooperation, support, and feedback we received from the employees of the City.

Throughout the project we met with members of City leadership so that executive level input could be contributed to the plan. We would like to thank the members of City management for their time and contributions to the project.

The key ingredient for future success of technology initiatives is the commitment level of necessary financial and managerial resources. We also believe that local area citizens and businesses should be proud of the manner in which the dedicated employees of Winchester provide services to the community.

## Executive Summary

The City of Winchester, founded in 1744, is the oldest Virginia City west of the Blue Ridge Mountains. Located at the northern entrance to the Shenandoah Valley, the City is the medical, commercial, governmental, and financial center for the surrounding area. The City encompasses 9.3 square miles. The City's 2007 population was estimated at 26,000 with 7,650 single family attached and detached homes and over 4,000 multi-family dwelling units.

The City has approximately 400 employees that interact with the information systems or related business activities on a daily basis. There are three Constitutional offices at the City which are managed by an elected official. One Registrar is a state appointed official and all other departments are managed by directors reporting to the City Manager.

City Hall

In January 2012, the City retained Berry, Dunn, McNeil & Parker (BerryDunn) to assist in conducting an analysis of the current technology environment at the City and in the development of a five-year IT Strategic Plan. As part of the first phase of the project, BerryDunn conducted an assessment of the current technology environment based on focus areas identified by the City as well as additional areas identified during the course of the project.

In March 2012, BerryDunn conducted onsite fact-finding meetings with all City departments. BerryDunn also toured the City's IT facilities and met with IT Department employees individually to gain an understanding of the roles and responsibilities of the IT staff and the current technology environment in the City.

Old Town Winchester VA

Interim findings included a summarized list of technology strategic issues identified by both BerryDunn and the City. A strategic issue is a challenge or problem faced by the City that relates to the use and/or management of technology. This list of strategic issues was discussed, confirmed, and prioritized as part of the "Strategic Issue Prioritization Work Session" facilitated by BerryDunn that included representatives from each department. As a result of the work session, the identified strategic issues were prioritized. The prioritized list of issues is contained in Section 3.1 of this plan.

Each strategic issue has been allocated to one of three functional areas: management and operations, applications, and technical. The list of strategic issues is organized based on these categories, which are defined below:

- **Management and Operations (M):** Management and Operations Issues are related to how the City supports the technology tools and infrastructure in place, how technology is planned for and acquired, and how resources are positioned to support technology in the City.
- **Applications Issues (A):** Applications Issues are related to the applications that are used to support City users in core business processes, including providing services to City citizens.

- **Technical Issues (T):** Technical Issues are related to the City's core technology infrastructure and how it is developed and maintained to be cost efficient and effective.

Department Leads were then asked to review the prioritized list of strategic issues and complete initiative planning templates to identify and document technology projects that would address the list of strategic issues. BerryDunn also developed a list of projects which was combined with those initiatives submitted by Department Leads. The "Projects and Initiative Work Session" facilitated by BerryDunn allowed the City Technical Working Group (TWG) the opportunity to discuss, confirm, and score each initiative or project. Collaboration and involvement of all departments was a key ingredient to this successful effort which became the basis for the Strategic Plan.

The table below summarizes the initiatives developed collaboratively by the City and BerryDunn in the Strategic Initiative Prioritization Work Session.

| Initiative Budget and Timeline Matrix ($) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Strategic Initiative | | Year 1 FY2013 (6 Mths) | Year 2 FY2014 | Year 3 FY2015 | Year 4 FY2016 | Year 5 FY2017 | 5 Year Total |
| **Initiatives Starting in Year One** | | | | | | | |
| **L** | City-wide email and calendaring | 90,000 | 0 | 0 | 0 | 0 | **90,000** |
| **B** | IT Department Organization | 30,000 | 150,000 | 150,000 | 170,000 | 170,000 | **670,000** |
| **A** | Hardware Replacement Schedule | 136,333 | 136,333 | 136,333 | 136,333 | 136,333 | **681,665** |
| **D** | Disaster Recovery/Business Continuity | 30,000 | 30,000 | - | - | - | **60,000** |
| **F** | Technology Purchasing and Project Management Policies | 5,000 | 8,000 | 8,000 | 8,000 | 8,000 | **37,000** |
| **Initiatives Starting in Year Two** | | | | | | | |
| **I** | SunGard Needs Assessment | - | 207,372 | - | - | - | **207,372** |
| **M** | Network Improvements Action Plan | - | 77,100 | 59,400 | 59,400 | 59,400 | **255,300** |
| **E** | Technology Training | - | 0 | 25,000 | 25,000 | 25,000 | **75,000** |
| **K** | Treasurer and COR Needs Assmt. | - | 25,000 | 125,000 | 0 | 0 | **150,000** |
| **Initiatives Starting in Year Three** | | | | | | | |
| **H** | Time and Attendance Application | - | - | 180,000 | 240,000 | - | **420,000** |
| **P** | Remote Meeting Technologies | - | - | 26,000 | - | - | **26,000** |
| **O** | Physical and Env. Controls | - | - | 40,000 | - | - | **40,000** |
| **N** | Virtualization Strategy | - | - | 25,000 | - | - | **25,000** |
| **Initiatives Starting in Year Four** | | | | | | | |
| **J** | Council Meeting Application | - | - | - | 3,000 | 6,000 | **9,000** |
| **C** | Mobile Telephone Policy | - | - | - | 0 | - | **0** |
| **Initiatives Starting in Year Five** | | | | | | | |
| **G** | GIS Policy | - | - | - | - | 0 | **0** |
| | | **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5 Year Total** |
| **Total Plan Initiatives Budget** | | **291,333** | **633,805** | **744,733** | **641,733** | **404,733** | **2,746,337** |

**Table i: Prioritized Strategic Initiatives**
***Year One is considered to be the final six months of the current fiscal year**

One of the critical success factors for the implementation of the IT plan will be executive support and leadership for the projects in the plan. The IT Department has committed to undertaking the projects in this plan and executive support will be needed to secure and allocate the appropriate City resources, as well as ensuring that projects outside the scope of this plan in current and future years are thoroughly evaluated before adjusting the existing priorities of the projects in the plan. Implementing the projects and initiatives in this plan not only require appropriate City resources, but a structured project management methodology will also need to be established to increase the likelihood of project success.

By undertaking this Strategic Technology Planning Project, the City is proactively planning to make improvements in many areas throughout the City. Thoughtful and well-planned investments in proven information technologies will allow the City to be more efficient and effective for their stakeholders and constituents. The key to success is managing and executing the plan. It will require the full commitment of necessary financial and managerial resources.

# 1.0 Introduction

## 1.1 PROJECT BACKGROUND

The City of Winchester, founded in 1744, is the oldest Virginia City west of the Blue Ridge Mountains. Located at the northern entrance to the Shenandoah Valley, the City is the medical, commercial, governmental, and financial center for the surrounding area. The City encompasses 9.3 square miles. The City's 2007 population was estimated at 26,000 with 7,650 single family attached and detached homes and over 4,000 multi-family dwelling units.

The City has approximately 400 employees that interact with the information systems or related business activities on a daily basis. There are three Constitutional offices at the City which are managed by an elected official. One Registrar is a state appointed official and all other departments are managed by directors reporting to the City Manager.

In 2011, the City formed two groups to facilitate the development of an Information Technology (IT) Strategic Plan. The Information Technology Advisory Group (ITAG) consists of representatives from all departments and is tasked with providing insight into the issues and problems facing their departments. The Technical Working Group (TWG) is a sub-group of ITAG tasked with coordinating the efforts to produce the IT Strategic Plan.

In January 2012, the City retained Berry, Dunn, McNeil & Parker (BerryDunn) to assist in conducting an analysis of the current technology environment at the City and in the development of a five-year IT Strategic Plan. As part of the first phase of the project, BerryDunn conducted an assessment of the current technology environment based on focus areas identified by the City as well as additional areas identified during the course of the project.

Prior to retaining the services of BerryDunn, the City initiated an internal assessment among departments to determine technology needs. A significant amount of feedback was collected and was used to form the basis for this current initiative of developing an IT Strategic Plan with the goal to maximize the value information systems and technology brings to City business processes. The focus of the initiative is to develop a plan to address unmet needs and improve efficiency, reliability, and cost effectiveness of business processes, as well as the information systems that support them.

## 1.2 REPORT FORMAT

This report is comprised of five sections, as described below:

1. **Introduction.** This section describes the background of the project leading up to the report, the format of the report, and the work performed in the development of the report.

2. **Current Technology Environment.** This section contains a summary of the current environment in the City including the technical infrastructure and applications in place, as well as the current IT projects and initiatives underway at the City.

3. **Planning Framework.** This section contains the City-wide Strategic Issues that were prioritized; the mission and goals of the IT Department; the objectives of the City; and the sources of benchmarking and best-practice research utilized throughout the project.

4. **City-Wide Technology Initiatives.** This section contains the Strategic Initiative Reference Table, which describes those Initiatives currently in progress and presents the Prioritized Plan Initiatives.

5. **Implementing the Strategic Technology Plan.** This section contains the budget and timeline for the Prioritized Plan Initiatives, projected funding levels for the Plan, and describes the approach to ongoing governance of the plan.

## 1.3 WORK PERFORMED

In March 2012, BerryDunn conducted onsite fact-finding meetings with all City departments. BerryDunn also toured the City's IT facilities and met with IT Department employees individually to gain an understanding of the roles and responsibilities of the IT staff and the current technology environment in the City.

Interim findings included a summarized list of technology strategic issues identified by both BerryDunn and the City. A strategic issue is a challenge or problem faced by the City that relates to the use and/or management of technology. This list of strategic issues was discussed, confirmed, and prioritized as part of the "Strategic Issue Prioritization Work Session" facilitated by BerryDunn that included representatives from each department. As a result of the work session, the identified strategic issues were prioritized. The prioritized list of issues is contained in Section 3.1 of this plan.

Department representatives were then asked to review the prioritized list of strategic issues and complete initiative planning templates to document technology projects that would address the strategic issues. BerryDunn also developed a list which was combined with those initiatives submitted by City department representatives. The "Projects and Initiative Work Session" facilitated by BerryDunn allowed departments to discuss, confirm, and score each initiative or project. Collaboration and involvement of all departments was a key ingredient to this successful effort which became the basis for the Strategic Plan.

In addition to developing the Preliminary List of Strategic Issues, BerryDunn also developed an Assessment Report which was the outcome of activities conducted as part of the first phase of the project, the Assessment Phase. This technology assessment was not a complete assessment of every component of technology in place in the City, but rather focused on specific areas requested by the City (as contained in Table 01 below) and based on BerryDunn's experience working with similar-sized local governments.

| Assessment Focus Areas | | |
|---|---|---|
| **RFP Section** | **Focus Area** | **Assessment Report Section** |
| i. | Internal Questionnaire Assessment | 3.0 |
| ii. | System Infrastructure, Network Access, Capacity and Robustness Assessment | 5.0 & 6.0 |
| iii. | End User Training and IT Staffing Assessment | 9.0 |
| iv. | Web Enablement Assessment | 8.0 |
| v. | Collaboration and Communication Assessment | 7.0 |
| vi. | Analytical Reporting Assessment | 10.0 |

| Assessment Focus Areas | | |
|---|---|---|
| **RFP Section** | **Focus Area** | **Assessment Report Section** |
| vii. | Disaster Recovery and Continuity of Operations Assessment | 11.0 |
| viii. | Governance | 12.0 |

**Table 01: Assessment Focus Areas**

The information gathered from City stakeholders, the results of work sessions, research activities, and existing documentation was used to create this plan. BerryDunn also facilitated meetings with the IT Department and City Management to discuss IT Department, Mission, Goals, and Objectives and City Mission, Goals, and Objectives. The results of those work sessions formed the basis for Section 3.2 of this plan. The projects in the IT Strategic Plan support the Mission, Goals, and Objectives identified by both the IT Department and the City.

In addition to Assessment Focus Areas which were the basis for developing recommended initiatives and projects, the City requested specific alternative solutions be developed for some focus areas. The following table identifies these areas.

| Focus Areas for Alternative Solutions | |
|---|---|
| **RFP Section** | **Focus Area** |
| ii. | Identify at least three distinctly different alternative solutions for **system infrastructure**. |
| iii. | Identify at least three distinctly different alternative solutions for a **training program**. |
| iv. | Identify at least three distinctly different alternative solutions to **web enable** desired functions. |
| v. | Identify at least three distinctly different alternative solutions to provide **communication and collaboration tools**. |
| vi. | Identify at least three distinctly different alternative solutions related to **analytical reporting**. |
| vii. | Identify alternative solutions related to **disaster recovery and continuity of operations**. |
| viii. | Identify alternative solutions related to **governance**. |

**Table 02: Focus Areas for Alternative Solutions**

The projects included in the IT Strategic Plan were selected to help address these challenges, support the Mission, Goals, and Objectives of the City and the IT Department and to position the City as a forward looking organization with stable core technologies. Active involvement on the part of department staff will be necessary to continually update and refine the plan in the coming years.

# 2.0 Current City Technology Environment

## 2.1 IT DEPARTMENT ORGANIZATIONAL STRUCTURE AND SUPPORT

The IT Department at the City of Winchester currently consists of six full-time employees. The IT Department currently has a vacancy in the PC Support position which is frozen due to budgetary limitations. These support positions are depicted in the following figure.

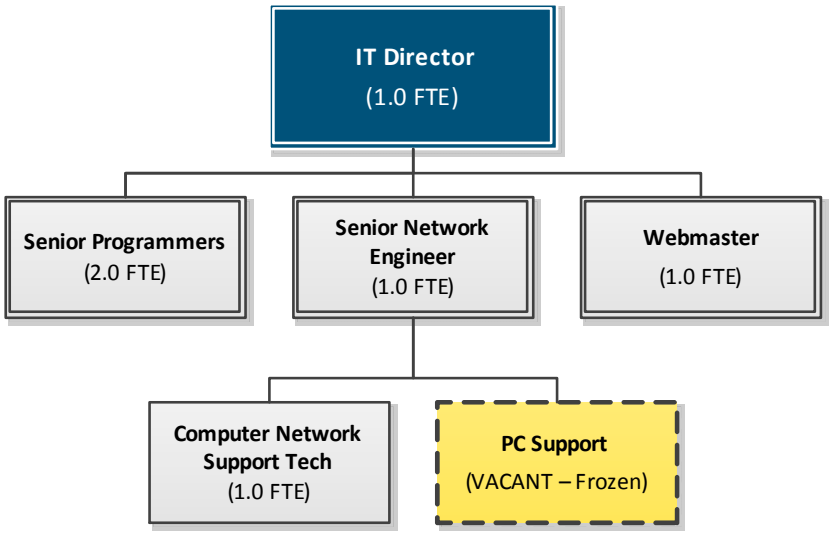



**Figure 01: Current IT Department Organizational Structure**

The PC Support position became vacant and frozen in 2008. The Senior Network Engineer position also became vacant and frozen in 2008; however, it was recently filled in March, 2012. Historically a part-time administrative resource was a part of the department; however, this position was eliminated and clerical responsibilities were shifted largely to the Webmaster and other department staff.

In the current environment, PC Support responsibilities are largely held by the Computer Network Support Technician due to the vacancy in the Department. This individual performs a variety of tasks on a regular basis and has the skill-set for technical work beyond PC Support or Help Desk, namely network administration.

Documented job descriptions for all positions in the current organizational structure of the IT Department exist and were last reviewed on September 30, 2011. The descriptions contain the necessary components to document the expectations for each position. In addition, the descriptions are in line with what is generally understood as the function of each role in the industry.

In some cases, the actual work performed by staff in the IT Department does not align with their respective job descriptions. Staff is aware of this and it is attributed largely to the vacancy in the PC Support position and also to generally increased workloads and shifting demands for technology support. The vacancies and staffing levels were discussed in the preceding section and an example of the shifting demands for technology support is the increased adoption of commercial software versus custom developed software, or software that requires ongoing programming maintenance for operations.

Technology support for City departments is largely provided by the IT Department. In some cases, there are resources within departments with informal technology support roles. These individuals typically provide initial triage support to their departments. In the case of the Police Department, a more formal support technician position exists. While there is no formalized reporting back to the IT Department, this individual is regularly involved in IT Department meetings and communications. It was reported that some departments in the City have "opted-out" of receiving support from the IT Department.

The process for an end-user to request technology support varies both in the nature of the request and the resources that will be receiving the request. If the support provider is the IT Department, requests are generally made through an email work request. Upon submission, the request is logged and tracked by the IT Department using Track-It. All staff in the IT Department regularly review this list to monitor the delegation and resolution of requests. In some cases, requests for support are made to staff in the IT Department directly, either through email or a telephone call. It was reported that these direct interactions are often for "quick" requests, or follow-up to existing requests.

Support requests made by end-users to sources other than the IT Department do not always follow a consistent model. Where support is provided by an internal City employee outside of the IT Department, several informal procedures are used. Additional processes are employed when support is being provided by an external support source. In these instances, the City's IT Department is not involved in these support requests and they do not typically have the ability to observe the requests being made.

Multiple departments in the City receive support from sources other than the IT Department for operational support of regular business processes. In some cases, this is due to the use of State systems, such as in Housing and Neighborhood Development as well as Voter Registration where support is provided by the State of Virginia for some technologies. In other instances, technology support is currently provided by external companies including WinTech Group, American Business Systems and Computer Information Technology. All three of these sources are local companies. Departments receiving support from these external companies include Tourism, Utilities Operations and Social Services. The instances of external support sources have typically been in place for a number of years, and in each case users reported a high level of satisfaction with the service they received.

## 2.2 SYSTEMS INFRASTRUCTURE

The City is a self-described Dell shop with nearly all of the servers and workstations purchased from Dell. One primary exception is the iSeries from IBM which runs the City's SunGard application. It was reported that the hardware was upgraded in the spring of 2011. Instances of restrictions due to outdated hardware are limited.

The City is performing Domain Administration with a primary and backup Windows Server 2008 R2 Domain Controller for Active Directory, DNS (Domain Name System), and DHCP (Dynamic Host Configuration Protocol). As mentioned above, the City is utilizing SunGard 8.0.1.0-3 Enterprise Resource Planning (ERP) software. There are various third party applications in use throughout the City, as well.

The City of Winchester's IT Department has also recognized the benefits of virtualization and has begun to consider how to effectively integrate virtualized solutions into the organization. Currently, the City is not using virtualization in production. However, virtualization is a current in-progress initiative and the IT Department has begun preliminary exploration of Virtual Machine (VM) technologies. It has

been recognized that professional development may be needed for current staff to better leverage the use of virtualization.

The City is currently utilizing a limited number of hosted systems including both the Web Server and the Email Server. These City-owned systems are both located in a rack at a local hosting company, Visual Link. The City is also using a hosted Postini solution for spam filtering.

The City currently supports approximately 350 PCs throughout the City and 47 servers. The typical age of these PCs ranges from eight years old to almost new. Laptop computers and tablets are not widely used throughout the City at this time. Some departments reported having laptop computers in the past that have either aged to obsolescence or deliver inadequate performance. It was also reported that due to the increased cost of laptop computers, desktop computers have been purchased instead in some instances.

Workstations are not currently managed based on a replacement schedule. Each department in the City purchases workstations from their own budget with varying levels of involvement from the IT Department. Most typically the IT Department reviews the specifications of workstations that are being purchased for general standardization. The IT Department recognizes the need for a replacement schedule, but is challenged to implement one due to not managing City-wide technology purchases and challenges in the past with securing necessary funding.

Nearly every department reported challenges with the current workstation inventory, including the IT Department. While end users reported challenges with standardization and performance, the IT Department reported challenges with supporting the inventory largely due to the lack of standardization. Departments also reported a desire for an increased number of laptop computers and tablets. It was recognized that many applications the City may implement in the future offer mobile functionality that will be further leveraged by the use of tablets. Examples include public safety applications and applications used in public utilities.

## 2.3 CITY NETWORK

The City is currently collaborating with the School Department for Internet and Wide Area Network (WAN) connectivity. The School has a single Edge Router that provides connectivity to the Internet and an ASA 5505 providing Firewall Security and Virtual Private Network (VPN) access for both the City and School. The connectivity is provided by Comcast and is segmented for the two networks. The School is utilizing 45 Mbps throughput and the City uses 30 Mbps for a total of 75 Mbps. The costs are broken out and shared by the two entities. There is no redundant ISP (Internet Service Provider).

Currently the city is employing Ethernet only Local Area Networks at all their locations without wireless connectivity for City employees. Guest wireless is also not available with the effective use of a perimeter network, or DMZ. If installed, a perimeter network would not allow access to the actual City network, but would only provide access to the Internet. Wireless Access Points connected to this network would allow guests to have access to the Internet wirelessly.

Currently, there are several end users that are able to utilize Remote Access through the Firewall. The School Department has a Cisco ASA for both Firewall and VPN purposes. Those with access are able to connect to the network through the VPN and utilize Remote Desktop Protocol to access their desktop. It was reported that there may not be enough licenses to support the needed concurrent usage of the VPN. Additionally, if users share a workstation, only one person may access the PC remotely at a time.

The School is implementing a Cisco ASA Firewall for protecting the combined City/School network from external threats. The City is also concerned about internal threats from 'rogue' technology, such as visitor laptops. The IT Department reserves the right to review laptops and potentially deny them based on Antivirus or unwanted, installed apps. In addition, the City currently employs an iPrism for virus and malware scans.

The City is utilizing Trend Micro for Anti-Virus Protection. Once a week, the City will run a scan that reportedly slows several users down for about an hour during lunch on Wednesdays. Postini is the City's Spam Filtering solution. It is a hosted solution that scans every piece of email incoming and outgoing for various threats.

## 2.4 TECHNOLOGY TOOLS

The City currently employs a POP3 server hosted by Visual Link. The City owns the server, but it is administered and maintained by the host. Currently, the City has limited the email file attachment size to 30 MB. However, users from various departments reported that it is only 10 or 20 MB. Due to the nature of the hosting company, support is only provided during normal business hours. If problems arise outside of that time, there is no way for the City to receive support on email issues.

The City is currently using MS Outlook to send and receive email. Users are able to send and receive email on their Blackberry mobile telephones, but several City employees are not aware of this available functionality. Calendar sharing is not an option within departments. Some users can sync their Blackberries with their calendar, but this is not true for users of other smartphone technologies.

The City is currently utilizing Intertel's Mitel technology for their PBX and Iwatsu telephones. Access to the phones is available to any City employee along with voicemail. The City is not utilizing Voice over IP (VoIP) at this time; however, all phones are connected by IP switches.

Currently, the City does not have a documented mobile phone policy. Many users have Blackberries that they are able to synchronize through their workstations. However, not all Blackberry users have this ability and it is a reported source of frustration. Additionally, the City will not support other mobile phones. Users would like the ability to obtain their email and calendar through their phone.

The City currently is in the process of implementing a document imaging solution throughout the organization, OptiView. Several departments are now live with the application and several more are scheduled to be live in the coming months. For those that are live, departments have integrated scanning routines into core business processes. Users reported that while the scanning process has been implemented, there may be opportunities to further streamline this process which is a current initiative across the City. Users also reported that in some areas, there are increased opportunities for efficiencies from fully leveraging the tool such as expanded indexing and archiving functions. The desire for integration of the document management system to City applications was also reported.

The City website is centrally managed by a full-time resource in the IT Department, the Webmaster. According to the job description of this position, the Webmaster is responsible for "managing and maintaining the content, structure, and overall integrity of the City's Intranet and Internet web sites." The Webmaster coordinates with departments to update and manage content and users reported a high level of satisfaction with the timeliness that updates are made.

The City's website is a php design and is externally hosted on a MySQL server. The current design is the result of a recent re-branding effort involving an external consulting firm that was also tasked with a City-wide re-branding effort. Capabilities of the site include pages for each City department, a menu

designed specifically for common citizen inquiries, a calendar, a portal to a Facebook page, several external links and a large amount of static document and forms postings. In addition, citizens are able to make payments through the website using a third-party payment manager.

The City maintains an internal website that is managed in WordPress. The site is publicly available, but the URL is not published beyond internal employees. Content is managed given the public nature of the site so that sensitive information is not available. Functionality of the site includes a calendar, a library of employee management documents, an employee training calendar, a library of forms and publications, and a library of past employee newsletters.

Data is largely managed by the departments responsible for the business area it supports. In the current environment, there is not a large amount of enterprise-wide use of particular data stores. As a result, despite challenges of interoperability and areas of inefficiencies, users reported that the data integrity is high. Users did not report a large amount of instances of inaccurate data or instances when there was limited assurance in the reliability of data. In addition, the process to manage data has been in place for a number of years and in most cases users have access to a significant amount of historical information. Users reported this as a strength and something they wish to maintain into the future.

The City has made progress to reduce the number of instances of MS Excel spreadsheets and MS Access databases. In the current environment, the City uses a mix of reports that reside within application functionality and those that have been custom developed, including MS Excel workbooks. Depending on the tool, involvement from IT staff may be required to produce the needed report.

## 2.5 MANAGEMENT AND OPERATIONS

The City does not have a documented procedure for training employees in technology. It was reported that training opportunities have been presented in the past for basic productivity tools such as Microsoft Office as well as for application-specific topics. The most common example of application-specific training is with SunGard HTE. Several factors have contributed to the decreased training levels in recent years, most notably budget challenges. Training has been a focus very recently and the City has planned for vendor training from SunGard in the first half of 2012.

Similar to training for end users, it was reported that the budget for IT Department staff training and professional development has been reduced in recent years. In addition to budget challenges, staff in the department has been faced with strained workloads due to two vacancies and so have had little time to devote to training and professional development. The IT Department has looked to reinstate a budget for training for department staff in the coming years.

Based on a review of current City job descriptions for positions that require a moderate to large use of technology tools in regular business processes, it was found that most descriptions contain information related to minimum technology proficiencies and standards required for that position. However, it was reported by support sources in the City that the users often may not have a baseline understanding of the technologies needed in their regular business processes.

The City of Winchester currently does not have a formalized enterprise-wide Disaster Recovery or Business Continuity Plan. Both of these documents are critical for the City to effectively react and quickly resume operations in the event of a disaster. While plans exist in some City departments related to specific applications and business processes, a City-wide plan does not exist. Furthermore, the City has an obligation to its citizens and businesses to provide assurance that in the event of a disaster the City will be capable of delivering services.

The City is currently making full backups monthly to both tape and disc. Daily incremental backups are made in the meantime. Storage is not currently a bottleneck, as the backup server currently has 4-5 TB. All other servers are backed up in the same way except for the SunGard sever which is backed-up nightly to tape. The tapes are then taken offsite. The City has made several improvements to the backup and testing methods in place in recent years; however, nearly all processes remain undocumented, and some methods are fragmented and do not ensure complete and reliable backups. For example, documented policies and procedures for how the various databases will be backed up along with Disaster Recovery and Business Continuity Plans do not exist.

The City of Winchester recognizes the importance of documented standards, policies, and procedures and has made efforts in recent years to develop this documentation. Multiple cases still exist of standards and policies that although are generally standardized, are not documented. Cases also exist of where documentation may exist but it is either outdated or is not communicated to end users.

The City does not have a formal technology purchasing policy at this time. Within the Acceptable Computer System and Network Use policy, however, it states “all hardware, software, on-line resource, and service purchases must be evaluated and approved beforehand by the Information Technology Director or designee.” Staff in the IT Department and City staff reported that IT is generally involved in most technology purchases with the largest exceptions being in departments where external support sources are utilized.

## 2.6 IN-PROGRESS PROJECTS AND INITIATIVES

The City is currently undertaking multiple technology projects that were either identified as Strategic Initiatives during the planning process, or are closely related to the Strategic Initiatives within this IT Strategic Plan. Projects were determined to be “in-progress” based on whether or not funding has been allocated to them and whether project work has begun. It is important that this group of projects and Strategic Initiatives be considered together as many are interdependent.

Each in-progress initiative is presented in the following table along with a summary status of the project and considerations that should be made in conjunction with the IT Strategic Plan.

| In-Progress Strategic Initiatives and Projects Summary | | |
|---|---|---|
| **No.** | **Summary** | **Considerations** |
| **1** | **Network Improvements** | |
| | The City has planned and begun multiple improvements for the network including the TPSC network refresh, implementing NAC and MARS, IP addressing scheme for TPSC, redundant DHCP for TPSC, converting legacy scripts to GPP and TPSC, and implementing network management and monitoring solutions. | This in-progress initiative is closely tied to Strategic Initiative M, which recommends the development of an action plan to make further improvements to the City network. Opportunities to further leverage the in-progress network improvements should be considered when developing the action plan to ensure that conflicting or redundant measures are not undertaken. |

| In-Progress Strategic Initiatives and Projects Summary | | |
|---|---|---|
| **No.** | **Summary** | **Considerations** |
| **2** | **Personal Property File Database Initiatives** | |
| | The City has planned initiatives related to the in-house maintained personal property file including State share refunds for exonerations, collection agency processing, and address standardization. These initiatives are expected to take approximately 120 hours of staff time. | As these personal property file initiatives are conducted, the City should consider the internal IT staff time required to implement the initiatives, versus the potential of a commercially available application to meet the needs. |
| **3** | **Expanded use of SunGard Fleet and Work Orders** | |
| | The implementation of Public Works fleet management and work order functionality in the SunGard application is planned to begin during the summer of 2012 and take approximately three to six months to implement. | As the implementation of this functionality will increase the scope of the use of the SunGard HTE application, these additional users from Public Works should be involved in Strategic Initiative I to conduct a needs assessment related to the SunGard applications. |
| **4** | **Drupal Content Management Solution** | |
| | The City is currently developing a content management solution for the City website using Drupal and is working to rebuild existing web pages in this technology. The new website is expected to be live by the end of 2012. | This in-progress project will address Strategic Issue M12 related to the challenges with the existing City website. |
| **5** | **Document Imaging Expansion** | |
| | The City is planning to expand the API Document Imaging “view” and implement this functionality in all remaining departments. This work effort is expected to be ongoing into FY 2013. | This in-progress project will address Strategic Issue A4 related to some departments not currently using the City’s electronic document scanning and storage system. |
| **6** | **Communication RFP Selection** | |
| | The City has released an RFP related to the communication system and expects to make a decision during the summer of 2012. | The work effort related to this implementation is expected to directly involve at least one individual in the IT Department. This resource demand should be planned relative to those other initiatives in the first year of this IT Strategic Plan to ensure appropriate staff levels for all projects is reached. |
| **7** | **Virtualization** | |
| | The City is in the process of deploying virtualization technology for Windows servers in City Hall. | This in-progress project is to be complete by the end of calendar year 2012. The necessary equipment and software has been purchased and is awaiting installation. |

**Table 03: In-Progress Strategic Initiatives and Projects Summary**

It is important to note that in addition to these six in-progress projects identified above, the City's IT Department is currently challenged with a large back-log of tasks of an operational nature. This back-log is due to a variety of factors including budget limitations and vacancies in the department. It will be important that resource requirements are appropriately planned to allow the Department to make progress towards this back-log while undertaking the projects and initiatives of this IT Strategic Plan.

Effective completion of all of the projects identified in this IT Strategic Plan, whether currently in-progress or newly identified as part of the Planning Project, will require effective project management in order to promote project success. While Strategic Initiative F addresses the detailed considerations of implementing effective project management policies and procedures, it is also important to reiterate that these six in-progress projects should continually be managed in light of all of the newly identified Strategic Initiatives of this Plan. Managing all technology projects with a consistent methodology will allow the City to increase the efficiencies of resource utilization, as well as best manage the dependencies among projects. As noted in Strategic Initiative F, it is recommended that the City adopt a method to track all ongoing projects in a single tool or portal.

# 3.0 Planning Framework

## 3.1 CITY-WIDE STRATEGIC ISSUES

During fact-finding meetings with City staff, issues and needs related to technology were identified. The interviews allowed Department staff to identify City-wide strategic issues that are impacting their departments.

As a result of the fact-finding meetings, a draft list of strategic issues was developed. A strategic issue is a challenge or problem faced by the City that relates to the use and/or management of technology. This list of strategic issues was reviewed and discussed as part of the "Strategic Issue Work Session" that included representatives from each City Department/Division. The strategic issues were confirmed and prioritized by the participants.

These priorities provide high-level guidance from the City's perspective to determine when each issue should be resolved during the timeframe of the plan. The strategic issues were prioritized using the three categories described in the table below.

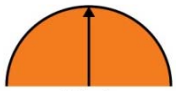
| Priority for Strategic Issues | |
|---|---|
|  | **Critical** - should be addressed during the first year of the Plan. |
|  | **High** - should be addressed during years two and three of the Plan. |
|  | **Medium** - should be addressed during years four and five of the Plan. |

**Table 04: Strategic Issue Priority Key**

Participants in the work session scored each issue based on the priority descriptions above, which were assigned a priority number. Critical Issues were given a score of three, a two for High, and a one for Medium. The points for each issue were added by BerryDunn. When reviewing the final scores, higher numbers represent higher priority issues. The resulting scores are contained in Table 05, Prioritized List of Strategic Issues.

Each strategic issue has been allocated to one of three functional areas: management and operations, applications, and technical. The list of strategic issues is organized based on these categories, which are defined below:

- **Management and Operations (M):** Management and Operations Issues are related to how the City supports the technology tools and infrastructure in place, how technology is planned for and acquired, and how resources are positioned to support technology in the City.

- **Applications Issues (A):** Applications Issues are related to the applications that are used to support City users in core business processes, including providing services to City citizens.
- **Technical Issues (T):** Technical Issues are related to the City's core technology infrastructure and how it is developed and maintained to be cost efficient and effective.

The resulting list of prioritized strategic issues, documented in the table below, guided the development of the initiatives identified in Section 4.0.The table contains the Strategic Issue summary and the complete description of each Strategic Issue is contained in Appendix B.

| Prioritized List of Strategic Issues | | | |
|---|---|---|---|
| **No.** | **Issue Description** | **Score** | **Weight** |
| **M2** | Vacancies in the IT Department have caused strained workloads and inhibited the ability to maintain an efficient support structure. | **50** | |
| **T1** | The City's current hosted POP3 email system creates several challenges. | **49** | |
| **M5** | The City does not have a documented enterprise-wide Disaster Recovery and Business Continuity Plan. | **47** | |
| **M3** | The City does not follow a documented enterprise-wide process for managing technology support. | **44** | |
| **A6** | e-Government capabilities offered by the City are limited. | **44** | |
| **A1** | The City does not have an application to track employee time and attendance. | **43** |  |
| **T10** | The City's network routes through the network of Winchester Public Schools for Internet access. | **43** | |
| **M8** | The City does not have a documented process for managing and prioritizing IT projects. | **43** | |
| **M1** | The City does not follow an enterprise-wide PC and tablet replacement schedule with standardization. | **42** | |
| **A2** | Users reported challenges with the City's SunGard financial management application. | **42** | |
| **T9** | The City network does not extend to all facilities and connectivity from remote sites can be problematic. | **42** | |
| **A11** | Current City systems may not include the functionality required by the Treasurer's Office. There were several challenges with existing billing and collections applications used by the Treasurer's Office. | **40** | |
| **M6** | Technology training of resources in the IT Department and City-wide is currently limited. | **40** |  |
| **T2** | The City does not have enterprise-wide calendaring capabilities. | **40** | |
| **T5** | Physical and environmental controls of technology infrastructure could be increased. | **39** | |
| **A4** | The City's electronic document scanning and storage system is not | **38** | |

| Prioritized List of Strategic Issues | | | |
|---|---|---|---|
| **No.** | **Issue Description** | **Score** | **Weight** |
| | being used by all departments. | | |
| **T4** | The City could increase the utilization of server virtualization technology. | **37** | |
| **A12** | Current City systems may not include the functionality required by the Commissioner of the Revenue's (COR) Office. There were several challenges with existing billing and collections applications used by the COR. | **37** | |
| **M7** | The City's decentralized technology purchasing model creates challenges with standardization and IT governance. | **37** | |
| **T3** | Remote access connectivity to the City's network is limited. | **34** | |
| **T8** | The number of login accounts for VPN network access is limited. | **34** | |
| **A8** | Some City business processes rely on manual signatures and redundant approvals. | **34** | |
| **A5** | The City's use of the SunGard application in Community Development and Utility Billing could be improved. | **33** | |
| **A7** | The process for developing and preparing City Council agendas is a manual process. | **33** | |
| **T7** | The City's use of patch management can be expanded. | **32** | |
| **T11** | The City does not currently have public or private wireless network access. | **32** | |
| **A9** | Several processes are supported with a variety of applications that are not integrated. | **32** | |
| **T6** | The City's use of technology tools to support in-person and remote meetings could be increased. | **32** | |
| **A3** | The City's use of human resource management functionality within the City's SunGard application is limited. | **30** | |
| **M4** | The City does not have documented policies and procedures for the management of mobile telephones. | **29** |   |
| **M9** | The City's approach to managing IT security could be expanded. | **27** | |
| **M10** | Change management and communication of IT changes and events to end users could be improved. | **26** | |
| **A10** | There is a desire for increased functional-specific COTS applications and productivity tools. | **26** | |
| **M12** | There is currently varying amounts of department-level inputs to the City website. | **24** | |
| **M11** | The City could expand the use of GIS data. | **23** | |

**Table 05: Prioritized List of Strategic Issues**

## 3.2 MISSION, GOALS AND OBJECTIVES

BerryDunn facilitated a work session with City leadership as well as the IT Project Team to document the vision and direction to include in this IT Strategic Plan. The following sub-sections contain the Objectives of the City as well as the Mission and Goals of the IT Department.

### 3.2.1 City Objectives

During a work session in April 2012, BerryDunn and members of City Leadership met to review the City's Objectives related to the IT Strategic Planning Project. As the IT Strategic Plan was developed, projects, and initiatives were incorporated that are in alignment with these objectives.

| City Objectives | |
|---|---|
| **1** | To provide efficient services to the City of Winchester citizens by monitoring service delivery effectiveness and seeking citizen feedback. |
| **2** | To be viewed as a high performing organization by using technology to enable City staff to be more efficient. |
| **3** | To leverage information technology in support of City initiatives and projects where appropriate to maximize the return on the City's investments. |

**Table 06: City Objectives**

### 3.2.2 IT Department Mission and Goals

During a work session in April 2012, BerryDunn and the Project Team met to review and update the Mission and Goals of the IT Department. As the Strategic Technology Plan was developed, projects and initiatives of the Plan focused on the Mission and Goals of the IT Department.

| Mission of the IT Department |
|---|
| The mission statement of the Information Technology department is to be committed to serving the end user community through empowered and progressive leadership that is entrusted to embrace technology innovation in every aspect of government service. |

**Table 07: Mission of the IT Department**

| Goals of the IT Department | |
|---|---|
| **1** | Use IT to improve how efficiently and conveniently services are delivered to citizens. |
| **2** | Use IT to improve the quality, timeliness, and cost effectiveness of the City's information. |
| **3** | Leverage IT to enable access to information to support and enhance the knowledge-based economy. |
| **4** | To balance the cost of IT with the needs of City staff and citizens. |

**Table 08: Goals of the IT Department**

## 3.3 BEST-PRACTICE RESEARCH AND CONSIDERATIONS

While there are several IT related best-practice organizations that provide standards and guidelines related to technology services in governments, BerryDunn primarily considered the information prescribed by organizations most consistent and familiar to City staff. The five organizations BerryDunn referenced are outlined below.

- **Information Technology Infrastructure Library (ITIL):** ITIL has prescribed five core processes that provide a framework for delivering IT services to an organization in order to "enable organizations to deliver appropriate services and continually ensure they are meeting the business goals and delivering benefits."[1] These processes are documented in Version 3 of the Library, published in 2007.

- **Virginia Information Technology Agency (VITA):** The mission of VITA is "to provide information technology that enables government to better serve the public."[2] While this is an agency that serves the Commonwealth of Virginia, it produces several documented standards that may be referenced and modeled by cities, such as those in areas of security and network design.

- **Computer Economics:** Computer Economics provides metrics for IT management, focusing on research and advisory information regarding the "strategic and financial management of information systems."[3] The study *IT Spending and Staffing Benchmarks* was the primary document from Computer Economics referenced for this project.

- **Project Management Institute (PMI):** PMI is a "leading not-for-profit membership association for the project management profession."[4] PMI provides concepts and a framework for best practices in project management and also certifies practitioners in project management with its certifications including the Project Management Professional (PMP) certification.

- **International Organization for Standardization (ISO):** ISO is the world's largest developer and publisher of international standards with over 18,500 published standards.[5] Several standards are directly applicable to government organizations in a variety of topics such as security, risk management and disaster recovery.

- **COBIT Framework (COBIT):** The framework created by the Information Systems Audit and Control Association (ISACA) for information technology management and IT governance.[6] The current release of the framework is 4.1 and it defines 34 processes to manage IT and their respective sets of control objectives.

- **National Incident Management System (NIMS)**: NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond

[1] Information Technology Infrastructure Library (ITIL); *What is ITIL?*; www.itil-officialsite.com
[2] Virginia Information Technology Agency (VITA); *About VITA: Mission*; www.vita.virginia.gov
[3] Computer Economics; *About Computer Economics*; www.computereconomics.com
[4] Project Management Institute (PMI); *About Us*; www.pmi.org
[5] International Organization for Standardization (ISO); *About ISO*; www.iso.org
[6] Information Systems Audit and Control Association; *COBIT Framework for IT Governance and Control*; www.isaca.org/knowledge-center/COBIT

to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.[7]

- **National Institute of Standards and Technology (NIST):** Advancing the state-of-the-art in IT in such applications as cyber security and biometrics, the National Institute of Standards and Technology accelerates the development and deployment of systems that are reliable, usable, interoperable, and secure; and conducts research to develop the standards infrastructure for emerging information technologies and applications.[8]

- **Institute of Electrical and Electronics Engineers (IEEE):** IEEE develops a wide range of standards that make the exchange of technical knowledge and information possible among technology professionals.[9]

BerryDunn has leveraged the standards and best practices of these organizations in developing some of the recommendations and initiatives in this plan. The IT Department has indicated that leveraging industry best practices is one of their goals as they move towards standardizing their business processes. Where appropriate, specific references to these organizations and the information they have published are contained in the initiatives described in Section 4.0, City-Wide Technology Initiatives.

[7] National Incident Management System; About Us; www.fema.gov/emergency/nims
[8] National Institute of Standards and Technology: About Us; www.nist.gov
[9] Institute of Electrical and Electronics Engineers: About Us; www.ieee.org

# 4.0 City-Wide Technology Initiatives

## 4.1 STRATEGIC INITIATIVES REFERENCE TABLES

The table below lists all of the initiatives developed collaboratively among BerryDunn and the City following the Strategic Issue Prioritization Work Session. In addition to those that were developed by BerryDunn, each Department submitted multiple projects and initiatives. The table also indicates the Strategic Issue addressed by the Initiative.

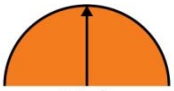
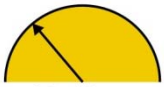
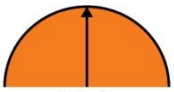
| List of Strategic Initiatives | | |
|---|---|---|
| **ID** | **Initiative** | **Strategic Issue(s)** |
| **L** | Select and implement a City-wide email and calendaring application. | **T1, T2** |
| **B** | Reorganize the IT Department to align resources with the needs of the City, fill vacancies in the department, and identify a resource with a security focus. | **M2, M3, M9** |
| **A** | Develop and implement an enterprise-wide hardware replacement and operating system update schedule with standardization to include desktops, laptops, tablets, servers, and other items. | **M1, T7** |
| **D** | Develop and implement an enterprise-wide disaster recovery and business continuity plan. | **M5** |
| **F** | Develop and implement technology purchasing and project management policies and procedures to include promoting standardization of technologies, the selection and prioritization of technology projects, and change management. | **M7, M8, M10, A10** |
| **I** | Conduct a needs assessment related to the SunGard applications to identify current challenges and gaps in available functionality. | **A2, A3, A5, A6, A8, A9** |
| **M** | Develop an action plan to make updates and improvements to the City's network including expanded connectivity, increased redundancy, and expanded wireless connectivity and remote access. | **T3, T8, T9, T10, T11** |
| **E** | Study the existing process of technology training and update policies and procedures to meet the needs of the City. | **M6** |
| **K** | Conduct a needs assessment related to the applications that support processes for the Treasurer and the Commissioner of Revenue to identify additional needed functionality. | **A11, A12** |
| **H** | Select and implement an enterprise-wide time and attendance management application. | **A1** |
| **P** | Implement increased technologies to support in-person and remote meetings. | **T6** |
| **O** | Implement increased physical and environment controls in areas where sensitive components are housed. | **T5** |
| **N** | Develop a Virtualization Strategy to include a preferred technology and identified City resources to receive virtualization training. | **T4** |
| **J** | Select and implement an application to manage the production and publishing of council meeting documents. | **A7** |
| **C** | Develop and implement an enterprise-wide mobile telephone policy based on a determination of supported technologies and capabilities. | **M4** |
| **G** | Develop and implement a GIS management policy. | **M11** |

**Table 09: List of Strategic Initiatives**

The final list of projects and initiatives described in Section 4.3 of this plan is a result of the Project and Initiatives Work Session facilitated by BerryDunn with the IT Project Team and City Department representatives. In the work session, the preliminary projects and initiatives were discussed, confirmed, edited, and in some cases combined.

At the end of the work session, 16 Strategic Initiatives remained and each department was asked to choose six that they thought should be addressed in the first two years of the Strategic Plan. This ranking of each project or initiative was given a weight of 25% towards the final prioritization. The input from City Department representatives was combined with the strategic issue rank to determine a total 50% of the score for each strategic project or initiative. Each project or initiative was scored based on the number and priority of each strategic issue it addressed.

The remaining 50% of the overall score for each project or initiative was determined by BerryDunn and confirmed by the IT Project Team. Twenty percent of this score was allotted to the cost benefit of the project or initiative which was high, medium, or low. The ease of implementation was given ten percent, and was ranked as easy, medium or hard. The final 20% of the score was based on the maturity of the technology involved in the project or initiative. It was either established, leading edge or bleeding edge technology. A summary of these categories is contained in the following table.

| Strategic Initiatives Weighted Prioritization Categories | | | | |
|---|---|---|---|---|
| **City** | | | | |
| **Strategic Issue Rank** | **25%** |  Critical |  High |  Medium |
| | | **Summary:** The Strategic Issue Rank is based on the scoring of each Strategic Issue by the Technology Advisory Group during a facilitated work session. | | |
| **Department Priority** | **25%** |  Critical |  High |  Medium |
| | | **Summary:** The Department Priority is based on the scoring of each Strategic Initiative/Project by the Technology Working Group during a facilitated work session. | | |
| **BerryDunn** | | | | |
| **Cost Benefit** | **20%** |  High |  Medium |  Low |
| | | **Summary:** Cost benefit is based upon the likelihood that the City will be able realize a return on its investment in a reasonable amount of time. An indicator of high, medium, or low was assigned on a relative basis among all Strategic Initiatives. | | |

| Strategic Initiatives Weighted Prioritization Categories | | | | |
|---|---|---|---|---|
| **Ease of Implementation** | **10%** | ●●● Easy | ●● Medium | ● Difficult |
| | | Summary: Ease of implementation is based upon both the amount of work effort required to complete the Strategic Initiative and the extent that specialized knowledge or experience is needed. An indicator of easy, medium, or difficult was assigned based on the current capacities in IT resources at the City. | | |
| **Maturity of Technology** | **20%** | ◆ Established | ➲ Leading Edge | |
| | | Summary: The City and the IT Department has established a vision to implement technologies that are established in local government and will not consider bleeding edge technologies at this time. Because of this, indicators of established and leading edge were assigned among all Strategic Initiatives. | | |

**Table 10: Strategic Initiatives Weighted Prioritization Categories**

The following figure depicts the distribution of the weighted prioritization categories including the higher level distribution of 50% City prioritization and 50% BerryDunn prioritization.

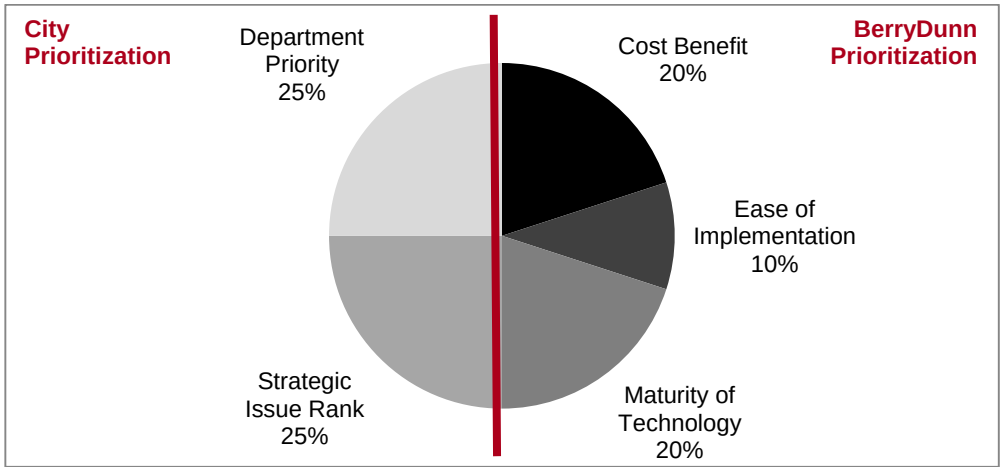



**Figure 02: Weight Prioritization Categories**

## 4.3 PRIORITIZED PLAN INITIATIVES

The projects and initiatives described in this section of the plan were developed as a result of the Projects and Initiatives Work Session. Many of the project descriptions include BerryDunn recommendations for addressing some of the issues and challenges identified in the current environment as a result of the fact-finding activities and interviews with City staff. Some of the project descriptions include a detailed process for implementing the project, while others provide guidance on how to begin the project. In some cases, the results of the initial planning work associated with the project will dictate the next steps that will need to be taken to complete the project.

The recommendations that BerryDunn has included in some of the projects are based on our experience conducting similar projects or industry best practice. The recommendations provided are meant to provide guidance to the City as they undertake the project, but also to address the issues and challenges discovered during our assessment of the City's current environment.

## Strategic Initiative L

**L – Select and implement a City-wide email and calendaring application.**

### Initiative Description

The City is currently utilizing a POP3 email server hosted by a local service provider. Challenges reported by end-users include, but aren't limited to, the following:

- Not having enough space to save email;
- Not enough space to send or receive email attachments at times;
- No ability to share calendars;
- No central tool to reserve conference rooms or equipment;
- Limited ability to receive emails and calendars on smart-phones; and
- Service Provider updates have caused service interruptions and downtime.

This is a source of frustration for both management and employees. BerryDunn recommends that the City implement a MS Exchange server to address these challenges. It is also recommended the City have its own router, firewall, and ISP connectivity (Initiative M), prior to implementing this option. In addition it is recommended the City have determined and implemented a virtualization platform (Initiative N) in place. Combined, these other two Initiatives will increase security and provide a greater ease of installation. Included in this initiative are cost comparisons for all three alternatives discussed, as well as all action items to be taken, benefits to the City, and potential risks, as well.

### Recommended Initiative

The recommended option is for the City to install and administer its own, in-house MS Exchange server. This option gives the City high flexibility, responsibility, and accountability for their email services. On-site management, with a dedicated Exchange Manager, can likely satisfy all the requirements needed to address the City's challenges regarding email and calendaring.

Through the formation of a Project Team, the City will be able to determine the necessary requirements needed to implement this option, including, hardware, software, virtualization, training, and migration of mailboxes from the legacy server. The Project Team should be made up of members of the City, the appointed Exchange Administrator, potentially a member from the School, and possibly a member of the current Email Hosting ISP. It is strongly recommended the City utilize a Systems Integrator with a high degree of Exchange Server integration. This project has several layers and the City would be well guided by an experienced implementation team. It is still recommended that the City have their own Exchange Administrator, and training for that person would be required. Otherwise, the City will need to engage in a Managed Services solution that would require additional monthly costs to the City.

Lead by the guidance of the Team, the City will be able to successfully implement an email solution that will satisfy their requirements and address the challenges they currently face, for years to come. BerryDunn recommends this alternative, because it best addresses the challenges facing the City and provides the best value. While this may have the highest upfront cost, it has a lower total cost over the life of the alternative when compared to the other options. This option also gives the City the greatest flexibility, highest security, and most control of their email and calendaring environment. Some of the features of this solution include:

## Strategic Initiative L

- **Integration with Active Directory:** Any user currently with a Domain Account within the City can easily be setup with an Email Account, with just a few clicks on the server and configuration of their Outlook client on their local machine. This provides for tremendous ease of management.

- **Sharing of Mailboxes, Calendars and Other Folders:** With an internal Exchange Server, the City will have the ability to grant permissions to their own calendars and view the calendars of those who have granted them permissions. This ability extends to actual email inboxes and subfolders, with varying levels of accessibility. Management can give administration ability to send email on their behalf. Forwarding email to other mailboxes is available, if an employee terminates and the mail still needs to be sent. Conference rooms and equipment can be represented as a room with a calendar that can be shared to all users and permissions given to reserve those rooms.

- **ActiveSync:** With ActiveSync, Exchange 2010 provides the native ability, at no extra cost, and very little administrative overhead, to synchronize data with every major brand of smartphone and tablet computer on the market today. Features include the ability to require passwords and the ability to remote wipe a device. The one exception is Blackberry. Although, it is rumored to be a feature of the Blackberry 10, which has yet to be released, full synchronization capabilities with Blackberry devices will have to be implemented through a Blackberry Enterprise Server (BES). However, end users could still synchronize their Calendars and Contacts with their Blackberries using the local Blackberry client on the workstation. Initiative C deals with the development and implementation of a mobile telephone policy.

- **Outlook Anywhere:** Outlook Anywhere is the ability for employees to securely access email from any web browser. This frees end users to securely access email from home or onsite without being tethered to their desktop.

- **Internal Control of Email Size.** The Exchange Administrator would have the ability to control the size of emails, both incoming and outgoing. The size of the mailboxes and archives themselves is bound only by the amount of storage space available and based on the City's archiving policies.

- **Spam Filtering:** In today's communication environment spam filtering is essential. It is not just a tool for reducing the amount of unsolicited and unwanted emails, but as a form of protection against potential threats (i.e., phishing expeditions) where an email contains a link to a website that immediately tries downloading a virus or Trojan horse type of threat. Exchange Server 2010 does come with its own spam filtering capabilities. Depending on the needs of the City, however, there is the possibility of investigating third party solutions for this aspect. It may be more advantageous to have spam blocked external to the City, rather than being blocked internally at the Exchange Server. The City is currently using Postini, which is an effective option and it is recommended that the City maintain that subscription.

- **Security:** Security patching and antivirus applications are a vital necessity, in conjunction with spam filtering, to reduce security threats. If a phishing email does get through and a user inadvertently links to a phishing website, updated security patches and definitions are the next line of defense to stop a potential security breach. Trend Micro is the City's current choice and should be investigated to determine the efficacy with which it can protect Exchange 2010.

| Strategic Initiative L |
|---|
| ➢ **Email Archiving:** Due to specific legal issues and regulations, more and more organizations are being required to archive their email. The period of retention can last from a few years to keeping all email ever received. Once a policy has been decided upon, the organization can determine the best option. This can include the native functionality found in Exchange 2010 or a third party application. There may be an additional cost if analysis reveals that more storage is required to house the archived database of emails. An additional analysis will need to be performed for this, as there are many third party options to this as well, with the appropriate additional costs.<br><br>➢ **Disaster Recovery (DR), Virtualization, and Clustering:** Although Disaster Recovery Planning is addressed in Initiative D, there are certain aspects that can be discussed here. First, virtualization of Exchange Servers is commonplace and supported. This is a cost saving implementation, but also provides greater ability of backing up and restoring than a physical server alone. Additionally, clustering of physical or virtual servers increases the redundancy of the servers, thus increasing the likelihood of continued functionality in the event of a single server failure.<br><br>➢ **Other Functions:** An internal Exchange server can also provide additional functionality in the form of integration with other technologies, for instance Unified Communications integration with a VoIP phone system, a Fax Management tool, Scanner/Printer, or a Document Management System. These represent additional projects beyond the scope of this initiative. |
| **Alternative 1** |
| Another possibility to address the identified issues is to utilize a Hosted Exchange solution. There are several vendors available that offer many different levels of service. The majority come with a monthly per-user cost structure, depending on which options the City would like to implement. These options are very similar to those available to the City should they implement their own in-house MS Exchange server, but without the overhead of an Exchange Administrator or hardware and licensing costs.<br><br>Advantages of this option include the City being able to free up a resource from becoming an Exchange Administrator and the cost of training that individual. Any and all maintenance (i.e. upgrades and patching) and troubleshooting are done by the vendor and that vendor's sole focus is Exchange Administration. Most will stipulate uptime guarantees that likely exceed an organization's ability to guarantee themselves. Compared to possible in-house downtimes, outages, failures, the economy of scale for the Hosted Exchange Provider is to nearly eliminate downtime, or at the very least bring downtime to a period much less than would be possible with a single in-house Exchange environment. Finally, although the costs are greater in the long run, they are predictable and easy to plan for. The setup is simple and can be done by internal IT staff on the City's side with little to no training.<br><br>While this alternative provides relief from all the related issues, over the long term, it is a significantly costlier one, though it provides roughly the same functionality. It is not recommended. |
| **Alternative 2** |
| While there are several variations of the above solutions, a third possibility would be to continue |

| Strategic Initiative L |
|---|
| utilizing the POP3 service in conjunction with a third party hosted calendaring application. This is a more simplistic solution, structured to address the issues mentioned at the beginning of this initiative. Several considerations, including the amount of storage space needed and how to expand this are discussed in the subsequent sections. This third solution could also be seen as a possible interim solution prior to implementing one of the previous solutions.<br><br>Alternative 2 is not recommended, other than as an interim solution to relieve the City from some of the issues faced today, while it works towards the first or second solution. |

| Alternative 3 |
|---|
| There is a third alternative available to the City, which is to implement Google Apps. Google Apps is similar to a Hosted Exchange scenario, as it offers some of the same features. While it would allow the City to free up a resource and maintenance would be taken care of by the vendor, this is considered a Bleeding Edge solution. The Total Cost of Ownership (TCO) is much higher overall and will continue to be so into the future. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Technology |
| **Priority Ranking:** | 1 of 16 |

| Related Strategic Issue(s) | |
|---|---|
| **T1** | **The City's current hosted POP3 email system creates several challenges**. The use of an externally hosted email server has created several challenges for end users at the City due to limitations with this arrangement. These include size restrictions on emails, size restrictions on inboxes, the inability to archive emails and the lack of 24/7 support, among others. It was reported by several City staff that they are frequently required to log in to their email account and delete files to keep their email inbox under the size limitations. This has created problems for staff on vacation that do not have the ability to log in and manage their email inbox**.** |
| **T2** | **The City does not have enterprise-wide calendaring capabilities**. The ability for City staff to share calendars, view free/busy information, reserve conference rooms electronically, and schedule appointments with other City staff is not available. It was reported by several City staff that a central calendaring system that allows staff to schedule meetings and book conference rooms by viewing City-wide calendars to determine availability does not exist. Many staff reported that they must call or email other staff to determine availability and then send a calendar invite to schedule a meeting. In addition, many of the conference rooms in City Hall have day planners in the room that are used to schedule room availability. |

| Benchmarking and Best Practice Information |
|---|
| Enterprise email solutions of today have to take into consideration many practices beyond the simple function of email distribution, including:<br><br>➢ Anywhere, Anytime Access;<br>➢ Protection and Compliance; and<br>➢ Flexibility and Reliability.<br><br>MS Exchange Server has built in the best practices recommendations to ensure the highest quality email experience. Prior to implementing however, the City should perform its own best practices procedure to ensure the greatest chance of success. The City should understand and document all |

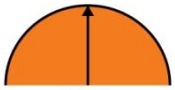
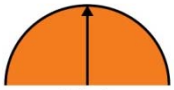
## Strategic Initiative L

areas that can affect and be affected by Exchange. For instance:

- Network
- Windows and Active Directory
- Exchange Infrastructure
- Any Third Party Tools and Utilities

By identifying issues or bottlenecks in any of these areas, the City ensures a greater chance of success.[1]

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  High |  High |  High |  Difficult |  Established |

**Estimated Initiative Budget (Solution 1)**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| $90,000 | $0 | $0 | $0 | $0 | $90,000 |

**Budget Description**

**Recommended**

The majority of costs for this recommendation are the physical server hardware and licensing, and vendor labor as indicated in the table below:

| Hardware and Licensing | | |
|---|---|---|
| | Physical Server | Virtualized Servers* |
| Server Hardware | $5000 | |
| Server 2008 R2 Enterprise with 25 CALs** | $4000 | $4000 |
| 425 Server 2008 R2 Enterprise CALs | $17000 | $17000 |
| Exchange Server 2010 Enterprise Edition | $4000 | $4000 |
| 450 Standard Exchange CALs | $30,150 | $30,150 |
| 450 Enterprise Exchange CALs | $15750 | $15750 |
| Labor (T&M) | $10000 | $7500 |
| SubTotal: | $85,900 | $78,000 |

**Virtualization is a separate project the costs of which are not addressed here.*
*** Licensing for a single Exchange server is not just limited to the licensing for the Operating System and the Exchange Server application itself, but also deals with Client Access*

## Strategic Initiative L

*Licensing, known as CAL's. CAL's have a one-to-one relationship with the number of accounts registered to Exchange. These licenses are a one-time only purchase.*

BerryDunn recommends that when purchasing licenses, the City procure a Service Level Agreement with Microsoft for the installation and management phase of this project. There is a higher up-front cost associated with this, but generally a higher level of service is secured. Otherwise there will be additional costs for Microsoft technical support. This should be done through the Systems Integrator of choice.

Additional costs:
Since the City does not currently have an Exchange Administrator, options would be to send a current employee to training, or hire someone with a background in Exchange Administration. Other forms of training that may be necessary could include user training of the latest versions of Outlook, Spam Filtering applications/usage and Calendar management.

| Training Options | | |
|---|---|---|
| | Upgrading, Administering, and Troubleshooting | MCITP: Enterprise Messaging Admin BootCamp |
| Exchange Admin Training | $3000 | $3500 |

The City is currently utilizing Postini as a Spam Filtering tool and would presumably continue with the same. Costs for this would likely not change.

The City should work with its Backup/Recovery solution reseller when determining prices for the backup license needed for the Exchange server. The estimated cost for this is approximately $1,000.

Depending on the City's retention policy and/or archival policies, storage costs could play a factor in the implementation of the Exchange server. If the City decides to implement a new Storage Area Network (SAN) or just add drives to the existing SAN, those costs could play a role. A new SAN, including installation, would be several thousand to approximately $10,000.

Ongoing Capital Costs would include any hardware and software upgrades and any renewals of related application licensing. Exchange licenses themselves do not require renewal, but there may be renewals for backup licenses, Postini support, among others.

### Action Items to Implement Recommended Initiative

☑ **Phase 1: Project Planning**

- Identify the Project Team
- Identify the Exchange Server Administrator
- Determine hardware, software, storage size, licensing, additional third party application specifications
- Develop policies and procedures stating the acceptable usage of email and email

| Strategic Initiative L |
|---|
| archiving<br>• Determine the best way of migrating the existing email from the legacy email system<br><br>☑ **Phase 2: Implementation**<br>• Installation and configuration of the Exchange Server<br>• Initial testing with a limited test group<br>• Migration of mailboxes<br>• Public DNS entries (A, MX, and PTR records) will need to be changed to reflect the new system<br>• Configuration of the Exchange Server functions, such as Spam Filtering, Security, and Archiving<br>• Configuration of end user's Outlook client and smartphone<br><br>☑ **Phase 3: Finalization**<br>• Project Team completion meetings<br>• Project Team evaluation of the project and reporting<br>• All project notes will be documented and printed out<br>• All configuration information will be documented printed out<br>• All related third party applications configurations will be documented and printed out<br>• All of these documents will be stored in a secure location |
| **Anticipated Benefits of Recommended Initiative** |
| ☑ High security because all data is housed within the City's network<br>☑ Centralized control of email and calendaring<br>☑ Greatest flexibility in terms of expansion<br>☑ Lowest Total Cost of Ownership<br>☑ Faster implementation with outside vendor<br>☑ Larger team with network experience from which to draw<br>☑ Stronger Service Level Agreements (SLAs) with hardware vendors<br>☑ Training provides City with its own resource |
| **Potential Risks** |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ This project has several phases and will require a Project Manager and Project Team. Proper analysis and planning is required.<br>**No Action:**<br>☑ Continued employee frustration<br>☑ Continued employee time investment in mailbox management<br>☑ Continued inability to send attachments<br>☑ Higher potential loss of data |

| Strategic Initiative L |
|---|
| ☑ Higher potential security risks<br>**Alternative 1:**<br>☑ Potential loss of security<br>☑ Potential loss of regulatory and administrative control<br>☑ More expensive in the long run<br>☑ High risk of rising costs over time<br>☑ Stability of Vendor may be unknown<br>☑ Scalability of Vendor to handle growth of its own customer base and growth of clients<br>☑ Potential data loss if vendor does not integrate existing mailboxes<br>**Alternative 2:**<br>☑ Potential loss of security<br>☑ Potential loss of regulatory and administrative control<br>☑ Potential unpredictable disruptions<br>☑ Potential lack of assistance if outside of normal business hours<br>☑ Potential extended downtime if outside of normal business hours<br>☑ No guaranteed uptime<br>**Maturity of Technology:**<br>☑ The maturity of this technology is very well established and is implemented the world over. With proper planning this risk is low. |

| Risk Rating (Solution 1) | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative B |
| --- |
| **B – Reorganize the IT Department to align resources with the needs of the City, fill vacancies in the department, and identify a resource with a security focus.** |
| **Initiative Description** |

The IT Department recently filled a position (Senior Network Engineer) that was vacant since 2008 and another position (PC Support) has remained vacant since that time. This has caused the remaining IT staff to absorb the responsibilities of these two roles resulting in increased workloads, staff working beyond their prescribed roles, challenges with maintaining an efficient support structure, and reported extended response times. In addition, these vacancies have generally inhibited the IT Department from operating in a proactive manner. One issue identified that impacted IT operations was employees reportedly calling specific members of IT directly, for support needs as opposed to using the dedicated help request channels. These interruptions impacted IT operations.

It was also reported that the City does not currently have a documented enterprise-wide security policy that sets forth security procedures including acceptable use by end-users, screen lock-out time thresholds, employee termination procedures, and vendor access to critical network components. In addition, there is not currently a resource in the IT Department with a formalized focus on IT security. While the IT Department staff generally share security responsibilities and the department has implemented several security measures, the organization could benefit from increased efforts in this area. In some cases, security measures are in place that may limit functionality for City resources and external groups.

This initiative is to reorganize the IT department and align the resources with the needs of the City. The initiative includes a phased approach to implementing the organizational changes and for increasing the overall FTE count in IT. The following summarize the recommended changes to the IT Department along with the year in the plan BerryDunn recommends the changes be implemented.

**Current IT Department Organizational Structure**

In the current environment, there are a total of 6.0 FTEs in the IT Department. The PC Support position is currently vacant.

## Strategic Initiative B

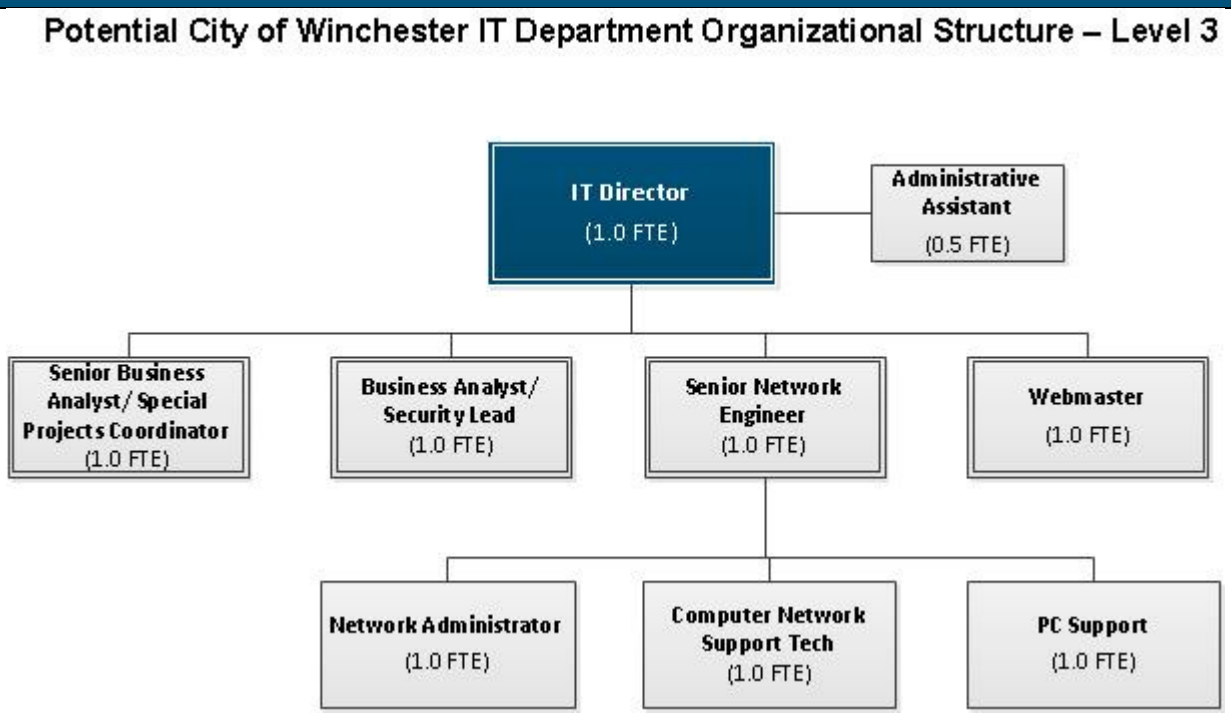
**Recommended IT Department Organizational Structure – Year 1**

BerryDunn recommends that the City fill the vacant PC support position in year one of the IT plan to bring the total number of FTEs to seven.

**Recommended IT Department Organizational Structure - Year 2**

BerryDunn recommends that in year three of the IT plan, a new position for a Network Administrator be created. One of the existing Senior Programmer responsibilities/ job descriptions is updated to include a focus on security. The staffing level in the IT Department at the end of year two of the plan will have increased to eight FTEs.

## Strategic Initiative B




**Recommended IT Department Organizational Structure - Year 4**

BerryDunn recommends that by the end of year four of the IT plan, the City should have filled the vacant PC Support position as well as added a new position as a Network Administrator. One Senior Programmer's position will have been updated to include a focus on security and has been re-titled to be "Senior Business Analyst/Security Lead." The remaining Senior Programmer's position should be updated to include a project management role and has been re-titled to be "Senior Business Analyst/Special Projects Coordinator." A part-time Administrative Assistant should also be added to the Department. The staffing level in the IT Department at the end of year four of the plan will have increased to 8.5 FTEs.

As the City adds staff to the IT Department and implements organizational changes, it will be important that the IT Department adjust job titles and descriptions based on the recommended organizational changes.

### Job Titles and Descriptions

As part of implementing the new organizational structure, it is important that the IT Department update and develop job descriptions to align with new and revised work responsibilities. It will be important that IT take an active role in the development of the job descriptions to ensure technical requirements and all IT Department work responsibilities are described. When draft job descriptions are completed, BerryDunn recommends that IT and Human Resources work together to review them to ensure that all IT Department work responsibilities are reflected in the job descriptions.

### IT Training and Certifications

The City should also consider that some job descriptions should require certification in certain technology tools. This is particularly relevant for the City's IT staff. There are several IT tools used on a daily basis where certifications are offered. The City should consider adding appropriate

| Strategic Initiative B |
|---|
| certifications to job descriptions where appropriate. Certifications related to project management, security, database administration and network administration should be considered.<br><br>Ongoing professional development and training of resources within IT will allow the group to be more effective at providing services to City users since resources will become more qualified in the existing services offered as well in their ability to leverage new technologies. To best manage the capabilities of resources, it is important that policies and procedures are developed to meet the overall strategy of the IT Department related to professional development and training.<br><br>BerryDunn recommends that the IT Department consider the following during the development of the policies and procedures:<br><br>• **Overall strategy for training and professional development.** ITIL (Information Technology Infrastructure Library) can be a resource for technology training. The IT Department should consider setting a strategy which will determine if this can be a source of information to base training curriculum.<br>• **Establish minimum training levels for individual job descriptions.** This will ensure that each job description contains information related to the minimum training requirements. These documented requirements will be fundamental in ensuring consistent ongoing training and professional development within the IT Department.<br>• **Develop Individual Development Programs.** Many organizations utilize a form of Individual Development Program (IDP) to align training and professional development with an individual's particular job description, continuing education requirements, and the training strategy of the organization. These types of programs can empower individuals to set goals based on long-term planning of how they will develop within the organization.<br>• **Develop process for requesting training opportunities.** A consistent process which resources within the IT Department will use to request training opportunities should be developed. Such a process would ensure that resources are leveraging training that is consistent with the group's strategy, the requirements of their job description, and the resource's IDP.<br><br>BerryDunn recommends that the City implement the recommendations related to the IT Department as part of this plan. Hiring and retaining an experienced IT workforce is a difficult task for any organization. It can be an especially challenging task for local government organizations given shrinking budgets and greater demand for service. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Management and Operations Issues |
| **Priority Ranking:** | 2 of 16 |

| Related Strategic Issue(s) | |
|---|---|
| **M2** | **Vacancies in the IT Department have caused strained workloads and inhibited the ability to maintain an efficient support structure.** The IT Department recently filled a position that was vacant since 2008 and another position has remained vacant since that time. This has caused the remaining IT staff to absorb the responsibilities of these two roles resulting in increased workloads, staff working beyond their prescribed roles, challenges with maintaining an efficient support structure, and reported extended response times. In addition, these vacancies have generally inhibited the IT Department from operating in a proactive manner. |

| Strategic Initiative B | |
|---|---|
| **M3** | **The City does not follow a documented enterprise-wide process for managing technology support.** A majority of requests made to the IT Department are initiated through the dedicated email account and tracked in Numara Track-It. In some cases, employees reportedly call specific members of IT directly, most often with application-specific support needs. In instances where technology support is provided by individuals within departments or external agencies, limited documentation exists for how this support will be managed and how the IT Department will be made aware of any impacting support requests or responses. |
| **M9** | **The City's approach to managing IT security could be expanded; in the current environment, measures may be limiting functionality and cumbersome.** The City does not currently have a documented enterprise-wide security policy that sets forth security procedures including screen lock-out time thresholds, employee termination procedures, and vendor access to critical network components, for example. In addition, there is not currently a resource in the IT Department with a formalized focus on IT security. While the IT Department staff generally share security responsibilities and the department has implemented several security measures, the organization could benefit from increased efforts in this area. In some cases, security measures are in place that may limit functionality for City resources and external groups. |

**Benchmarking and Best Practice Information**

There are several sources of best-practice information related to the number of IT positions relative to end users in an organization. These metrics are most commonly provided for help desk positions in comparison with the number of end users in an organization. Sources of best practice information, including Computer Economics, advise that for organizations with less than 750 PCs, a help desk (or PC Support) position is needed for approximately every 200 users. As the City has closer to 400 users, BerryDunn concurs with the City's recognized need to fill the PC support position and also suggests additional resources may be needed for this role based on these metrics.

Research of industry best-practices shows that organizations with IT Departments supporting less than 750 PCs typically have one security-focused IT staff member for every 700 users. As City of Winchester currently has less than 700 users, it is likely that less than one FTE would be required for the security focused position, therefore a security focused IT staff member could also work on IT projects and assist as a business analyst.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
| Critical | Critical | High | Medium | Established |

**Estimated Initiative Budget**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| $30,000 | $150,000 | $150,000 | $170,000 | $170,000 | $670,000 |

| Strategic Initiative B | |
|---|---|
| **Budget Description** | The budget for this initiative is comprised of new staff salary as well as funding for IT staff training in years three through five. In year one, the budget amount of $30,000 is half of a full year salary for the PC Support Position. This amount is carried into year two and becomes a full year salary at $60,000.<br><br>In year two, $75,000 has been added for the new Network Administrator Position. In addition, $15,000 has also been added as a training budget for IT staff. The total budget at the end of year two is $150,000 which is comprised of the $60,000 for the PC support position, $75,000 for the Network Administrator and $15,000 for the training budget.<br><br>Year three remains the same as year three with no increase.<br><br>Year four of the plan adds an additional $20,000 for a part time administrative assistant, adding to the years two and three total of $150,000 for a total $170,000. Year five remains the same with no increase. |

**Action Items to Implement Initiative**

- ☑ Phase in new organizational structure
- ☑ Add appropriate certifications to job descriptions
- ☑ Develop process for requesting training opportunities
- ☑ Work with Human Resources to finalize job descriptions
- ☑ Communicate updated job descriptions with all City staff
- ☑ Identify training needs based on job duties at the City

**Anticipated Benefits**

- ☑ Increased IT Department staff knowledge by requiring appropriate certifications
- ☑ Improved service delivery
- ☑ Increased consistency of training among IT resources
- ☑ Improved staff retention through effective, ongoing training programs
- ☑ Improved productivity with existing IT tools
- ☑ Improved ability to leverage emerging technologies
- ☑ Highly trained work force

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

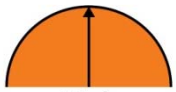
- ☑ This initiative does not involve managing a specific or initiative and therefore has a low Project Management risk associated with it.

**No Action:**

- ☑ IT Department staff continue to perform tasks outside of their normal job responsibilities.
- ☑ IT continues to operate in a reactive manner with limited resources to implement the initiatives in this plan.
- ☑ As new technologies are implemented and network changes are made the lack of a security resource in IT could expose the City to security related risks.

| Strategic Initiative B | | | |
|---|---|---|---|
| ☑ Basic IT support for end users could be impacted as new applications (time and attendance, new revenue system, SunGard E-gov modules) are implemented.<br>**Maturity of Technology:**<br>☑ This initiative does not involving managing or implementing new technology and therefore has low Maturity of Technology risk associated with it. | | | |
| **Risk Rating** | | | |
| | **Low** | **Medium** | **High** |
| **Project Management** | X | | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative A |
| --- |
| **A – Develop and implement an enterprise-wide hardware replacement and operating system update schedule with standardization to include desktops, laptops, tablets and servers.** |
| **Initiative Description** |
| The purpose of this strategic initiative is to develop and secure funding for a City-wide workstation replacement schedule that will leverage standardized versions of Windows, MS Office, and other workstation applications. The replacement schedule will include desktops and laptops as well as new tablets in the City.<br><br>The first step in this initiative is for workstation specifications to be developed. These should include both technical and application standards so that consistent and current version of applications will be used throughout the City. As new workstations replace those older ones in the City, progress will be made towards a standardized environment. An important consideration in the development of these standards is where dependencies exist for particular versions of operating systems by older applications in the City. For example, there may be an application that will not be supported using a Windows 7 operating system.<br><br>The workstation replacement schedule has been planned based on a useful life of five years for desktop computers, four years for laptop computers and three years for tablets. This lifecycle is at the further end of those used by similar organizations; however, it will represent a large improvement over the age of some workstations in place today. Typically, the useful life of a desktop computer is three to five years and two to four years for a laptop computer. Once a full cycle of replacements is complete, the City may determine whether this useful life should be shortened.<br><br>It is recommended that for the first cycle of replacements, the City determine where new workstations should be placed based on a variety of factors including support levels and volume of use. Best practice is for the oldest workstations to be replaced first; however, it is recognized that as the City undergoes the first replacement cycle multiple factors contribute to where newer workstations are most needed. Once a full replacement cycle is complete, it is recommended that best-practices are followed and going forward the older workstations in the City are replaced in future years.<br><br>This initiative plans for 10 tablets for use by each City Council member and some additional users. Although this initiative only plans for 10 tablets, it is recommended that the City consider increased use of tablets where it is beneficial to do so. As new or updated applications are implemented throughout the organization, expanded use that includes mobile computing may be promoted by the use of tablets. An example may be data collection in the field with the new or updated Community Development application.<br><br>Effectively implementing the use of tablets in the City will also require a documented strategy to be developed, as there are unique considerations related to these types of devices. There may be some opportunities for City staff that perform remote or mobile business processes to move towards using a tablet on a regular basis as opposed to a desktop or laptop. The development of a tablet strategy will need to outline how the City will maintain security with these new devices and how they can help move the City further towards a paperless environment. It will also be important for the City to determine the applications that can be used on a tablet to improve business processes and reduce the reliance on desktop-based applications. As with other policies, procedures, and documentation it will be important that the strategy is developed collaboratively, effectively communicated throughout |

<table>
<tr><th colspan="6">Strategic Initiative A</th></tr>
<tr><td colspan="6">the organization, and regularly reviewed.<br><br>The final piece of hardware that is considered with this initiative is servers. On an annual basis BerryDunn recommends that the City evaluate the expected useful life of its current servers and plan for the needed funding for replacements. As the City expects to further leverage virtualization technology, the number of physical servers in place at the City will likely decrease, therefore reducing the investment needed for an ongoing server replacement schedule.</td></tr>
<tr><th colspan="6">Initiative Source Information</th></tr>
<tr><td colspan="2">Functional Area:</td><td colspan="4">Management and Operations Issues and Technology Issues</td></tr>
<tr><td colspan="2">Priority Ranking:</td><td colspan="4">3 of 16</td></tr>
<tr><th colspan="6">Related Strategic Issue(s)</th></tr>
<tr><td>M1</td><td colspan="5">The City does not follow an enterprise-wide PC and tablet replacement schedule with standardization. There are multiple instances throughout the City of outdated workstations that are due for replacement. Without an enterprise-wide replacement schedule and standards, support resources may be increasingly tasked with workstation triage and repair, long-term budget planning is limited, and ensuring standardization is difficult. In addition, there is a desire from multiple departments to use tablets; however, the City does not currently have a replacement plan that includes tablets. The City recognizes that the current processes for technology purchase budgeting and budget limitations is a primary factor.</td></tr>
<tr><td>T7</td><td colspan="5">The City’s use of patch management can be expanded. Currently, the City is utilizing a Windows Systems Update Server (WSUS) server to provide patching for all Windows-based Operating Systems. Patching and updates of firmware and other applications is currently not routinely performed.</td></tr>
<tr><th colspan="6">Benchmarking and Best Practice Information</th></tr>
<tr><td colspan="6">Best practices indicate an expected lifespan of three to five years for desktops, two to four years for laptops and one to three years for tablet devices.</td></tr>
<tr><th colspan="6">Initiative Ranking</th></tr>
<tr><th colspan="2">City</th><th colspan="4">BerryDunn</th></tr>
<tr><th>Strategic Issue Rank</th><th>Department Priority</th><th>Cost Benefit</th><th>Ease of Implementation</th><th colspan="2">Maturity of Technology</th></tr>
<tr><td>  <br>High</td><td>  <br>Critical</td><td>  <br>Medium</td><td>  <br>Medium</td><td colspan="2">  <br>Established</td></tr>
<tr><th colspan="6">Estimated Initiative Budget</th></tr>
<tr><th>FY2013</th><th>FY2014</th><th>FY2015</th><th>FY2016</th><th>FY2017</th><th>5-Yr Total Cost</th></tr>
<tr><td>$136,333</td><td>$136,333</td><td>$136,333</td><td>$136,333</td><td>$136,333</td><td>$542,332</td></tr>
<tr><td colspan="2">Budget Description</td><td colspan="4">FY2013 activities will include the development of the standard specifications prior to the actual purchase of replacement devices.<br>The budget for this initiative is based on a replacement schedule of five</td></tr>
</table>

| Strategic Initiative A | |
|---|---|
| | years for the City's inventory of desktops, four years for laptops and three for tablets. A replacement cost bundle of $1,500 has been allocated for each desktop computer, $2,000 for each laptop and $1,000 for each tablet. The budget estimates account for 300 desktops, 20 laptops and 10 tablets. |

**Action Items to Implement Initiative**

- ☑ Compile an updated inventory of applications in the City and the respective requirements for workstation environments.
- ☑ Develop and continually update technology standards for PCs, laptops and tablets based on the City's application inventory.
- ☑ Continually update replacement budget based on the addition of new computers in the City.

**Anticipated Benefits**

- ☑ Bulk purchasing power of PCs and laptops.
- ☑ Improved equipment standardization.
- ☑ Assurance that all equipment will be supported by manufacturer.
- ☑ Reduction in unexpected support and maintenance costs of aging equipment.
- ☑ Increased security with utilization of latest operating systems and equipment.

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ Managing and adhering to the replacement schedule
- ☑ Effectively communicating the upcoming replacements to end users
- ☑ Adjusting the technology standards in future years

**No Action:**

- ☑ Continued challenges with supporting outdated workstations
- ☑ Continued challenges with supporting varying workstation platforms
- ☑ Limitations in the adoption of new applications due to outdated platforms

**Maturity of Technology:**

- ☑ The maturity of this technology is established

**Risk Rating**

| | Low | Medium | High |
|---|---|---|---|
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative D |
| --- |
| **D - Develop and implement an enterprise-wide disaster recovery and business continuity plan.** |
| **Initiative Description** |

The City of Winchester currently does not have a formalized enterprise-wide Disaster Recovery or Business Continuity Plan. Both of these documents are critical for the City to effectively react and quickly resume operations in the event of a disaster. While plans exist in some City departments related to certain applications and business processes, a City-wide plan does not exist. The City has an obligation to its citizens and businesses to provide assurance that in the event of a disaster, the City will be capable of delivering services.

This initiative may involve the efforts of a consulting firm to develop the plans. A firm should be selected based on their knowledge and experience developing similar plans for City governments. This selection process will involve the identification of a selection team and the development of a request for proposal by internal City resources, which is then released into the marketplace for responses. Based on the responses, the selection team will then create a short list of potential firms that will present to the City. Following the presentations, the preferred firm will be selected.

Once a firm is selected to assist in this initiative, a four phased approach should be utilized.

**Phase 1: Risk Assessment**

In collaboration with the hired consulting firm, a risk assessment should be conducted to determine which services will need to be provided in the event of a disaster, the priority of these services, and how quickly they need to be resumed following the event. This assessment should include all technology tools, including those in all operating environments (i.e., IBM and Windows). Based upon this list, these services should be assessed as to how vulnerable they are in the event of a disaster.

**Phase 2: Document Business Processes**

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

**Phase 3: Develop Plan**

Based on the results of the risk assessment and the accompanying business process documentation, the Plan can be developed involving both internal resources and the consulting firm. The Plan should be very detailed indicating the timing and individuals who will carry out the various aspects of the Plan. The Plan should also determine how an off-site data backup or operations facility will be leveraged.

**Phase 4: Regularly Test and Update Plan**

In order to be best prepared for a disaster, the City needs to regularly test the procedures in its Disaster Recovery and Business Continuity Plan. This can involve simple to complex drills, but effort should be made to test each aspect of the Plan at least once a year. In addition, the process to

| Strategic Initiative D |
|---|
| update the Plan should take place annually. |
| **Alternative 1** |
| An alternative to the initiative described above would be for the City to develop a disaster recovery and business continuity plan using internal resources. BerryDunn does not recommend this approach because it will likely extend the timeline significantly, given the limited available time of City resources. |
| **Alternative 2** |
| Another alternative to the initiative would be to develop a disaster recovery plan and exclude a business continuity plan. BerryDunn does not recommend this approach because the City would not realize benefits such as broadened knowledge of City-wide business processes and improved business continuity. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Management and Operations Issues |
| **Priority Ranking:** | 4 of 16 |

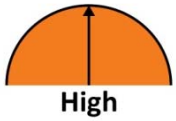
| Related Strategic Issue(s) | |
|---|---|
| **M5** | **The City does not have a documented enterprise-wide Disaster Recovery and Business Continuity Plan.** While individual procedures may exist for particular components or applications in place, an enterprise-wide plan for the City as a whole does not exist. It was reported that the City is working towards measures to improve disaster recovery and business continuity capabilities. However, the lack of a plan in the current environment may limit the City's ability to serve its users and restore basic business operations following a catastrophic event. |

**Benchmarking and Best Practice Information**

In past projects with similar organizations BerryDunn has found that most did not have current, enterprise-wide Disaster Recovery and Business Continuity Plans. Similar to Winchester, some had plans for specific business areas or applications, but not how these will fit into the organization's overall response to a disaster.

BerryDunn has also found that the largest challenge for organizations in disaster recovery and business continuity planning is keeping documentation up to date based on changes to business processes and the technologies used to support them. For example, when a process for archiving data changes, the related components in the Disaster Recovery and Business Continuity Plans must be updated.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  High |  Critical |  Medium |  Medium |  Established |

| Strategic Initiative D | | | | | |
|---|---|---|---|---|---|
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $30,000 | $30,000 | - | - | - | $60,000 |
| **Budget Description** | The budget amount of $60,000 for this initiative is to hire an external consulting firm to assist the City with the development of Disaster Recovery and Business Continuity Plans. While the firm will conduct a majority of the effort of this initiative, it is expected City resources will be involved in the process, to the amount of 40 to 60 hours. This initiative will begin in the first year and be completed in the second year of the Plan. This initiative budget does not include funding to implement any needed recommendations. | | | | |

**Action Items to Implement Initiative**

- ☑ Engage a consultant to assist the City in developing the Plan
- ☑ Conduct risk assessment
- ☑ Document business processes
- ☑ Develop the Plan
- ☑ Continually update and test the Plan

**Anticipated Benefits**

- ☑ Increased risk mitigation
- ☑ Improved business continuity
- ☑ Decreased downtime in the event of a disaster
- ☑ Preservation of critical data
- ☑ Broadened knowledge of City-wide business processes

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ This initiative is subject to the project management risks of cost, schedule and scope; however, the selection of an experienced consulting firm to assist in the development of the plan will help mitigate this risk through the use of an established methodology and project management best practices.
- ☑ A plan is developed that exceeds the needs of the City and as a result becomes too costly to adhere to.
- ☑ Not testing and regularly updating the plan will cause it to become outdated and ineffective.

**No Action:**

- ☑ Inability to effectively react and quickly resume operations in the event of a disaster.
- ☑ Inability to provide essential services to citizens in the event of a disaster.
- ☑ Potential for the loss of large amounts of critical data.

**Maturity of Technology:**

- ☑ There are a variety of technical components involved in the development and maintenance of a

| Strategic Initiative D | | | |
|---|---|---|---|
| business continuity and disaster recovery plan. These technologies can vary in level of maturity from leading edge to established technology. | | | |
| **Risk Rating** | | | |
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | | X | |

| Strategic Initiative F |
| --- |
| **F – Develop and implement technology purchasing and project management policies and procedures to include promoting standardization of technologies, the selection and prioritization of technology projects, and change management.** |
| **Initiative Description** |

In the current environment at the City, the IT Department does not have an appropriate set of IT Project Management tools, and can improve on the current methodology used to track the status of IT projects. To increase the likelihood of project success, it is important that projects are tracked and reported on to measure progress against key project milestones or metrics. Failure to track, plan, and report on projects increases the likelihood that projects will not achieve desired results and will ultimately lead to failed projects.

In addition, the IT Department is challenged with the current technology purchasing model where departments have the ability to make their own technology purchases from their respective department budgets. This has limited the ability of the IT Department to standardize technologies that are purchased but also ensure needed technology investments are adequately prioritized.

This initiative is to develop IT project management policies and procedures and tools to assist in the management of the City's IT projects including technology purchasing procedures.

BerryDunn recommends that the City develop documented policies and procedures to support the decentralized purchasing model. Such documentation would enable the IT Department to restrict certain purchases that are not within the City's standards. In addition, documentation should describe how threshold levels for determining which purchases are deemed "projects."

As part of the first phase of developing overall project management and purchasing standards, we recommend that the City first develop and implement standard tools to use in project management. These tools should include, but not be limited to, standard project plan template, project status reporting tool, the metrics that will be measured on each project to gauge overall project health, quality assurance processes, and project closeout procedures. Once these tools and templates have been developed and agreed upon, the City can begin to develop a process for selecting and prioritizing projects.

The IT Department currently has numerous projects in progress. The Department is responsible for managing, overseeing, and ensuring success of all of IT related projects. In the current environment, a business process and system for selecting and prioritizing projects does not exist. This issue has placed a great deal of strain on existing IT resources and made project planning and prioritization difficult. The lack of a project prioritization process has forced the IT Department to operate in a reactive mode, responding to project issues and addressing immediate needs as opposed to strategically planning, selecting, and prioritizing projects.

BerryDunn recommends that the IT Department develop a standard set of Project Management tools to track projects, assist in planning for resource needs and facilitate the overall prioritization process. Many organizations struggle with tracking projects which often leads to initiating more projects than can be supported. With a standard set of project management tools for project tracking, resource planning, and reporting, the IT Department will be able to better plan and manage projects. Many organizations have moved towards using a centrally managed Project Management and Tracking tool such as MS Project and MS SharePoint to track the status, risks and issues, and overall progress

| Strategic Initiative F |
|---|
| made on projects. Web-based project management applications have also been developed recently that can operate on Smart Phones and allow project team members access to project documents, track status, and communicate with the team. As the IT Department begins to implement its IT Strategic Plan, it will be important to implement the one of the alternatives identified here to increase the likelihood of success for IT projects.<br><br>The IT Department should, at a minimum, consider documenting project dependencies, identifying a project schedule and documenting the critical path activities as well as the identification of potential risks and issues that could impact the project. BerryDunn recommends that the IT Department develop a policy of collecting functional and technical requirements prior to starting any project. The collection of requirements should involve both IT resources as well as City stakeholders.<br><br>In addition to tracking and prioritizing projects, it is critical that the project reporting processes monitor the appropriate metrics. The IT Department can improve the current methodology for reporting project status. At a minimum, reporting should be done on project scope, schedule, and budget (known as the triple constraints) along with staffing on larger projects. The inability to effectively track projects makes reporting against these metrics increasingly difficult. The inability to monitor key project metrics and report on the overall "health" of a project increases the likelihood that there will be cost, scope, or schedule variances that will adversely impact the project.<br><br>BerryDunn recommends that the IT Department develop a formal reporting structure for all projects. The reporting process should include a standard status report template, identification of standard metrics that will be reported on, reporting frequency, and the audience (in addition to the IT Department) that will receive the report. |
| **Alternative** |
| Alternatives related to technology purchasing models exist including centralized and charge-back models, in addition to the decentralized model that is recommended. The following table summarizes each model. |

| No. | Model | Summary |
|---|---|---|
| **1** | Centralized | In a centralized purchasing model, IT Department purchases all technology for the organization out of its own budget. Typically, departments submit requests for certain items and others are purchased based on replacement cycles. Often a technology advisory group or steering committee determines expenditures for larger enterprise projects. |
| **2** | Charge-back | In a charge-back purchasing model, the IT Department purchases all technology for the organization and departments are "charged" for the expenditures out of their own respective budgets. The spread of charges may be based on usage or pre-determined spreads where multiple departments benefit from a particular piece of technology. In some cases, charge-backs can be used for certain components but not others. For example, time spent by IT support positions may be charged but not maintenance of certain servers. |

| Strategic Initiative F | | |
|---|---|---|
| **3** | Decentralized | In a decentralized purchasing model, departments purchase all technology for their own use out of their individual budgets. Typically the IT Department is notified of purchases and the decentralized model is most effective when the IT Department is enabled to restrict certain purchases that are not within the City's standards. Enforcing such standardization is most challenging with the decentralized purchasing model. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Management and Operations Issues and Applications Issues |
| **Priority Ranking:** | 5 of 16 |

| Related Strategic Issue(s) | |
|---|---|
| **M7** | **The City's decentralized technology purchasing model creates challenges with standardization and IT governance.** Purchases of technology-related items are made from department budgets with varying involvement from the IT Department. This has resulted in challenges with standardization across the City and governance of the IT Department's support responsibilities. Examples include various versions of MS Office and MS Windows, among several others. |
| **M8** | **The City does not have a documented process for managing and prioritizing IT projects.** A process or system and related set of policies and procedures for identifying, selecting, managing, prioritizing, collaborating, and implementing IT projects does not exist, which may make ongoing project management and support difficult. It has been several years since the City has committed a large amount of resources to technology projects. A consistent process for managing projects may result in a well-defined justification or rationale for the importance of a particular project. |
| **M10** | **Change management and communication of IT changes and events to end users could be improved.** It was reported that the current communication methods of changes and events to technology do not always reach City users in a timely fashion and do not always allow users to prepare for and adopt necessary changes. This may include new functionality available as updates and upgrades to existing applications are deployed. |
| **A10** | **There is a desire for increased functional-specific COTS applications and productivity tools.** Several departments have a desire to consider commercial off-the-shelf applications for functional-specific use. Examples include case management, scheduling, GPS tracking, Personal Property Tax, drawing tools as well as interfaces to existing City applications. Increased productivity tools are also desired such as Photoshop to be used for the City's marketing efforts. |

| Benchmarking and Best Practice Information |
|---|
| Benchmark organizations have reported often finding that the charge-back model presents the most complexities in recording, tracking and recouping funds from department budgets for technology purchases. Organizations also reported that the success of the decentralized and charge-back models is often based on the documented policies and procedures in place to enforce them, and the technology tools available to support them. An example of a technology tool that supports these two models is a financial system or ERP system with the ability to configure workflow approval levels for all technology purchases. Such systems ensure that an IT staff member reviews all technology purchases made. |

| Strategic Initiative F | | | | | |
|---|---|---|---|---|---|
| **Initiative Ranking** | | | | | |
| **City** | | **BerryDunn** | | | |
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** | |
|  Critical |  Critical |  Medium |  Medium |  Leading Edge | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $5,000 | $8,000 | $8,000 | $8,000 | $8,000 | $37,000 |
| **Budget Description** | The budget estimate is based on the licensing cost of 50 users for MS SharePoint. The estimate assumes that MS SharePoint will be used for six months in the first year of the plan and all future years. The budget also includes 10 users at $200/per user for MS Project Professional software licensing. BerryDunn does not recommend MS Project Server (enterprise version) at this time due to the needed investment. | | | | |

**Action Items to Implement Initiative**

- ☑ Document policies and procedures for selecting, prioritizing, and managing IT projects
- ☑ Communicate and train IT staff on policies related to IT project management
- ☑ Obtain project management certifications for appropriate staff. Increased planning, prioritization and selection of IT related projects will increase the likelihood of appropriate level of IS support for projects.
- ☑ Develop and communicate new policies related to technology purchases

**Anticipated Benefits**

- ☑ Documenting project requirements will help ensure projects meet business expectations
- ☑ Increased planning, prioritization and selection of IT related projects will increase the likelihood of appropriate level of IT support for projects
- ☑ Increased likelihood of project success
- ☑ Greater project forecasting related to budgeting and IT resources for upcoming projects
- ☑ Increased standardization of purchased technologies
- ☑ Increased ability to support purchased technologies

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ A potential risk is that the policies and procedures that are developed are too constrained

| Strategic Initiative F |
|---|
| **No Action:**<br>☑ Continued lack of standardization<br>☑ Increased challenges with managing the technology projects at the City<br><br>**Maturity of Technology:**<br>☑ There are no risks related to the maturity of associated technologies |

| Risk Rating | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative I |
| --- |
| **I - Conduct a needs assessment related to the SunGard applications to identify current challenges and gaps in available functionality.** |
| **Initiative Description** |
| The City currently uses the SunGard NaviLine applications for managing financial, human resource, payroll, community development, and utility billing business processes. In 2011, the City conducted an internal survey of City staff to assess the satisfaction level with the SunGard system. As a result of the survey process, the decision was made to continue using the SunGard system. As part of the survey process, the City identified a comprehensive list of issues that needed to be addressed by SunGard to mitigate some of the challenges and issues identified by City staff. SunGard was able to address some issues through training. In other instances SunGard provided cost estimates to purchase additional modules to provide needed functionality. During the fact finding interviews with City staff conducted by BerryDunn as part of the IT planning project, challenges related to the use of SunGard were reported. Some of the challenges identified by City staff are summarized below.<br><br>End-users reported the SunGard NaviLine application used for financial management is not user friendly and presents challenges with generating reports. Multiple end users reported the use of external spreadsheets for reporting purposes because the analytical and reporting capabilities of the NaviLine modules are not widely understood, cumbersome, or non-existent. In addition, contract management, inventory, project management, and grant management functionality is not being used. It was also reported that several challenges exist with the current application used for human resource management due to a lack of functionality including limited decentralized access to employee information and limited tracking of certifications, training, discipline, and Family Medical Leave Act (FMLA) data. Desired employee self-service functionality is currently not available and a large amount of time is spent fulfilling requests from City staff for pay stub and W-2 information. In addition, the City has recently implemented an applicant tracking system (NeoGov) but due to a lack of integration, several manual data entry routines are needed to link application data to employee files upon hiring.<br><br>Several users reported a desire for expanded functionality within the SunGard NaviLine application used for Community Development and Utility Billing. In addition to increased user-friendliness, there is a desire for workflow functionality, integration with the City's document management system, and web-based citizen self-service. It was also reported that there is a desire in multiple departments to expand e-Government capabilities through the City website. Examples include vendor self-service, a utility account management portal, an online application for Planning and Engineering, rental applications for monthly parking spaces as well as online bill pay functionality for tax and utility bills.<br><br>Since the City has made the decision to remain with the SunGard application, this initiative is to continue to work with SunGard to address the needs identified by City staff. This could mean that the City revisits the list of issues identified in 2011 and updates it based on the challenges identified by City staff as part of this project or develop a new list of needs. The needs identified by City staff during meetings with BerryDunn to capture the IT related strategic issues can be categorized into three areas; additional training, a need for additional modules or increased functionality, and integration with other City systems. These areas are further described below:<br><br>**Additional Training:** Additional training needs relate to issues where City staff have reported a lack of functionality, however functionality does exist and City staff require training to understand how to use the functionality. This area is also for re-training needs on current functionality to help City staff |

| Strategic Initiative I |
|---|
| use the SunGard system more efficiently and improve City business processes and training on reporting tools. This process will require additional work for City business analyst(s) from IT as they work closely with City staff to further refine reporting needs and requirements. It is important that business analysts (or other City staff) are able to articulate the data required for a report or by identifying the process they are trying to manage. Understanding the data needs and the process being managed can assist in defining reporting requirements.<br><br>**Additional Modules:** Additional modules needs relate to purchasing additional modules to address City needs identified for additional functionality. The additional modules identified include, but are not limited to, contract management, grant management, E-government modules and employee self-service modules related to payroll and human resources information.<br><br>**Integration:** Integration relates to integrating SunGard with other existing City systems to improve functionality and efficiency. Integration needs could include, (but not limited to) integration with NeoGov, Firehouse and any future E-government modules purchased.<br><br>BerryDunn recommends the City update the SunGard "needs" list (or develop a new list) either through a city staff survey or a focused work session(s) with stakeholders from each department that represent all functional areas (purchasing, community development, etc.). The City should then require SunGard to respond to the list of needs with cost (and resource) estimates for training, new modules, and integration; and provide the City with an estimate for when required functionality will be made available. BerryDunn recommends that the City implement the new modules and E-Government functionality provided by SunGard in the Add-On Quote (dated June 15, 2012), over the course of a 12 month period.<br><br>As an alternative to purchasing and implementing the new modules, the City could consider addressing some of the needs identified, by purchasing training days from SunGard to train City staff on current functionality and attempt to improve efficiencies by leveraging existing functionality as opposed to implementing new modules. This approach will not address the issues related to missing functionality. Based on a training day cost of $1,280 per day, the City could consider purchasing an additional 15 days of training for a cost of $19,200 plus $1,500 for anticipated expenses for a total of $20,700. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Application Issues |
| **Priority Ranking:** | 6 of 16 |
| **Related Strategic Issue(s)** | |
| **A2** | **Users reported challenges with the City's SunGard financial management application.** End-users reported the SunGard NaviLine application used for financial management is not user friendly and presents challenges with generating reports. Multiple end users reported the use of external spreadsheets for reporting purposes because the analytical and reporting capabilities of the NaviLine modules are not widely understood, cumbersome, or challenging to use or non-existent. In addition, contract management, inventory, project management, and grant management functionality is not being used. |
| **A3** | **The City's use of human resource management functionality within the City's SunGard** |

| Strategic Initiative I | |
|---|---|
| | **application is limited.** It was reported that several challenges exist with the current application used for human resource management due to a lack of functionality in place including limited decentralized access to employee information and limited tracking of certifications, training, discipline, and FMLA data, among others. Employee self-service functionality is currently not available and a large amount of time is spent fulfilling requests from City staff for pay stub and W2 information. In addition, the City has recently implemented an applicant tracking system (NeoGov) but due to a lack of integration, several manual data entry routines are needed to link application data to employee files upon hiring. |
| **A5** | **The City's use of the SunGard application in Community Development and Utility Billing could be improved.** It was reported by several users that there is a desire for expanded functionality within the SunGard NaviLine application used for Community Development and Utility Billing. In addition to increased user-friendliness, there is a desire for workflow functionality, integration with the City's document management system, and web-based citizen self-service. |
| **A6** | **e-Government capabilities offered by the City are limited.** It was reported that there is a desire in multiple departments to expand e-Government capabilities through the City website. Examples include vendor self-service, a utility account management portal, an online application for Planning and Engineering, rental applications for monthly parking spaces as well as online bill pay functionality for tax and utility bills. |
| **A8** | **Some City business processes rely on manual signatures and redundant approvals.** It was reported by City staff that in many instances, City business processes rely on manual signatures and redundant approvals. For example, it was reported that purchase orders can be approved online using functionality in HTE. However, in some cases once a requisition is approved, a second approval from the same staff is required again before the conversion to a purchase order. |
| **A9** | **Several processes are supported with a variety of applications that are not integrated.** The lack of workflow functionality and multiple instances of duplicate data entry create many inefficiencies. In addition, this increases the opportunities of data entry errors, or the existence of outdated and inaccurate data. For example, the inspection process for the Fire and Rescue department involves entry of data into both SunGard and Firehouse and then paper copies are delivered to City Hall. |

**Benchmarking and Best Practice Information**

Organizations similar in size to the City of Winchester rely on enterprise wide systems such as SunGard's NaviLine system to support city business processes. Some of the gaps in module specific functionality identified, could be provided by the implementation of some additional modules from SunGard, such as contract or grant management. It is common for organizations to leverage these types of modules and to also integrate their enterprise systems to other systems (NeoGov) and the City website to offer E-Government services.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |

| Strategic Initiative I | | | | |
|---|---|---|---|---|
|  Critical |  Critical |  Medium |  Medium |  Leading Edge |

| Estimated Initiative Budget | | | | | |
|---|---|---|---|---|---|
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| - | $207,372 | - | - | - | $207,372 |

| | |
|---|---|
| **Budget Description** | The budget for this initiative is comprised of the funds needed to purchase new SunGard modules, as well as the funds needed to purchase E-Government functionality (GovNOW) modules from SunGard to provide web enabled E-gov services. The City was provided a quote from SunGard to provide this functionality. The quote included, license fees, maintenance, training, installation and project management services. The budget detail for the initiative is detailed as follows:<br>**New Modules:**<br>HR, Contracts, Grants, Contact Management - $126,732<br>**E-Gov (GovNOW) Modules:**<br>Permits, Business License, Core, Planning, Citizen Request, Employee Self Service, Customer Information System, Tax Billing and Collections, Map Access, VeriSign Certificate, Point of Sale, Point of Sale Core - $80,640. |

**Action Items to Implement Initiative**

- ☑ Conduct a city staff survey or work session to document the remaining needs/challenges related to the use of SunGard.
- ☑ Discuss unmet requirements with SunGard to understand options for meeting requirements.
- ☑ Develop an implementation plan based on the responses from SunGard that includes an approach for conducting training, implementing new modules and integrating City systems with SunGard.

**Anticipated Benefits**

- ☑ Greater use of SunGard by City staff
- ☑ Increased efficiencies with City business processes
- ☑ Less reliance on duplicate data entry through integration with other systems
- ☑ City staff trained to use more of the functionality provided by SunGard
- ☑ Improved adoption/acceptance of the SunGard system in use today

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ This initiative will require the City to potentially manage the implementation of new modules, as well as identify specific staff to receive SunGard training. It will be important for the City to follow project management best practices and develop a project plan, schedule and monitor risks and issues related to training and implementation. A lack of project management activities could

| Strategic Initiative I |
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| cause the training and implementation efforts to struggle.<br>☑ A lack of a communication strategy related to the meetings and staff survey could create challenges and a lack of buy in from City staff if the goals and objectives of the initiative are not clear.<br>**No Action:**<br>☑ IT Department staff continue to perform business processes in SunGard that should be performed by City staff.<br>☑ City staff continues to perform work outside of the SunGard system in MS Excel and MS Access.<br>☑ Buy in and user adoption of the SunGard system decreases.<br>☑ City staff continues to perform dual entry into multiple systems (in some instances).<br>☑ Desired functionality such as increased E-Government services are not offered.<br>**Maturity of Technology:**<br>☑ This initiative includes a training component as well as potentially implementing additional modules from SunGard. Since the functionality that may be implemented from SunGard is in the form of generally available modules and not functionality still in development, the risks related to the technology itself are minimal. However, integrating SunGard to other City systems, (website, NeoGov), will require some potential development work and ongoing maintenance of the interfaces, especially during upgrades which will require monitoring by City IT staff. |

| Risk Rating | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | | X | |

| Strategic Initiative M |
| --- |
| **M - Develop an action plan to make updates and improvements to the City's network including direct connectivity, increased redundancy, expanded wireless connectivity and expanded remote access.** |
| **Initiative Description** |
| The purpose of this initiative is to develop an action plan to expand the City of Winchester's network, to establish redundancy, increase security, and increase accessibility. The City is currently collaborating with the Winchester Public School Department for Internet connectivity, Wide Area Network (WAN) services, and Remote Access via Virtual Private Network (VPN). The City shares a router and a firewall with the School, where the devices are located, and is dependent upon the School's IT Department for any configuration changes needed to be made to the network.<br><br>There is currently no redundant network connectivity to the Internet. If the School's Internet connection experiences any disruptions, the City will also lose connection. Moreover, if the School's network security is compromised, it could leave the City at a greater risk.<br><br>Further, the City has no guest network connectivity or wireless network access in any of the City's six locations. Although there are some Gigabit fiber optic connections between a few of the buildings with City Hall, the City does not have network connectivity to the Volunteer Fire and Rescue buildings. These locations are connected to the Internet through volunteer provided local ISP's, but are not part of the WAN. Anyone trying to access the network remotely is competing for bandwidth with the Volunteers. While connectivity is not necessarily limited by a lack of VPN licenses to provide for all users to connect concurrently, existing VPN pools may need to be adjusted to meet demand. |
| **Recommendation** |
| BerryDunn recommends that the City replace the current WAN services provided by Winchester Public Schools with its own router/firewall, and high-speed connectivity. It is further recommended that the City and School enhance their current collaboration and utilize the other's Internet connection as failover connections as a step towards greater Disaster Recovery preparation. Implementing routers/firewalls at satellite sites allows the City to implement its own converged WAN, thus enabling access to locations that are not currently connected to the City network. With its own network infrastructure, the City will have full control of its own remote access. Currently, the City reports not being able to have all employees connect remotely simultaneously. This may have to do with a configuration change on the Schools end. However, with their own router/firewall, the City would be able to control and configure remote access based on their need.<br><br>Part of a Disaster Recovery scenario would suggest that a second Internet Service Provider be utilized. However, this scenario would require the installation of new Fiber Optic connections to all desired locations. BerryDunn recommends continued utilization of the Comcast lines, but with the City's own router and firewall. Additionally, it is recommended to renegotiate any contracts with the provider at no greater length of time than two to three years. The price of bandwidth is constantly falling and the City could find savings in this area.<br><br>It is also recommended to provide a guest network. Once the City has its own Firewall, a perimeter network can provide network connectivity for non-City employees. With the implementation of a wireless network, the City can expand its own Local Area Network (LAN) connectivity. This can also |

| Strategic Initiative M |
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be tied to the guest network, and limit the need to run cable and provide jacks for non-City employees.

Furthermore, BerryDunn recommends considering the use of an outside consultant to assist the City's internal resources and project team in planning and implementing the network expansion. A firm should be selected based on their experience and references, preferably from similarly sized organizations. This gives the City a greater breadth of experience to draw from and generally provides a shorter assessment, and implementation phase.

The action plan will consist of four phases:

**Phase 1: Assessment**

In this phase, the City and Consultant will identify the members of the Project Team and determine what functions are deemed necessary to the network expansion. This phase will include the development of the City's network diagram and the project timeline. Identification of areas for expansion will be determined, with consideration for future growth. Consideration for Initiative P regarding increased remote meeting capabilities and other network related Initiatives should be made at this time. This initiative does not occur until the second year of the Strategic Plan implementation, so assessment is necessary to identify any changes that may have occurred in the interim, and to ensure proper planning and sizing is as comprehensive as possible.

First, research and cost analysis should be done to determine the best type of connectivity for the City. The City should work with a third party to analyze which locations will be directly part of the WAN or require a direct connection to the Internet. There are several types of high speed Internet connections, and the City should determine, based on bandwidth requirements and cost whether they prefer to use Fiber Optic connections, T1's, T3's, leased lines, Frame Relay, etc. Bandwidth between WAN sites and between the School and the City must be properly sized with a consideration for growth. It is expected that the analysis will result in keeping the current Comcast connectivity, but with a contract of the City's own. The City should work closely with the School to continue collaboration and determine the best method for providing failover services to one another.

Part of the assessment will be to determine how much bandwidth the City is currently utilizing. Once determined, consideration must be given to future growth. Bandwidth is a measurement not only of speed, but also data. BerryDunn recommends that the City take into consideration items such as increased VoIP usage and videoconferencing. In addition, considerations of backups across the WAN to a remote site or real-time recovery capabilities should be made. The greater amount of data and the time in which it needs to be access is not easy to determine with the number of variables involved. Currently, the City has a 30 Mbps connection through the school WAN. It is recommended to increase that. The Table below, Benchmarking and Best Practices Information maps out some of the highest bandwidth uses. Some of these are not being used by the City, but have been included to show what may be necessary in the future, with a range between 100Mbps and 125Mbps. If the City decides not to use these higher bandwidth cost options, they could conceivably save. This will be determined in the assessment.

Internally, the City should analyze the speed of their current switching environment. Any 10/100 switches should be swapped out with 10/100/1000 switches. This provides a throughput of a 1Gbps (Gigabit), or 1000 Mbps. This will increase the ability to handle any possible bandwidth increases for

| Strategic Initiative M |
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| the foreseeable future.<br><br>This initiative potentially affects some of the other Initiatives and their alternatives and should be considered a precursor to them, even though their planning phases may start in the same year. Initiative L and N, should be considered when planning this initiative.<br><br>**Phase 2: Implementation**<br><br>In Phase 2, the City will install any hardware they have decided to purchase. Installation of the ISP connection (determined by bandwidth requirements), routers, and firewalls should be done first. Depending on the City's needs, any additional routers and ISP connections can be installed at remote locations. Wireless routers can be installed for City employees. Once a perimeter network has been created that does not overlap the City network, wireless access should be granted to non-City employees.<br><br>**Phase 3: Testing**<br><br>Testing should be done at every stage of the above phase. As this is likely a key feature of a Disaster Recovery Plan that is developed from Initiative D, the controlled failover from City to School and vice versa should be tested in collaboration with their respective ISPs. Testing of subsequent routers, firewalls, and wireless routers should be done throughout the City. Also, important, is the testing of the perimeter network, to guarantee that there is no ability to access the City's network through that.<br><br>**Phase 4: Finalization**<br><br>Once completed with Phase 3, the City should have everything documented and have a succinct report, including the network diagram, configurations of all devices, and all the testing that was done along with the results. It may be determined at this time that the City may wish to continue utilizing the same or a Managed Services partner for network analysis and monitoring. |
| **Alternative 1** |
| An alternative to the initiative described above would be for the City to install dark fiber throughout the City. BerryDunn does not recommend this approach. This would be cost prohibitive both in additional and ongoing costs. Additional complexity may not result in significant benefit to the City. The primary advantage occurs with a Disaster Recovery scenario, where if either the City's or the School's ISP failed, there would be a failover to the other's. However, there is a price comparison below to help benchmark the average cost of Fiber Optic lines. This does not take into consideration what extraneous considerations should be made in terms of any installation challenges, such us the cost between running the fiber underground versus utilizing utility poles. Also, the cost of managing and administration costs are not considered here, nor cost to respond to emergency issues, such as accidental line cuttings. |
| **Alternative 2** |
| Another alternative for the City would be to limit the extent to which it performs the network expansion. It may be decided, for instance, that it is less critical for the City to expand to other locations with additional routers and ISP connections. It may also be decided that it is less critical for the City to add a perimeter network, or provide wireless access. This is not recommended as it was |

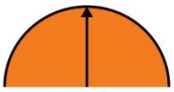
| Strategic Initiative M | |
|---|---|
| determined by the City to be a major focus for many end users and guests of the network. | |
| **Initiative Source Information** | |
| **Functional Area:** | Technology Issues |
| **Priority Ranking:** | 7 of 16 |
| **Related Strategic Issue(s)** | |
| **T3** | **Remote access connectivity to the City's network is limited.** It was reported by end users that remote access connectivity is not available to all users. There is a desire by many City employees to have remote access capabilities to connect to email, specific applications, or to entire desktops when at other locations away from the City. |
| **T8** | **The process for VPN network access creates challenges in the current environment.** City employees at the Timbrook access the City network through VPN. It was reported that on multiple occasions end users at Timbrook were not able to log into the VPN because there were too many users logged in at the same time. In addition users who momentarily lose connectivity have to re-authenticate through the VPN. |
| **T9** | **The City network does not extend to all facilities and connectivity from remote sites can be problematic.** It was reported by City staff that network connectivity is not reliable at remote sites and challenges exist with maintaining email connections as well as connections with other applications at these remote sites. |
| **T10** | **The City's network routes through the network of Winchester Public Schools for internet access.** The City does not own or control a router of its own, so all City employees' Internet traffic goes through the School Department's network. One challenge that exists with this configuration includes possible outages at the School disconnecting the City's network from the Internet. An additional issue is that coordination of maintenance windows can be a challenge. For example, maintenance performed by the schools after hours may impact the 24/7 operations of Public Safety. |
| **T11** | **The City does not currently have public or private wireless network access.** It was reported by several departments that there is a desire for wireless connectivity in City buildings for use by both City employees and the public. |
| **Benchmarking and Best Practice Information** | |
| As with any large scale technology implementation, the list of best practices for all of the steps that need to be taken is long and should be researched comprehensively as part of the planning phase. A complete analysis should be done in Phase 1: Assessment, as it is much easier to plan properly than to redesign a solution during or after implementation. When designing a WAN, numerous factors must be considered. The most important best practices to consider are:<br><br>➢ Perform a Network Discovery<br>• Is the current network equipment up to the task of supporting the desired goals?<br>➢ Conduct a Performance Analysis<br>• How is throughput, bandwidth, latency, et al?<br>➢ Implement a Network Simulation<br>• Once the Discovery and Analysis are performed, Network Simulation software can be used to analyze the data. There are many products available.<br><br>Below is the table describing different types of technology that the City may or may not currently be | |

**Strategic Initiative M**

using, and the estimation of bandwidth required.

| Technology | Recommended Bandwidth Needs | Range |
|---|---|---|
| Voice over Internet Protocol (VoIP) | A single call requires 64kbps/person. 2 people in a call requires 128kps. The City would need to decide if they want to have enough bandwidth added for every person to be on a call outside of the network. However, this would be rare and a needs assessment would be required to properly size. So we will use a range of 200 – 300 for illustrative purposes. | 13Mbps – 20Mbps |
| Backups over the WAN | This number will vary depending on when backups are taken. After hours will put less strain on current resources. However, backups cannot always be controlled to do this and may run into the business day. The best way to avoid this is to properly size the connection. This would require a needs assessment to properly size this so for illustrative purposes we will use a baseline of 1 TB, which will take roughly 8 hours at 30 Mbps. | 35Mbps |
| Video Conferencing | A high quality videoconference call is good around 1Mbps, while bare minimum is around 386kbps. It is possible to have calls below this, but the quality drops drastically and the quality is poor. This is currently not applicable and may not be for the foreseeable future, but is included for reference. The majority of video endpoints can typically handle a total of 4 connections. This does not take into consideration any video conferencing that may be done over user laptops or PC's. | 5 Mbps |
| Wireless Access | If the City implements the Wireless Access Initiative, this can increase the number of connections to the network and potentially increase the amount of bandwidth being used. This includes not only laptops, but other wireless devices, such as Smartphones and Tablet computing devices. This could potentially double the bandwidth, but in the first year or two it will probably only be a small portion. For illustrative purposes we will use a range of an additional 25% - 50% and round up. | 10 – 20 Mbps |
| Exchange Server 2012 | Utilizing the Exchange Client Network Bandwidth Calculator provided by Microsoft, it is determined that the bandwidth used by a medium usage end user at peak times would be essentially negligible, within these configurations. The numbers to the right are the range between hosted and in-house. | .61Mbps – 1.15Mbps |

| Strategic Initiative M | | |
|---|---|---|
| Totals: | With all other things being equal, the City would probably be comfortable with a total 100Mbps as a round number. Considering the approximately 35 Mbps the City currently is using over the WAN through the School, we will add this to the range. If the City stays connected to the School as a form of disaster recovery (DR), they would do well to err on the side of the higher figure to accommodate the additional strain of the School's network usage. | 98Mbps – 125Mbps |

| Initiative Ranking | | | | |
|---|---|---|---|---|
| City | | BerryDunn | | |
| Strategic Issue Rank | Department Priority | Cost Benefit | Ease of Implementation | Maturity of Technology |
|  Critical |  High |  Medium |  Medium |  Established |

| Estimated Initiative Budget | | | | | |
|---|---|---|---|---|---|
| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
| - | $77,100 | $59,400 | $59,400 | $59,400 | $255,300 |

**Budget Description**

Costs for this project are expected to include installation of the connectivity backbone based on the analyses performed by the City, in addition to the hardware and configuration thereof.

The table below outlines estimated costs of the different pieces of hardware, installation of lines, and the monthly cost associated with access to the backbone. For the sake of example, we will assume a Fiber Optic connection, since it is approximately a 20%-30% savings compared to T1 or T3, and can provide higher bandwidth. The cost however, would be significantly higher, if there is currently no dark fiber available and a new fiber optic network would have to be installed. Again, this would be determined from the analysis.

Additionally, equipment options are many and would have to be determined by the analysis to determine what options are best for the City.

| Estimated Costs | | |
|---|---|---|
| Option | Range | Average |
| Fiber Installation (numbers based on US DOT RITA website)* | $8,000 (per mile) - $30,000 (per mile) | $19,000/mile x 3 Miles = $57,000 |
| Monthly Connectivity | $3000 - $4400 | $3700 X 12 = $44,400 |

**Strategic Initiative M**

| | | |
|---|---|---|
| Charges (100Mbps)** | | |
| Main Router w/ Integrated Firewall, VPN, MPLS | $5000 - $10000 | $7500 |
| Satellite Routers w/ Integrated Firewall, VPN, MPLS | $600 - $1000 (x2 or more) | $850/per router x 2 routers = $1700.00 |
| Wireless Access Points | $500 - $750 | $625 x 5 locations = $8500 |
| External Vendor | $10,000 - $20,000 | $15,000 |

It is expected that in FY2013, it will cost approximately $77,100 for external resources and equipment costs. Then, a bucket of $15,000/year for 3.5 years to help budget for the further action items in terms of additional equipment and implementation costs. In addition, $44,400 has been added yearly to account for Internet Connectivity charges.

*Fiber Optic installation numbers may vary widely. Variables can include whether the cabling can be buried or run on utility poles. Terminal equipment prices and the cost of administration, management, and emergency repair would be determined by an assessment by an experienced networking contractor. The number above estimates 3 miles of Fiber and is an estimate based on numbers averaged throughout the US. The price found near the City may not reflect this price. This number is just included for comparison value and is not part of the recommended solution.

**All prices are estimates. Actual Cost Analyses may provide different numbers. Bandwidth and connectivity numbers vary widely throughout the United States. These numbers will be revised upon the City's Assessment.

**Action Items to Implement Recommended Initiative**

- ☑ Identify Network Project Team
- ☑ Determine which ISP the City will use
- ☑ Installation of Network Infrastructure
- ☑ Testing
- ☑ Reporting

**Anticipated Benefits of Recommended Initiative**

- ☑ Redundancy
- ☑ Increased Network Security
- ☑ Wider Network Accessibility
- ☑ Faster implementation with outside vendor
- ☑ Larger team with network experience from which to draw

| Strategic Initiative M |
|---|
| ☑ Stronger Service Level Agreements (SLAs) with hardware vendors |

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

☑ This project has several phases and will require a Project Manager and Project Team. Proper analysis and planning is required.

**No Action:**

☑ Continued reliance on the School's network administration
☑ Higher security risk if School is compromised
☑ Longer recovery time in event of Internet outage
☑ Higher risk of data loss
☑ Continued lack of service to guests and wireless devices
☑ Continued lack of coverage to outlying locations

**Maturity of Technology:**

☑ The maturity of this technology is highly established and is implemented the world over.

**Risk Rating**

| | Low | Medium | High |
|---|---|---|---|
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative E |
| --- |
| **E – Study the existing process of technology training and update policies and procedures to meet the needs of the City.** |
| **Initiative Description** |
| The purpose of this initiative is to improve training opportunities for general City staff as well as for the members of the IT Department. The desire for additional training was reported by nearly all participants in the fact-finding meetings facilitated by BerryDunn. In several instances, employees felt they may be able to better leverage existing technologies if they were trained on the full capabilities available. Specific examples ranged from desktop productivity tools to the SunGard HTE applications. Similarly, the IT Department reported that improving the training levels of the user-base would likely result in more efficiencies in the use of current technologies.<br><br>Similar to training for end users, it was reported that the budget for IT Department staff training and professional development has been reduced in recent years. In addition to budget challenges, staff in the department has been faced with strained workloads due to two vacancies and so have had little time to devote to training and professional development. The IT Department has looked to reinstate a budget for training for department staff in the coming years.<br><br>Technology training and the scope of the policies and procedures that are developed should consist of the following:<br><br>• New Hire Training;<br>• Ongoing “refresher” training; and<br>• Training related to technology changes.<br><br>BerryDunn recommends that leadership for this initiative be shared by member of the IT Department as well the Human Resource Department. With overall responsibility for the management of training City-wide, Human Resource will need to be involved and the subject matter expertise from the IT Department is similarly important.<br><br>There are five tasks associated with this initiative:<br><br>**Task 1: Inventory training processes currently used.** It is important for those leading the initiative to compile all current or historical training policies and procedures as an initial step in this initiative. BerryDunn has found that organizations have typically had more robust training plans in past years than in today’s current environment with budget challenges. Understanding what plans used to exist will be especially helpful when understanding the needs of long-tenured employees.<br><br>**Task 2: Understand the needs of the organization from varying perspectives.** With an understanding of the current and historic training documentation, those individuals leading this initiative should begin to meet with a variety of staff at the City. Participants should vary in their functional areas as well as level of leadership in the organization. It will be important that a variety of levels are involved, ranging from staff to Department Directors. All members of IT should also be involved as they will ultimately support those being trained and will need specific training themselves.<br><br>**Task 3: Develop policies and procedures.** Based on the feedback collected from meeting with individuals in the City with varying perspectives, the policy and procedure documentation can begin to be developed. |

## Strategic Initiative E

**Task 4: Communicate the policies and procedures that are developed.** Once the documentation is finalized, it should be communicated back to the organization and made available at a central location, such as an Intranet or shared drive. It will be important that the end-users understand the process for requesting training and what standards they will be expected to meet.

**Task 5: Regularly evaluate and update policies and procedures.** Just as the technology needs of the organization will change over time, the training needs will change as well. In order to keep the training policies and procedures actively used, the City will need to regularly evaluate their effectiveness and make any necessary updates. This evaluation should again consider the perspectives of a variety of employees. And any changes that are made should be adequately communicated across the organization.

The policies that are developed should identify who will receive training, the type of training to be received, the frequency of training, and the time when refresher training will be conducted. The City should consider that training be included as part of the new hire process, as well as when new systems are deployed. The IT Department does not need to be the single source of training resources. In some instances, training on department specific systems can be provided at the department level. The following is a sample table of contents for a training policy and procedure manual.

Technology Training Policy and Procedure Table of Contents:

1. Legal context or authority for training if applicable
2. Training needs, goals, objectives, purpose and performance measures
    a. Assessing needs
    b. Aligning activities to business needs
3. Resources and/or the process of allocating resources
    a. Funding
    b. Staffing
4. Roles and responsibilities of departments/IS, managers, etc.
5. Development, maintenance, and/or acquisition of
    a. Training assets
    b. Programs
    c. Professional services or instructors
6. Training request and approval process
7. Performance measures and training effectiveness evaluation
8. Training documentation
9. Travel authorization and reimbursement policy

As an additional component of this initiative, the City should consider leveraging an application to track training and certifications. Commonly provided as a function of an enterprise resource planning system, such applications have been helpful to organizations to add structure and accountability to complement their policies and procedures. The instance of this application will enable human resources and other departments to more effectively track employees' training and certifications as well as the administration of training programs. Currently, this data is largely tracked in external data stores and it was reported that this may create challenges with ensuring employees receive appropriate and adequate training.

## Strategic Initiative E

Due to the nature of this initiative, there are a variety of alternatives that will be considered and decided upon during the process of developing the policies and procedure documents. An alternative related to the specific approach of developing the documentation may include the use of external resources to assist with the effort. BerryDunn does not recommend this as an alternative.

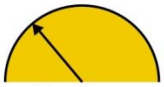
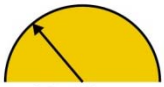
### Initiative Source Information

| | |
|---|---|
| **Functional Area:** | Management and Operations Issues |
| **Priority Ranking:** | 8 of 16 |

### Related Strategic Issue(s)

| | |
|---|---|
| **M6** | **Technology training of resources in the IT Department and City-wide is currently limited.** It was reported by City staff that while there have been proactive efforts to conduct training related to SunGard and office productivity tools in the past, current training opportunities are limited. Many of the City staff interviewed acknowledged that all departments could benefit from an increased technology training effort including utilizing documented technology proficiencies in job descriptions. Staff in the IT Department expressed a desire for increased training and professional development opportunities as well. |

### Initiative Ranking

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  Medium |  Medium |  High |  Medium |  Established |

### Estimated Initiative Budget

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| - | $0 | $25,000 | $25,000 | $25,000 | $75,000 |

| | |
|---|---|
| **Budget Description** | The budget for this initiative is based on a technology training budget for the City of $25,000 starting in the third year of the plan, and continuing into year five. This budget estimate is a starting point and the City may determine to increase it as the policies and procedures are developed. BerryDunn recommends this budget estimate be considered a minimum level. |

### Action Items to Implement Initiative

- ☑ Inventory training processes currently used
- ☑ Understand the needs of the organization from varying perspectives
- ☑ Develop policies and procedures
- ☑ Communicate the policies and procedures to City staff
- ☑ Regularly evaluate and update policies and procedures

| Strategic Initiative E |
|---|
| **Anticipated Benefits** |
| ☑ Increased efficiencies and use of existing City technologies<br>☑ Increased risk mitigation with employees training in proper and acceptable use of technologies |
| **Potential Risks** |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ The plans that are developed are not adequately communicated to end users<br>☑ Development of the training plans is not done using an adequate variety of City perspectives<br>**No Action:**<br>☑ Employees will continue to be frustrated with a lack of available training<br>☑ Instances where current and future applications are underutilized will exist<br>☑ Risks of data security due to inappropriate use may exist<br>**Maturity of Technology:**<br>☑ No risks at this time |

**Risk Rating**

| | Low | Medium | High |
|---|---|---|---|
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | X | | |

| Strategic Initiative K |
| --- |
| **K - Conduct a needs assessment related to the applications that support processes for the Treasurer and the Commissioner of Revenue to identify additional needed functionality.** |
| **Initiative Description** |

The City is currently using a combination of custom in-house developed software and SunGard functionality for its main billing, revenue and collection system functionality. It was reported by the Treasurer, Commissioner of the Revenue (COR), and the City's IT staff that the current system(s) are challenged to meet the needs of the City. One of the Senior IT Programmers has spent an extraordinary amount of time developing and supporting these applications and spends additional time each month maintaining the system, running reports, and assisting with the reconciliation of data.

The City has two potential alternatives to addressing the current challenges. Alternative one is to continue with the current configuration of the combination of SunGard and custom developed systems. Alternative one includes working with SunGard to develop and implement functionality to address the issues identified by both the Treasurer and the COR.

The second alternative is to select and implement a commercial off the shelf (COTS) product to support the personal property (motor vehicle) billing and collection needs of the Treasurer and COR.

BerryDunn recommends that the City pursue the second alternative and purchase a COTS Virginia-specific personal property (motor vehicle) product. This alternative is described in further detail below.

The personal property system should include functionality for assessing and billing motor vehicles fees. Integration points to the City's financial system will be an important consideration.

As described in other projects in this plan, BerryDunn recommends a structured approach to the procurement process. BerryDunn recommends the City following the steps outlined below:

**Phase 1 Requirements Gathering**

The City should begin by identifying the departments that would benefit from the use of a personal property billing system (in addition to the Treasurer and COR) and include those departments as stakeholders in the requirements gathering process. The City will then need to develop functional and technical requirements for the new system. The City should document the requirements in a structured format and develop the requirements based on industry standards. One source the City should consider for guidance when developing requirements is IEEE. The City should involve all stakeholders in the requirements gathering process and allow for multiple opportunities for review.

**Phase 2 Request for Proposal**

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

| Strategic Initiative K |
|---|
| opportunity to ask additional clarifying questions.<br><br>Once the City has received the RFP responses from vendors, the proposals should be scored using a pre-determined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to the City. The stakeholder group should be part of the evaluation process; however, scoring should be limited to four to seven City staff.<br><br>**Phase 3 System Evaluation and Selection**<br><br>Once the City has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system for the City. The demonstration process should include a scripted demonstration agenda that requires vendors to demonstrate their systems based on the City business and technical requirements. A scripted demonstration approach will also allow the City to compare the vendors as they demonstrate similar business processes. The City's stakeholder group should be included in the demonstration process as well as other City staff that will use the future system. At the completion of the demonstration process, the City should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process.<br><br>Once the City has determined a preferred vendor based on the results of the scoring and evaluation process, it will be important that the City conduct a thorough review of the vendor's proposed contract. Reviewing critical contract terms and conditions including payment terms, license agreement, payment milestones and deliverables will be important to define to assist in mitigating some of the challenges that can occur during implementation.<br><br>**Other Considerations:**<br><br>There are other steps in a structured system procurement that the City may want to consider as this project is started. The City should follow their procurement rules when considering whether or not to include any of the steps below:<br><br>1. **Reference checks.** Reference checks for the vendor and the proposed system can be a valuable tool to assist the City in further evaluating the system and vendor.<br>2. **Site visits.** Site visits, if feasible based on the City's timeline and budget can also assist in evaluating a system. A site visit to a location using the proposed software will provide the City's evaluation team an opportunity to see the system in use at a similar environment and allow City staff the opportunity to ask questions related to implementation and business process issues.<br>3. **Evaluating costs.** The City's evaluation team can evaluate proposed system costs during the initial review of the proposal responses or wait and evaluate costs at the completion of the software demonstration process.<br>4. The City could consider using external resources familiar with Virginia personal property systems available in Virginia to assist in the requirements definition and system evaluation and selection process. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Application Issues |
| **Priority Ranking:** | 9 of 16 |

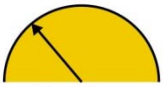
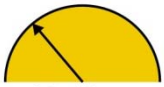
| Strategic Initiative K | |
|---|---|
| **Related Strategic Issue(s)** | |
| **A11** | **Current City systems may not include the functionality required by the Treasurer's Office. There were several challenges with existing billing and collections applications used by the Treasurer's Office including:**<br>• Inability for citizens to review Real Estate and Personal Property accounts online. The Treasurer's Office is currently receiving an average of ten requests per day for Real Estate and responding to these requests for information can be time consuming.<br>• Inability to scan a citizen's bill and post a payment to an account.<br>• Inability to move State Share Credits back to State Share GL Account through the system automatically. Currently these are processed manually.<br>• Inability to provide consolidated statements to citizens.<br>• Inability to process a partial payment on a license fee.<br>• Inability to re-instate a paid license fee.<br>• Inability to transfer Credits on Personal Property.<br>• Inability to run a collection action report at day's end.<br>• Inability to include method of payment on license fee receipt/report.<br>• Inability to show name of account holder on receipting screen.<br>• The cashier work stations in the Treasurer's Office are not designed to optimize productivity. The scanning and printing of receipts in the Treasurer's Office is currently a manual process that requires multiple steps and is labor intensive.<br>• The Business License system for posted payments and history is confusing. A posting today for prior years will post to the prior year history and this makes research on accounts time consuming and difficult.<br>• The handling of dog licenses using the business license module is cumbersome. |
| **A12** | **Current City systems may not include the functionality required by the Commissioner of the Revenue's (COR) Office. There were several challenges with existing billing and collections applications used by the COR, including:**<br>• Real Estate Assessment Software: currently use a combination of spreadsheets and a limited software application. Many factors and rates are hard-coded on a parcel by parcel basis, with limited analytical tools available.<br>• Business License/Personal Property Link: These two functions reside in entirely separate applications which currently have no link. This requires duplicate data entry and creates challenges in determining filing compliance.<br>• The personal property system is an in-house, custom built system that was developed due to the unique way the City handles personal property. This has caused a number of issues including a lack of reporting capabilities, limited integration with other City systems, and limited opportunity for enhancements.<br>• There is limited integration with the SunGard/NaviLine system with minimal interdepartmental checks and data flow (e.g., the COR must manually verify that a new business has completed all the necessary steps with various City departments, or that new construction data is entered onto tax rolls upon completion).<br>• Tools are limited to help identify research and correct any errors. For example, when the Treasurer's Office keys in a payment for a business license a routine to validate that the |

| Strategic Initiative K | |
|---|---|
| | payment is being applied to the correct license does not exist.<br>• Occupational License: This module requires several manual processes to process a license. The system does not have the functionality to view account history.<br>• COR relies on IT resources to write queries, which can be time consuming. |

**Benchmarking and Best Practice Information**

There are currently three to four vendors that provide personal property (motor vehicle) assessment and billing systems designed for Virginia localities. Using a COTS system designed to support Virginia business rules will greatly reduce the amount of time the City spends maintaining the existing systems.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  Medium |  Medium |  High |  Medium |  Established |

**Estimated Initiative Budget**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| $0 | $25,000 | $125,000 | $0 | $0 | $150,000 |

| | |
|---|---|
| **Budget Description** | The budget for this project consists of the costs related to selecting and implementing a personal property system. The budget also includes funds for the City to hire outside resources to lead the requirements development and system selection process if desired. The budget provided above is based on the BerryDunn recommended alternative of replacing the personal property system. The project is scheduled to begin in year two. The year two budget amount is $25,000 which is estimated funding should the City decide to use outside assistance to help with the requirements definition and system selection. The cost of the new system is estimated at $125,000 (software and implementation services). The project implementation will begin in year two of the plan and it is expected that the City will expend the entire project budget amount in year 2, including professional services, hardware and some licensing costs.. The budgeted amount for this project does not include ongoing software maintenance that the City will pay in subsequent years of the plan. This amount is typically 18-20% of the software license costs. |

**Action Items to Implement Initiative**

- ☑ Establish City Project Management Team to lead the implementation effort
- ☑ Document functional and technical requirements for a new personal property system
- ☑ Develop a RFP and issue it to the vendor community
- ☑ Conduct a structured selection process that at a minimum includes:

| Strategic Initiative K |
|---|
| • Level of fit analysis on RFP responses<br>• Scripted demonstration process<br>• Vendor reference checks<br>☑ Negotiate contract with preferred vendor |
| **Anticipated Benefits** |
| ☑ Reduce reliance on in-house developed systems<br>☑ Reduce redundant data entry<br>☑ Improve efficiency and streamline internal processes<br>☑ Reduce risks to the City associated with using in-house custom developed software applications<br>☑ Provide greater ability for revenue forecasting and collection tracking<br>☑ Integrated system will provide for enterprise-wide view of data and information<br>☑ Reduce reliance on paper copies of documents<br>☑ Reduce operating costs |
| **Potential Risks** |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ This initiative will require the City to potentially manage the implementation of a new system. It will be important for the City to follow project management best practices and develop a project plan, schedule and monitor risks and issues related to testing, training and implementation. A lack of project management activities could cause the implementation efforts to struggle.<br>**No Action:**<br>☑ IT Department staff continue to play a key role in developing and maintaining a custom developed system, limiting their ability to focus on other more critical IT functions.<br>☑ City staff continues to find workarounds to a lack of functionality by performing business processes in MS Excel and MS Access.<br>☑ Ability to forecast revenue, report on delinquency and provide executive level reporting is continually limited.<br>☑ The risk of losing institutional knowledge increases each year. In the event key City IT staff leave, the knowledgebase used to support the current system(s) will be difficult to fill.<br>☑ The ability to respond to legislative mandates and local ordinance changes is limited and requires additional time from City IT staff to customize the existing system.<br>☑ In the event customizations are provided by SunGard, the City will need to ensure the integrity of the modifications during upgrades and patching.<br>**Maturity of Technology:**<br>☑ This initiative includes potentially implementing a commercial off the shelf (COTS) product. Since the functionality that may be implemented is recommended from a COTS vendor, the risks related to the technology itself are minimal. However, integrating the personal property system to other City systems (e.g., website, SunGard, CAMA) may require some potential development work and ongoing maintenance of the interfaces, especially during upgrades which will require monitoring by City IT staff. |

| Strategic Initiative K | | | |
|---|---|---|---|
| **Risk Rating** | | | |
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | | X |
| **Maturity of Technology** | | X | |

| Strategic Initiative H |
| --- |
| **H - Select and implement an enterprise-wide time and attendance management application.** |
| **Initiative Description** |

In the current environment in the City, a paper-based process is most widely used to record and track time and attendance information for employees. Most City departments reported that it takes an average of three to five hours (for some departments this may not change) per pay cycle to collect employee time records, review, approve, and in some cases enter them into an MS Excel spreadsheet before submitting them to Finance for processing. In one example, City staff is driving to other City buildings to collect employee time sheets. There is a desire from nearly every department to move towards using an application to track employee time and attendance.

The purpose of this initiative is to select and implement an application to support electronic time entry City-wide. In the current environment the process is a manual, paper-based time collection and reporting process. The current process has led to an increased amount of City staff time to reconcile time and attendance records and complete the payroll process.

There are several vendors in the marketplace today that offer commercial off the shelf (COTS) applications to support electronic time entry, including Kronos, Executime, Intellitime and iNova. In order for the City to select a product that will most improve the current environment, BerryDunn recommends a phased approach. This approach follows best-practices in system selections and is also leveraged in other Strategic Initiatives of this Plan.

**Phase 1 Requirements Gathering:**

The City should begin by identifying the locations where electronic time clocks will be installed and analyze the existence of network connectivity at these locations. The City will then need to develop functional and technical requirements for the new system. The City should document the requirements in a structured format and develop the requirements based on industry standards. One source the City should consider for guidance when developing requirements is IEEE. IEEE has developed standards for documenting technical requirements (e.g., must be a complete sentence, must be able to stand on its own). The City should involve all stakeholders in the requirements gathering process and allow for multiple opportunities for review.

**Phase 2 Request for Proposal**

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

Once the City has received the RFP responses from vendors, the proposals should be scored using a pre-determined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to the City. The stakeholder group should be part of the evaluation process; however, scoring should be limited to four to seven city staff.

## Strategic Initiative H

**Phase 3 System Evaluation and Selection**

Once the City has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system for the City. The demonstration process should include a scripted demonstration agenda that requires vendors to demonstrate their systems based on the City business and technical requirements. A scripted demonstration approach will also allow the City to compare the vendors as they demonstrate similar business processes. The City's stakeholder group should be included in the demonstration process as well as other City staff that will use the future system. Scoring of the demonstrations should a similar scoring process used during the proposal scoring phase. At the completion of the demonstration process the City should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process.

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

**Other Considerations:**

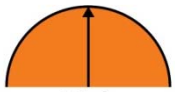
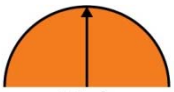
There are other steps in a structured system procurement that the City may want to consider as this project is started. The City should follow their procurement rules when considering whether or not to include any of the steps below:

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

Evaluating costs. The City's evaluation team can evaluate proposed system costs during the initial review of the proposal responses or wait and evaluate costs at the completion of the software demonstration process.

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Application Issues |
| **Priority Ranking:** | 10 of 16 |

| Related Strategic Issue(s) | |
|---|---|
| **A1** | **The City does not have an application to track employee time and attendance.** In the current environment in the City, a paper-based process is most widely used to record and track time and attendance information for employees with a single department using non-networked time clocks. Most City departments reported that it takes an average of three to five hours per pay cycle to collect employee time records, review, approve, and in some cases enter them into an MS Excel spreadsheet before submitting them to Finance for processing. In one |

| Strategic Initiative H | | | | | |
|---|---|---|---|---|---|
| | example, City staff is driving to other City buildings to collect employee time sheets. There is a desire from nearly every department to move towards using an application to track employee time and attendance. | | | | |
| **Benchmarking and Best Practice Information** | | | | | |
| Many local government organizations are using electronic time clocks or have implemented a decentralized time entry system that allows staff time to be interfaced into the payroll system which is then approved using an automated workflow process. | | | | | |
| **Initiative Ranking** | | | | | |
| **City** | | **BerryDunn** | | | |
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** | |
|  High |  High |  Medium |  Difficult |  Leading Edge | |

| **Estimated Initiative Budget** | | | | | |
|---|---|---|---|---|---|
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| - | - | $180,000 | $240,000 | $0 | $420,000 |

| | |
|---|---|
| **Budget Description** | This initiative is scheduled to begin in year three of the plan. The budget for this initiative is based on the funding needed for a time and attendance system including hardware and software licensing. Additional funding has also been added to allow the City to potentially use outside assistance to assist in the system selection process. Year one of the budget (for this project) consists of $60,000 for consulting assistance to develop requirements and assist the City in selecting a system. It is anticipated that the implementation of the system will also begin in the same year. Total cost of the system is estimated at $360,000. It is anticipated that the City expend approximately half of the initiative funding in this year of the plan ($180,000) on implementation costs and software licensing. The remainder of the budget will be expended in the subsequent year ($180,000).<br><br>In the event the City decides to implement this initiative without the assistance of external resources, the budget for the initiative can be reduced to $360,000. |

**Action Items to Implement Initiative**

- ☑ Identify City stakeholders
- ☑ Document functional and technical requirements
- ☑ Develop a request for proposal
- ☑ Conduct a structured procurement evaluation process and select a system
- ☑ Negotiate a contract with the preferred vendor
- ☑ Implement the selected application

| Strategic Initiative H |
|---|
| **Anticipated Benefits** |
| ☑ Increased efficiency related to payroll process and time entry tracking<br>☑ Reduction of the reliance on paper based time entry records<br>☑ Increased reporting capabilities related to time entry<br>☑ Potential reduction in data entry errors based on current process<br>☑ Increased efficiency related to payroll process and time entry tracking<br>☑ Reduction of the reliance on paper based time entry records<br>☑ Increased reporting capabilities related to time entry<br>☑ Potential reduction in data entry errors based on current process |
| **Potential Risks** |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ This initiative will require the City to potentially manage the implementation of a new system. It will be important for the City to follow project management best practices and develop a project plan, schedule and monitor risks and issues related to testing, training and implementation. A lack of project management activities could cause the implementation efforts to struggle.<br>☑ Implementing an enterprise wide system will require a comprehensive change management and communication strategy. A failure to manage change and implement an effective communication plan can create project challenges and lead to buy in issues from City staff.<br>**No Action:**<br>☑ Time and attendance reporting continues to be a manual process.<br>☑ The likelihood for data keying entries remains high given the multiple instances time entry is recorded.<br>☑ The ability to identify trends and patterns is limited.<br>☑ Management reporting is limited.<br>☑ City staff continues to spend significant time each payroll cycle collecting and reporting time information.<br>**Maturity of Technology:**<br>☑ This initiative includes implementing a commercial off the shelf (COTS) time and attendance product. Since the functionality that may be implemented is recommended from a COTS vendor, the risks related to the technology itself are minimal. However, integrating the time and attendance system to other City systems, (SunGard), may require some potential development work and ongoing maintenance of the interfaces, especially during upgrades which will require monitoring by City IT staff. |

**Risk Rating**

| | Low | Medium | High |
|---|---|---|---|
| **Project Management** | | | X |
| **No Action** | | X | |

| Strategic Initiative H | | | |
|---|---|---|---|
| **Maturity of Technology** | X | | |

## Strategic Initiative P

**P – Implement increased technologies to support in-person and remote meetings.**

### Initiative Description

The purpose of this initiative is to install technologies in meeting rooms throughout the City to facilitate presentations, teleconferences and web-conferencing. Multiple City departments reported a desire for increased technologies to facilitate meetings such as smart boards and projectors in locations including the City's Regional Training Center as well as the Community Room at the public safety building. There is also a reported desire for increased technology tools to support remote meetings such as table-top teleconference phones and video-conference tools.

It is recommended that the City plan the technologies it will use with a focus on design and technical standardization. Design standardization will be achieved by developing multiple specification levels based on the room layout and desired use. Technical standardization will be achieved by utilizing standard components within each design level.

BerryDunn has identified three initial design levels for the City to consider as meeting room technologies are initially implemented. These configurations include a large group and panel presentation room, a web-conference meeting room and a teleconference meeting room, with progressively decreasing technical capabilities. BerryDunn recommends that the City outsource the installation of the components for these meeting rooms to ensure proper and timely installation.

- **Design Level 1**: This design level is for a large group and panel presentation room and will include a smart board, projector, sound system and conference phone for an estimated cost of $7,000 per room. Based on observations and feedback received from City departments, BerryDunn has planned that the Community Room at TPSC, the City's Regional Training Center, and one other City meeting room will receive the specifications in design level one.

- **Design Level 2**: This design level is for web-conferencing and small presentation rooms and will include a projector, screen, video output device, and conference phone for an estimated cost of $5,000 per room. Based on observations and feedback received during the fact finding meetings, BerryDunn recommends equipping four City meeting rooms with the specifications included in design level two. The City should determine which four rooms will be equipped based on input from a variety of perspectives as to the greatest area of need.

- **Design Level 3**: This design level is for smaller teleconference meeting rooms and will include a conference phone for an estimated cost of $500 per room. Based on observations and feedback received during the fact finding meetings, BerryDunn recommends equipping four City meeting rooms with the specifications included in design level three.

### Alternative 1

An alternative to the recommendation described above would be for the City to install the components for these meeting rooms using internal resources. BerryDunn does not recommend this alternative because there is no guarantee that internal resources will have the specialized knowledge for proper installation and an outside firm will have the ability to perform an expedited installation.

### Initiative Source Information

| Strategic Initiative P | |
|---|---|
| **Functional Area:** | Technology |
| **Priority Ranking:** | 11 of 16 |

**Related Strategic Issue(s)**

| | |
|---|---|
| **T6** | **The City's use of technology tools to support in-person and remote meetings could be increased.** Multiple City departments reported a desire for increased technologies to facilitate meetings such as smart boards and projectors such as at the City's Training Center, as well as the Community Room at the public safety building. There is also a reported desire for increased technology tools to support remote meetings such as table-top teleconference phones and video-conference tools. |

**Benchmarking and Best Practice Information**

In BerryDunn's experience, the meeting room technologies described above have been known to provide many benefits to organizations similar in size to Winchester. These technologies can help to increase the quality and efficiency of meetings as well as provide opportunities for cost savings by reducing travel time and expenses.

BerryDunn has also found that outsourcing the installation of remote meeting technologies helps to reduce risk and prevent additional strain on City resources. Outsourcing also provides opportunities for the City such as warranties and product support from external entities.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  Medium |  Medium |  Medium |  Easy |  Established |

**Estimated Initiative Budget**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| $0 | $0 | $26,000 | $0 | $0 | $26,000 |

| | |
|---|---|
| **Budget Description** | The estimated initiative budget is based on the Community Room at the Timbrook Public Safety Center and the City's Regional Training Center each receiving Design Level 1 configurations for a total budget of $14,000. The budget also plans for an additional presentation room in the City will receive the same technical capabilities for a total budget of $7,000. In addition, this budget plans for equipping four City meeting rooms with Design Level 2 capabilities at a budget of $10,000 and four City meeting rooms with Design Level 3 capabilities at a budget of $2,000. |

**Action Items to Implement Initiative**

☑ Develop standardized design levels for multiple City meeting rooms.

| Strategic Initiative P |
|---|
| ☑ Purchase and install meeting room technology components based on design levels.<br>☑ Train users in how to use new meeting room technologies. |
| **Anticipated Benefits** |
| ☑ Increased efficiencies with meeting facilitation tools.<br>☑ Decreased time and expense for travel with the ability to host remote meetings.<br>☑ Ability to record meetings for information backup and storage. |
| **Potential Risks** |
| **Project Management:**<br>☑ There is very little project management risk associated with this initiative. Outsourcing the installation will mitigate any risk related to project staffing and ensure proper installation.<br>**No Action:**<br>☑ Inefficiencies with meeting facilitation.<br>☑ Increases time and expense for travel with the inability to host remote meetings<br>**Maturity of Technology:**<br>☑ The technologies that are recommended in this initiative are well established.<br>☑ Limitations in the City's network may limit the ability to provide connectivity for phone and web conferencing. |

**Risk Rating**

| | Low | Medium | High |
|---|---|---|---|
| **Project Management** | X | | |
| **No Action** | | X | |
| **Maturity of Technology** | X | | |

## Strategic Initiative O

**O - Implement Increased Physical and Environmental Controls in Areas where Sensitive Components are Housed.**

### Initiative Description

This initiative is in response to the need for increased security and environmental controls for the server room, and possibly beyond. Currently, the City is implementing a key code security system with a single code on the server room door and no way to differentiate from one user to the next. The concern here is the potential security threat, in terms of accountability, i.e, data entry errors or even the threat of malicious intent. The key code is the same for everyone, so the chances of unauthorized users learning the code are high.

### Recommendation

Of the highest priority, BerryDunn specifically recommends the City implement a card swipe access system to the server room. Further a Security Controls Consultant specializing in building security should be engaged to provide project leadership, installation, and support. Further analysis by the consultant should include preventative and protective environmental systems, with a focus on efficiency and electrical cost savings. Most Security Consultants will provide a free analysis. A card swipe access system is customizable to allow individuals the following:

- Access to only specific doors;
- Access only at certain times of the day;
- Access only certain days of the week;
- Holidays can be programmed into the system;
- Keys can be activated/disabled centrally by an administrator for specific individuals;
- Auto-lock/-unlock on power loss;
- Electromagnetic door locks; and
- Other customizable features are generally available.

While security is of the utmost concern, other protective/preventative considerations should be made, including the following:

- Analysis of current dedicated HVAC systems;
- Dedicated backup power supply and generator (in process project);
- Dry-pipe sprinkler system;
- Raised flooring; and
- Emergency power cut-off.

While some of these items may already be in place or in progress, this initiative is an opportunity for the City to review and revise the status of the existing prevention systems, ensuring that all existing systems are up to code and are providing the greatest efficiency. This may also be an opportunity for the City to perform analyses on Security and Environmental Controls for the entire City Hall. Based on these findings, the City will prioritize and develop plans for the implementation of identified Security and Environmental Controls needs.

### Alternative 1

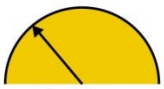
| Strategic Initiative O |
|---|
| Alternatives to card swipe access controls include, Biometrics. This technology typically allows access based on either scans of the employees retina or fingerprints. The features of the system are still generally the same regarding access control features. However, BerryDunn does not recommend this solution as the technology is not as established as keycard access systems. It can potentially take longer for implementation in order to baseline each employee's biological scans. An additional factor the City may want to take into consideration is the ethical issues surrounding biometric identification, i.e. privacy concerns. |
| **Alternative 2** |
| This alternative suggests the City maintain their current system, but still perform an analysis of current environmental controls to verify all systems are up-to-date and working. As a result, the City can determine potential future environmental and security projects. This alternative is not recommended as it leaves the City at a higher security risk. |

| Initiative Source Information | |
|---|---|
| **Functional Area:** | Technology |
| **Priority Ranking:** | 12 of 16 |

| Related Strategic Issue(s) | |
|---|---|
| **T5** | **Physical and environmental controls of technology infrastructure could be increased.** It was reported that backup power controls in City buildings could be improved as the server room at City Hall does not have a backup generator and the power supply delivered by UPS devices at other locations is insufficient. A card swipe access system would increase control and give the City increased monitoring to critical locations throughout the City. HVAC and fire suppression devices should be reevaluated for functionality and ensure they are current. |

| Benchmarking and Best Practice Information |
|---|
| Best practices for Security Access Controls implement solutions that obtain and record information regarding date and time of access and identification of who has accessed the server room. By utilizing an automated system, that uniquely identifies staff members, the best practices are satisfied and useful reports can be easily produced. Many products utilize a server that is able to tie in with Active Directory to provide ease of use for user management, and be able to uniquely identify anyone who accesses the secured location, logging the date and time of access. |

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  Medium |  Medium |  Medium |  Medium |  Established |

**Estimated Initiative Budget**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| - | - | $40,000 | - | - | $40,000 |

| Budget Description | These numbers reflect the estimated cost of equipment and installation to |
|---|---|

| Strategic Initiative O | | | | | |
|---|---|---|---|---|---|
| | increase security and protection of the server room and City technology and data. Depending on the City's analysis findings, the number may be greater or lesser based on priority. | | | | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $0 | $0 | $50,000 | $0 | $0 | $50,000 |
| **Budget Description** | It is estimated that the costs will be $50,000 in FY2014 and reflect the additional potential costs in technology and the increase in time necessary for configuring the Biometric scanners for each individual. | | | | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $0 | $0 | $0 | $20,000 | $0 | $20,000 |
| **Budget Description** | The cost of this alternative is estimated to be at approximately $20,000 in FY2014. This cost reflects possibility of a security breach in terms of equipment damaged or stolen, due to weak security barriers. | | | | |

**Action Items to Implement Recommended Initiative**

- ☑ Identify Security and Environmental Controls needs
- ☑ Implement Card Swipe Access Controls
- ☑ Security and Environmental Controls for Server Room

**Anticipated Benefits of Recommended Initiative**

- ☑ Most Security Consultants will provide free analysis
- ☑ Increased Security by restricting access to Server Room
- ☑ Increased Protection by implementing efficient environmental controls

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ This initiative has limited management other than planning and scheduling, and therefore has low Project Management risk associated with it.

**No Action:**

- ☑ Lower Security
- ☑ Higher risk of data loss

**Alternative 1:**

- ☑ Higher Costs
- ☑ Longer implementation phase
- ☑ Ethical issues regarding biometrics and privacy

| Strategic Initiative O | | | |
|---|---|---|---|
| **Maturity of Technology:**<br>☑ The maturity of this technology is well established and widely used. | | | |
| **Risk Rating** | | | |
| | **Low** | **Medium** | **High** |
| **Project Management** | X | | |
| **No Action** | | X | |
| **Maturity of Technology** | X | | |

| Strategic Initiative N |
| --- |
| **N - Develop a Virtualization Strategy to include a preferred technology and identified City resources to receive virtualization training.** |
| **Initiative Description** |

This initiative addresses the City's wish to increase data security, redundancy, and efficiency. Server Virtualization allows an organization to abstract Operating Systems at the kernel level, from the physical server hardware. Storing the Virtual Machines on a Shared Storage Device gives an organization the ability to leverage shared server resources (processor and memory). The result is increased efficiency in physical space requirements, increased savings in electricity, and better recovery time when disasters occur.

**Phase I: Needs Assessment**

It is recommended the City utilize a Systems Integrator who has a great deal of experience with Virtualization to assist with the planning and implementation. However, the City also needs to identify an internal resource who will be chosen provide the day-to-day administration for the virtualized environment. This person should be provided with training to be able to make decisions based on best practices and should work closely with the Integrator.

Additionally, the City will determine which servers will need to be virtualized. It is not necessarily appropriate for all systems to be virtual. Close attention must be paid to specific applications and processes that will not be supported under virtualized conditions. All third party applications should be researched for virtualization support. Prioritization of servers to be virtualized will be noted. Also, of great importance, is to determine and verify that the storage, processor and memory requirements will be satisfied. An experienced Integrator can simplify this process and reduce the time needed to plan.

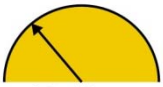
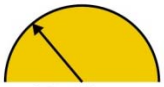
Further, the City will determine which virtualization platform will be used. There are several options available and each should be evaluated for their particular benefits, risks, and costs.

**Phase II: Virtualization Testing**

Based on the needs assessment, the City can begin virtualizing servers one at a time. Sufficient time should be given for testing. The original servers should be retained for backup for a period of time with which the city is comfortable, before being decommissioned. Sufficient time should be given between virtualization of servers. Close attention should be paid to resource usage and quality assurance. When possible, it is best to do live testing with small groups of test users.

**Phase III: Virtualization Production**

Once testing is complete, the City can roll out the production, virtualized servers. The Integrator can hand the project back to the City. The City's Virtualization Admin will continue doing Quality Assurance testing and surveying of the end users periodically. During the rollout phase, baseline measurements should be made of server resources before and after rollouts. Obtaining feedback on the end user experience is also important to a successful roll-out process. Once all servers have been virtualized, the City can continue Quality Assurance testing every three to six months.

| Strategic Initiative N | | | | | |
|---|---|---|---|---|---|
| **Alternative 1** | | | | | |
| An alternative is to implement a cloud-based virtualization host vendor. Security issues surrounding a third party host must be considered very carefully. A very thorough analysis of different vendors would need to be done. Issues regarding network connectivity would also need to be taken into consideration. When there is a network loss, all access to the virtualized environment would be lost. Since cost is based on storage, memory and bandwidth, a very thorough analysis would be required. This is considered bleeding edge technology and is not recommended. | | | | | |
| **Alternative 2** | | | | | |
| The City can remain in its current condition. | | | | | |
| **Initiative Source Information** | | | | | |
| **Functional Area:** | Technology | | | | |
| **Priority Ranking:** | 13 of 16 | | | | |
| **Related Strategic Issue(s)** | | | | | |
| **T4** | **The City could increase the utilization of server virtualization technology.** The City has recognized the benefits that may be realized by virtualizing servers including reducing the number of physical servers housed at the City that may have excess capacity in the current environment. It was reported that staff training will need to take place before virtualization is initiated. | | | | |
| **Benchmarking and Best Practice Information** | | | | | |
| As with other initiatives, the Best Practices are based on the discovery and analysis of the current environment. Of the utmost importance is proper sizing of virtualization environment in terms of:<br>❖ Storage;<br>❖ Memory; and<br>❖ Processing Power.<br>Current storage, memory, and processor usage must be documented to calculate the necessary requirements for determining the specifications for the virtualization hosts and clusters, and also SAN storage needs. Anticipated growth of these needs is a necessity and must be taken into consideration. It is far more difficult to upgrade after the fact, than it is to properly size from the outset. | | | | | |
| **Initiative Ranking** | | | | | |
| **City** | | **BerryDunn** | | | |
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** | |
|  |  |  |  |  | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |

| Strategic Initiative N | | | | | |
|---|---|---|---|---|---|
| $0 | $0 | $25,000 | $0 | $0 | $25,000 |
| **Budget Description** | These numbers reflect the price of new servers to provide the processor and memory resources needed to drive the virtual servers, the price of the software needed to implement the virtual environment (FY2014), and the cost of training for an individual (FY2013). | | | | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $0 | $0 | $12,000 | $12,000 | $12,000 | $36,000 |
| **Budget Description** | Costs for Alternative 1 are typically based on a monthly per server charge. Each server's cost will be based on amount of storage, memory, and bandwidth needed. Costs will be continual | | | | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| $0 | $0 | $5000 | $5000 | $0 | $10,000 |
| **Budget Description** | The costs here are variable. Hardware failures are more likely without virtualization and can be very costly. These numbers reflect the potential loss of two physical servers. | | | | |

**Action Items to Implement Recommended Initiative**

- ☑ Identification and Prioritization of servers to be virtualized
- ☑ Staggered testing prioritized Virtual Machines
- ☑ Staggered roll-out of production Virtual Machines

**Anticipated Benefits of Recommended Initiative**

- ☑ Increased physical space in server room
- ☑ Reduced electricity and battery backup requirements
- ☑ Improved recovery time in event of disaster
- ☑ Faster implementation with outside vendor
- ☑ Larger team with network experience from which to draw
- ☑ Stronger Service Level Agreements (SLAs) with hardware vendors
- ☑ Training provides City with its own resource

**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*

**Project Management:**

- ☑ This project has several phases and will require a Project Manager and Project Team. Proper analysis and planning is required.

**No Action:**

| Strategic Initiative N |
|---|
| ☑ Higher energy costs due to under-utilized hardware<br>☑ Lower Security<br>☑ Longer recovery time in event of catastrophe<br>☑ Higher risk of data loss<br>**Alternative 1:**<br>☑ Security Risks with data off-site<br>☑ Potential loss of data network connectivity drops<br>☑ Complete inability to gain access to virtualized servers when Internet connectivity is lost<br>☑ High risk of rising costs over time<br>☑ Stability of Vendor may be unknown<br>☑ Scalability of Vendor to handle growth of its own customer base and growth of clients<br>**Maturity of Technology:**<br>☑ The maturity of this technology is established and is implemented the world over. |

| Risk Rating | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | X | |
| **Maturity of Technology** | X | | |

| Strategic Initiative J |
| --- |
| **J – Select and implement an application to manage the production and publishing of council meeting documents.** |
| **Initiative Description** |

The purpose of this initiative is to select and implement an application to manage the production and publishing of council meeting documents. In the current environment, this is a manual, paper-based process. There is a desire from a variety of City staff to implement an application that will help manage the process of developing, distributing and updating these documents.

In today's current vendor marketplace there are a variety of options available for this type of application. Several applications are based on a foundation of document management functionality and are available at little to no cost. Some of the no-cost options are open source technologies. Based on the open-source options, other vendors have been forced to develop applications that are highly configurable and priced competitively.

In BerryDunn's experience, organizations similar to the City of Winchester have had greater success implementing an application produced by a commercial software vendor rather than an open source application. The risks of an open source council document management application are similar as those of all open-source technologies. In addition, other local governments have been challenged with the long-term viability of an open-source solution and many have had to move towards a commercial-off-the-shelf application within a few years of implementing an open-source technology.

**Phase 1 Requirements Gathering:**

The City should begin by developing functional and technical requirements for the new system. The City should document the requirements in a structured format and develop the requirements based on industry standards. One source the City should consider for guidance when developing requirements is IEEE. IEEE has developed standards for documenting technical requirements (e.g., must be a complete sentence, must be able to stand on its own). The City should involve all stakeholders in the requirements gathering process and allow for multiple opportunities for review.

**Phase 2 Request for Proposal**

The City should develop a Request for Proposal (RFP) for the council meeting management applications. The RFP should include the requirements developed by the City. In addition to the functional and technical requirements, the City should also include requirements for a structured project management and implementation approach by the vendor including a project plan and schedule and other planning documents such as a training, testing, and implementation plan.

Once the City has received the RFP responses from vendors, the proposals should be scored using a pre-determined scoring methodology. The proposals should be ranked to determine the vendors that will be asked to demonstrate their system to the City. The stakeholder group should be part of the evaluation process; however, scoring should be limited to four to seven city staff.

**Phase 3 System Evaluation and Selection**

Once the City has ranked the proposals, the top two to three vendors should be invited to demonstrate their proposed system for the City. The demonstration process should include a

| Strategic Initiative J |
| --- |
| scripted demonstration agenda that requires vendors to demonstrate their systems based on the City business and technical requirements. A scripted demonstration approach will also allow the City to compare the vendors as they demonstrate similar business processes. The City's stakeholder group should be included in the demonstration process as well as other City staff that will use the future system. At the completion of the demonstration process the City should conduct a second round of scoring based on the results of the demonstrations that also includes the results of the scoring from the proposal review process. Scoring of the demonstrations should follow a similar scoring process used during the proposal scoring phase.<br><br>Once the City has determined a preferred vendor based on the results of the scoring and evaluation process it will be important that the City conduct a thorough review of the vendors proposed contract. Reviewing critical contract terms and conditions including payment terms, license agreement, payment milestones and deliverables will be important to define to assist in mitigating some of the challenges that can occur during implementation.<br><br>**Other Considerations:**<br><br>There are other steps in a structured system procurement that the City may want to consider as this project is started. The City should follow their procurement rules when considering whether or not to include any of the steps below:<br><br>• Reference checks. Reference checks for the vendor and the proposed system can be a valuable tool to assist the City in further evaluating the system and vendor.<br><br>• Site Visits. Site visits, if feasible based on the City's timeline and budget can also assist in evaluating a system. A site visit to a location using the proposed software will provide the City's evaluation team an opportunity to see the system in use at a similar environment and allow city staff the opportunity to ask question related to implementation and business process issues.<br><br>• Evaluating costs. The City's evaluation team can evaluate proposed system costs during the initial review of the proposal responses or wait and evaluate costs at the completion of the software demonstration process. |
| **Alternative 1** |
| Many of the council meeting management applications currently available have features and functionality specifically developed to work on a tablet computer, such as an iPad. The City should consider this as a deployment method. BerryDunn recommends that the City consider this alternative in later years, and not as the application is initially selected and implemented. |
| **Alternative 2** |
| A second option that the City may consider is to pursue an open-source application to assist with the management of council meeting documents. The advantages of this option are that the technology can be customized by the City and open source technologies are usually available at little to no cost. Conversely, a risk associated with this alternative is that the open source technologies require more maintenance, particularly with any customizations that have been made. In addition, other organizations have experienced challenges with the general long-term viability of open source technology and several have moved towards a commercial-off-the-shelf application. |

| Strategic Initiative J | | | | | |
|---|---|---|---|---|---|
| **Initiative Source Information** | | | | | |
| **Functional Area:** | Applications Issues | | | | |
| **Priority Ranking:** | 14 of 16 | | | | |
| **Related Strategic Issue(s)** | | | | | |
| **A7** | **The process for developing and preparing City Council agendas is a manual process.** Currently, the Deputy Clerk must prepare the Council agendas using a combination of paper based processes and MS Word. This process requires City staff to spend an increased amount of time preparing items for the Council agendas. | | | | |
| **Initiative Ranking** | | | | | |
| **City** | | **BerryDunn** | | | |
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** | |
| Medium | Medium | Medium | Easy | Leading Edge | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| - | - | - | $3,000 | $6,000 | $9,000 |
| **Budget Description** | The budget estimate for this initiative is based on the software licensing cost of a sample of commercially available council meeting management applications. Initial costs are typically around $3,000 and an enterprise license will cost approximately $500 per month. | | | | |
| **Action Items to Implement Initiative** | | | | | |
| ☑ Identify City stakeholders.<br>☑ Document functional and technical requirements.<br>☑ Develop a request for proposal.<br>☑ Conduct a structured procurement evaluation process and select a system.<br>☑ Negotiate a contract with the preferred vendor.<br>☑ Implement the selected application. | | | | | |
| **Anticipated Benefits** | | | | | |
| ☑ Increased efficiencies related to the management of council meeting documents<br>☑ Decrease reliance on manual and paper-based processes<br>☑ Increased opportunities for public postings of council meeting documents | | | | | |
| **Potential Risks** | | | | | |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.* | | | | | |

| Strategic Initiative J |
|---|
| **Project Management:**<br>☑ This initiative will require the City to potentially manage the implementation of a new system. It will be important for the City to follow project management best practices and develop a project plan, schedule and monitor risks and issues related to testing, training and implementation. A lack of project management activities could cause the implementation efforts to struggle.<br>**No Action:**<br>☑ Council meeting document management continues to be a manual process<br>**Maturity of Technology:**<br>☑ This initiative includes implementing a commercial off the shelf (COTS) product. Since the functionality that may be implemented is recommended from a COTS vendor, the risks related to the technology itself are minimal. |

| Risk Rating | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | | X | |
| **No Action** | | X | |
| **Maturity of Technology** | | X | |

| Strategic Initiative C |
|---|
| **C – Develop and implement an enterprise-wide mobile telephone policy based on a determination of supported technologies and capabilities.** |
| **Initiative Description** |
| Several users at the City reported a desire for increased functionality related to mobile telephones to include email and calendaring. In the current environment, the use of smart-phone technology for City use is limited and the City has not implemented a standardized technology.<br><br>There are two primary considerations related to this initiative. The first, as with any technology is how to select a mobile phone technology to standardize upon so that support is efficient and effective. This standardization should include both the service provider as well as the hardware. Typically, the City's role as a support provider will be limited to triage support as most enterprise agreements with mobile telephone service providers include a service plan that also includes the devices themselves. BerryDunn recommends that the City enter into such an agreement that includes warranties on devices for their entire expected life.<br><br>The second primary consideration related to this initiative is how to establish acceptable use policies and procedures to provide adequate controls over the City's sensitive data. Historically this has been limited to the email and calendar content and controls were largely achieved with the ability to remotely wide all data from a phone. As local governments are increasingly implementing mobile applications that can operate on smart-phones, the access points to sensitive data are increasing and so the implementation of such applications should include consideration of how data will be secured when deployed on these mobile devices.<br><br>Similar to the development of other technology policies and procedures, it is recommended that a group is assembled that includes members of the IT Department as well as functional users to select the technologies to standardize upon and to develop the policies and procedures. This will ensure a variety of perspectives are involved and will increase the likelihood the selections will meet the needs of the organization in the longer term.<br><br>With selections made and policies developed, the City should adequately communicate the decisions and begin to plan for the investments needed to provide these technologies to City staff. |
| **Alternative 1** |
| A potential alternative to provide City employees with the desired functionality would be to enable personal mobile telephones to access the City data including email and calendar information. Although this method is very common in the private sector, local governments have not been as responsive to adopting this model. Based on the feedback from management at the City, this direction has not historically been supported due to the limitations in control it would create; however, City management may be willing to investigate this option further. BerryDunn concurs that implementing adequate controls may be challenging with this alternative method. |
| **Initiative Source Information** |

| | |
|---|---|
| **Functional Area:** | Management and Operations Issues |
| **Priority Ranking:** | 15 of 16 |

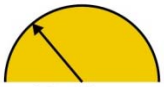
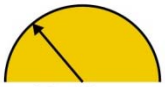
| **Related Strategic Issue(s)** |
|---|

| Strategic Initiative C | |
|---|---|
| **M4** | **The City does not have documented policies and procedures for the management of mobile telephones.** It was reported that the IT Department has identified a preferred mobile telephone technology; however, several other technologies are in use throughout the City. Support for these other technologies is largely left to individual users. There is a desire from multiple departments to implement an increased number of mobile telephones with capabilities of smart-phone technology including email and calendaring. |

**Benchmarking and Best Practice Information**

Similarly sized local government organizations that have successfully implemented the use of mobile telephone technologies advocate that standardization on a single service provider and a single device is very important with this type of initiative. This reduces both the initial implementation and training time as well as the long-term effort required to support the operational use of the mobile telephones.

**Initiative Ranking**

| City | | BerryDunn | | |
|---|---|---|---|---|
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** |
|  Medium |  Medium |  Medium |  Medium |  Leading Edge |

**Estimated Initiative Budget**

| FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | 5-Yr Total Cost |
|---|---|---|---|---|---|
| - | - | - | - | $0 | $0 |

| Budget Description | This initiative is planned to begin in the fifth year of the IT Strategic Plan and will be completed using internal resources. Once a standardized technology is selected and the City begins to purchase devices and service, funding will be needed in FY2017. |
|---|---|

**Action Items to Implement Initiative**

- ☑ Assemble a team to be tasked with the development of the policy
- ☑ Research potential service providers and device options
- ☑ Select a preferred service provider and device
- ☑ Communication the selection to the end users
- ☑ Regularly revise the levels of service received and the extent the devices are meeting the needs of users

**Anticipated Benefits**

- ☑ Increased efficiencies due to standardization
- ☑ Increased bulk purchasing power due to standardization
- ☑ Increased abilities for employees to work remotely

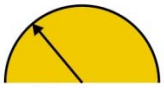
**Potential Risks**

*Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks*

| Strategic Initiative C |
|---|
| *described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ There are no specific risks beyond the fundamental risks of project management due to a lack of scope and schedule management<br>**No Action:**<br>☑ Varying or lacking of mobile technologies for end users<br>**Maturity of Technology:**<br>☑ The maturity of this technology is established |

| Risk Rating | | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| **Project Management** | X | | |
| **No Action** | X | | |
| **Maturity of Technology** | X | | |

| Strategic Initiative G | |
|---|---|
| **G – Develop and implement a GIS management policy.** | |
| **Initiative Description** | |
| The City of Winchester has recognized the value of GIS and staff from multiple functional areas have a desire to leverage the technology to improve City operations. In the current environment, there is a single resource tasked with the coordination of the development of GIS data. As the City expects the demand on the GIS database to increase with the increased implementation of enterprise-wide applications, there is a need to proactively develop the database in a structured manner. Without an effective action plan, there is a risk of compromising the integrity of GIS data and the workload for this single resource will likely be strained.<br><br>This initiative is to develop a GIS Management Policy that will document how GIS data is recorded, updated and used. It will also identify City resource teams that will be responsible for maintaining data at different levels. As part of this initiative, GIS data management responsibilities will continue to be lead by the current resource tasked with this responsibility. To complete this initiative, that resource will be supported by one or two additional IT resources. It is anticipated that these additional resources will share their new GIS responsibilities with other responsibilities they currently have in their respective positions.<br><br>The policy documentation that is developed should include the following:<br><br>• Data disclaimer for public use of GIS data;<br>• Listing of City employees and their roles with managing and updating GIS data;<br>• Definition of a request for data and a project related to creating additional layers;<br>• Process for developing a layer for data entry by City resources; and<br>• Process for prioritizing and tracking requests for GIS data.<br><br>Upon the completion of the development of the policy, the final step will be to communicate it to those City users that it affects. In instances where business processes are modified, training may be necessary. | |
| **Initiative Source Information** | |
| **Functional Area:** | Management and Operations Issues |
| **Priority Ranking:** | 16 of 16 |
| **Related Strategic Issue(s)** | |
| **M11** | **The City could expand the use of GIS data.** The City has recognized the opportunities to leverage GIS information for use by multiple departments. In the current environment, most management of GIS information is done by a single employee, and policy and procedure documentation does not exist for how the City will manage a growing GIS database. Without such a policy, the risk of inaccurate or outdated information is increased as the database grows. |
| **Benchmarking and Best Practice Information** | |
| In most cities, the benefits of leveraging GIS technology are known; however, they reported that it is very important to effectively manage the GIS data to maintain its integrity. There have been different approaches to this effort, the most common being delegating a “steward” of the GIS data that will | |

| Strategic Initiative G | | | | | |
|---|---|---|---|---|---|
| control how the data is updated. | | | | | |
| **Initiative Ranking** | | | | | |
| **City** | | **BerryDunn** | | | |
| **Strategic Issue Rank** | **Department Priority** | **Cost Benefit** | **Ease of Implementation** | **Maturity of Technology** | |
|  Medium |  Medium |  Medium |  Medium |  Leading Edge | |
| **Estimated Initiative Budget** | | | | | |
| **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5-Yr Total Cost** |
| - | - | - | - | $0 | $0 |
| **Budget Description** | This initiative is expected to be initiated in the fifth year of the plan and be completed using internal resources. | | | | |
| **Action Items to Implement Initiative** | | | | | |
| ☑ Identify IT resources to assist GIS Coordinator with the development of the policy<br>☑ Research industry standards for GIS policy documentation<br>☑ Communicate changes related to the implementation of the GIS policy | | | | | |
| **Anticipated Benefits** | | | | | |
| ☑ Improved integrity of GIS data<br>☑ Improved tracking and prioritization of GIS data requests<br>☑ Increased integration and leverage of GIS date by City applications<br>☑ Increased access to GIS data by the public | | | | | |
| **Potential Risks** | | | | | |
| *Note: The risks identified in this section are not meant to serve as an all-inclusive list. The risks described in this section highlight some of the common risks the City could encounter as they implement (or do not implement) the initiative.*<br>**Project Management:**<br>☑ There are no specific risks beyond the fundamental risks of project management due to a lack of scope and schedule management<br>**No Action:**<br>☑ Risks of inaccurate or outdated data<br>☑ Reduced realization of efficiencies with leveraging GIS data<br>**Maturity of Technology:**<br>☑ The maturity of this technology is established | | | | | |
| **Risk Rating** | | | | | |
| | **Low** | **Medium** | **High** | | |

| Strategic Initiative G | | | |
|---|---|---|---|
| **Project Management** | X | | |
| **No Action** | | X | |
| **Maturity of Technology** | X | | |

# 5.0 Implementing the Technology Plan

## 5.1 BUDGET AND TIMELINE

The previous Section 4.0 of the Strategic Technology Plan provided detailed descriptions for each initiative, identified which strategic issue(s) are addressed by the initiative, estimated budgets and timing for the initiative, identified action items to implement the initiative, and listed anticipated benefits of the initiative.

Based on the City's desire for alternative solutions to be developed for the seven focus areas identified in Section 1.0 of this IT Plan, BerryDunn has developed the array of Strategic Initiatives described in the previous section to align with these areas. In addition, several of the initiatives described in the preceding section included alternative options that would require varying levels of investment. Although BerryDunn has indicated the recommended solution based on experience with similar organizations and industry best-practices, these alternatives provide the City options to consider. The following table contains the high and low ranges of budget estimates for the initiatives that contain alternatives as well as the budget estimate for BerryDunn's recommended solution.

| Budget Estimates for Alternatives ($) | | | | |
|---|---|---|---|---|
| **ID** | **Strategic Initiative** | **Low Range** | **High Range** | **Recommended** |
| **L** | City-wide email and calendaring | $25,000 | $226,000 | $90,000 |
| **I** | SunGard Needs Assessment | $20,700 | $207,372 | $207,372 |
| **M** | Network Action Plan | $35,000 | $255,300 | $255,300 |
| **K** | COR and Treasurer Applications Needs Assessment | $30,000 | $150,000 | $150,000 |
| **H** | Time and Attendance Application | $360,000 | $420,000 | $420,000 |
| **O** | Physical and Environmental Controls | $20,000 | $50,000 | $40,000 |
| **N** | Virtualization Strategy | $10,000 | $36,000 | $25,000 |

**Table 11 Budget Estimates for Alternatives**

The following table presents summaries of the budgets for the recommended initiatives that have been presented in this plan. The timeline provides a framework for budgeting project costs and for planning implementation timeframes over a five-year planning horizon. The costs presented are estimates and will vary based on the City budget, competing technologies, the availability of support resources, and the specific technical approach used to undertake an initiative.

| Initiative Budget and Timeline Matrix ($) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Strategic Initiative** | **Year 1 FY2013 (6 Mths)** | **Year 2 FY2014** | **Year 3 FY2015** | **Year 4 FY2016** | **Year 5 FY2017** | **5 Year Total** |
| **Initiatives Starting in Year One** | | | | | | | |
| **L** | City-wide email and calendaring | 90,000 | 0 | 0 | 0 | 0 | **90,000** |
| **B** | IT Department Organization | 30,000 | 150,000 | 150,000 | 170,000 | 170,000 | **670,000** |
| **A** | Hardware Replacement Schedule | 136,333 | 136,333 | 136,333 | 136,333 | 136,333 | **681,665** |
| **D** | Disaster Recovery/Business Continuity | 30,000 | 30,000 | - | - | - | **60,000** |
| **F** | Technology Purchasing and Project Management Policies | 5,000 | 8,000 | 8,000 | 8,000 | 8,000 | **37,000** |
| **Initiatives Starting in Year Two** | | | | | | | |
| **I** | SunGard Needs Assessment | - | 207,372 | - | - | - | **207,372** |
| **M** | Network Improvements Action Plan | - | 77,100 | 59,400 | 59,400 | 59,400 | **255,300** |
| **E** | Technology Training | - | 0 | 25,000 | 25,000 | 25,000 | **75,000** |
| **K** | Treasurer and COR Needs Assmt. | - | 25,000 | 125,000 | 0 | 0 | **150,000** |
| **Initiatives Starting in Year Three** | | | | | | | |
| **H** | Time and Attendance Application | - | - | 180,000 | 240,000 | - | **420,000** |
| **P** | Remote Meeting Technologies | - | - | 26,000 | - | - | **26,000** |
| **O** | Physical and Env. Controls | - | - | 40,000 | - | - | **40,000** |
| **N** | Virtualization Strategy | - | - | 25,000 | - | - | **25,000** |
| **Initiatives Starting in Year Four** | | | | | | | |
| **J** | Council Meeting Application | - | - | - | 3,000 | 6,000 | **9,000** |
| **C** | Mobile Telephone Policy | - | - | - | 0 | - | **0** |
| **Initiatives Starting in Year Five** | | | | | | | |
| **G** | GIS Policy | - | - | - | - | 0 | **0** |
| | | **FY2013** | **FY2014** | **FY2015** | **FY2016** | **FY2017** | **5 Year Total** |
| | **Total Plan Initiatives Budget** | **291,333** | **633,805** | **744,733** | **641,733** | **404,733** | **2,746,337** |

**Table 12: Initiative Budget and Timeline Matrix**

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

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

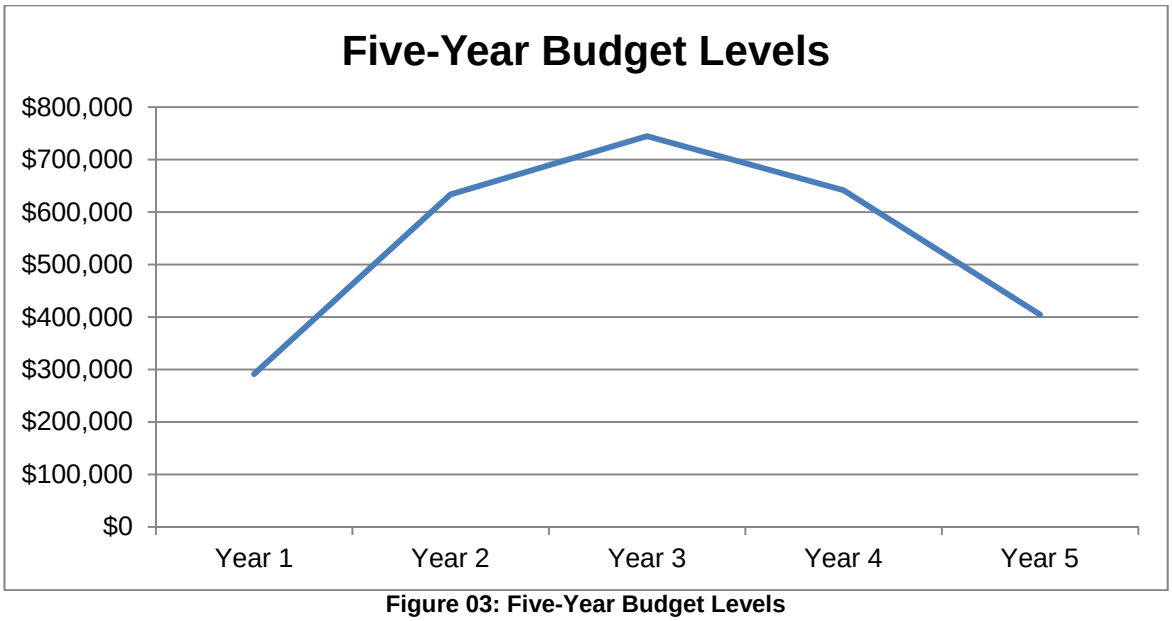



**Figure 03: Five-Year Budget Levels**

As the nature of projects in the first year are generally internal projects designed to increase documented policies and procedures so that the City is prepared for projects in later years of the Plan, there is not a large level of estimated funding needed to support these first projects. Similar organizations undertaking strategic planning projects typically follow this approach to have the increased budget levels mostly be realized in the second year of the plan to ensure adequate timing to secure funding. It should also be noted that the first year of the plan is a six-month period ending at fiscal year-end 2013.

The increase in budget levels in years two and four of the Plan represent the investment related to initiatives for new applications. Lower budget levels in year three is reflective of internal policy and procedure development projects as well as additional implementation efforts of initiatives in year two. The lower budget levels in year five was planned so that funding for additional projects identified through the governance process may be requested without a sharp increase over prior year levels.

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

## 5.2 FUNDING

The following table contains the City's historic IT spending ratios based upon total IT spending and the City's General Fund budget.

| Historical IT Spending Ratio | | | | |
|---|---|---|---|---|
| | **FY2009** | **FY2010** | **FY2011** | **FY2012** |
| Total IT Spending | $1,481,485 | $1,374,610 | $1,417,604 | $1,820,453 |
| City General Fund | $74,360,623 | $70,375,827 | $71,176,930 | $70,800,000 |
| **IT Spending Ratio** | **1.99%** | **1.95%** | **1.99%** | **2.57%** |

**Table 13: Historical IT Spending Ratio**

The historical IT spending ratios are depicted in the figure below.

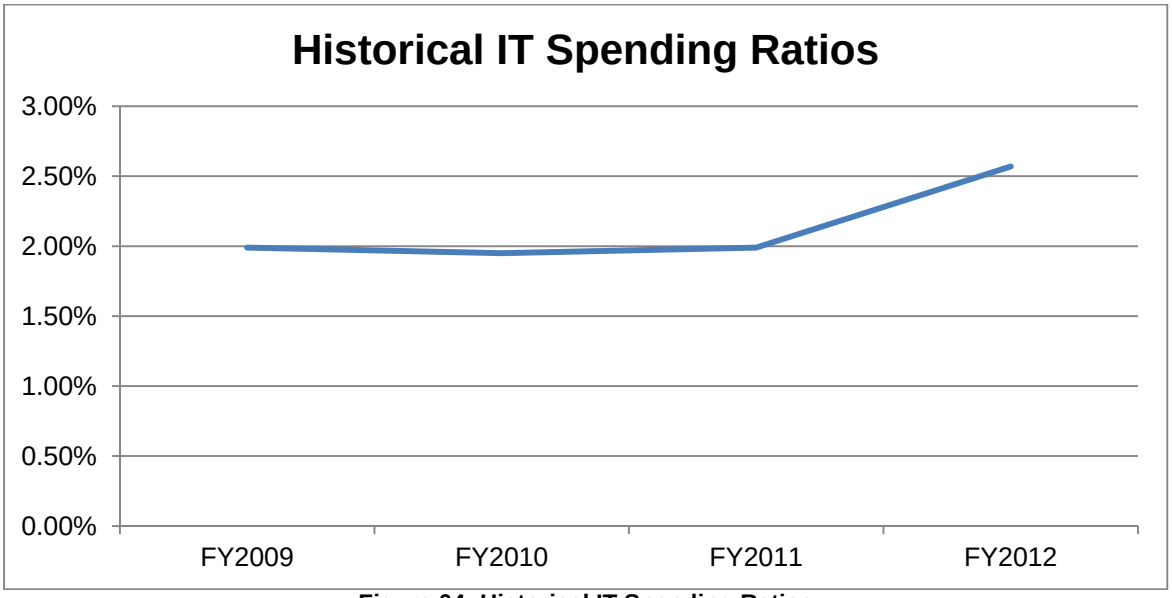



**Figure 04: Historical IT Spending Ratios**

The ratio of IT spending to the total budget is a measure often used to compare the IT commitment of various organizations. Typically, this percentage can range from 2 to 4 percent. As evident by the calculations above, the City has historically been spending less than this range on information technology.

As the annual IT budget is developed, it is important that operational funding is secured to support those investments made in the previous year. Typically the necessary level of funding is 20% of the investment for software, and 10% of the investment for hardware. Based on the nature of the strategic initiatives, these rates have been applied. It is important to note that additional operational spending is only necessary for those initiatives that will not directly replacing existing hardware or software.

The following table contains the total plan budget for each year as well as the necessary operational funding estimates resulting in the total plan IT spending in the five years of the plan.

| Future IT Spending Levels ($) | | | | | |
|---|---|---|---|---|---|
| | Year 1 FY2013 | Year 2 FY2014 | Year 3 FY2015 | Year 4 FY2016 | Year 5 FY2017 |
| **Total Plan Initiatives Budget** | **291,333** | **633,805** | **744,733** | **641,733** | **404,733** |
| | | | | | |
| Estimated Operational Budget | 1,820,453 | 1,820,453 | 1,820,453 | 1,820,453 | 1,820,453 |
| Additional Operational Funding to Support Prior Year Capital Projects | 0 | 0 | 39,000 | 118,000 | 207,000 |
| **Total Operational Budget** | **1,820,453** | **1,820,453** | **1,859,453** | **1,938,453** | **2,027,453** |
| | | | | | |
| **Total IT Spending** | **2,111,786** | **2,454,258** | **2,604,186** | **2,580,186** | **2,432,186** |

**Table 14: Future IT Spending Levels**

The following table contains calculations of future IT spending ratios. The City General Fund budget for FY2013 includes a large increase. For planning purposes, this budget remains flat over the next five years.

| Future IT Spending Ratio | | | | | |
|---|---|---|---|---|---|
| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 |
| Total IT Spending | $2,111,786 | $2,454,258 | $2,604,186 | $2,580,186 | $2,432,186 |
| City General Fund | $78,985,000 | $78,985,000 | $78,985,000 | $78,985,000 | $78,985,000 |
| **IT Spending Ratio** | **2.67%** | **3.11%** | **3.30%** | **3.27%** | **3.08%** |

**Table 15: Future IT Spending Ratio**

The future IT spending ratios are depicted in the figure below.

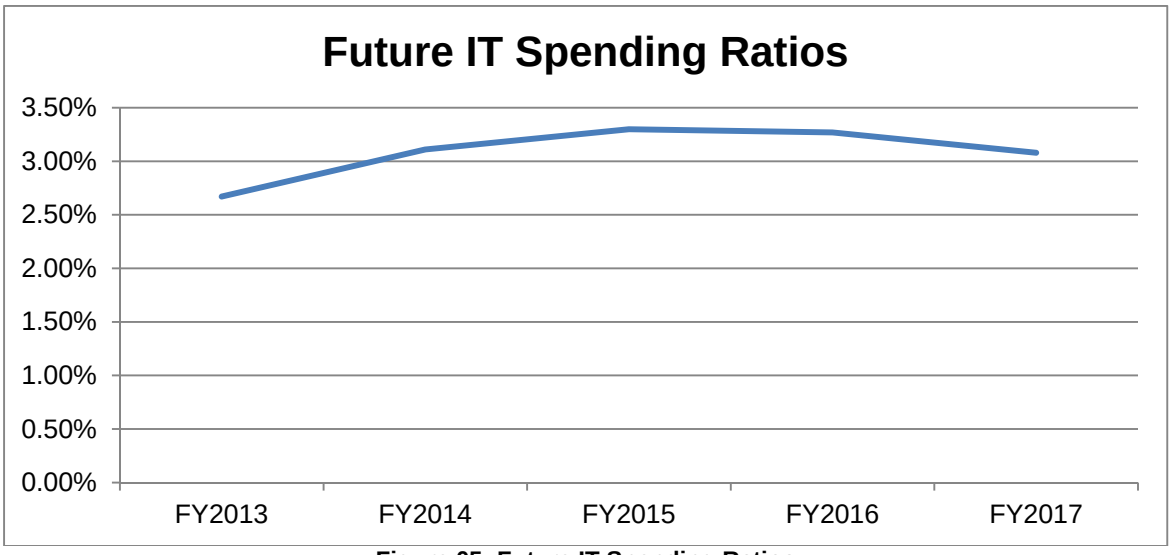



**Figure 05: Future IT Spending Ratios**

The investments required as part of this Strategic Plan drive the ratios up in the future years of this plan. Future potential cost savings will in turn drive down this ratio, which will occur in the years beyond the five-year planning horizon.

The Strategic Plan involves significant future investments in the IT environment in the City over the next five years. These investments are in addition to those currently in the operational budget and will comprise the majority of the capital expenditures in the coming years. It is important to note that as new needs arise, additional capital projects will be identified. These will significantly contribute to the capital budget, especially in the later years of the Plan. The process for identifying these projects is described in section 5.3, Strategic Plan Governance.

## 5.3 STRATEGIC PLAN GOVERNANCE

The City will begin the implementation of the projects and initiatives contained in this plan during the remaining six months of the current fiscal year. The Information technology Strategic Plan will greatly impact the operations of the City. Planning, selecting, deploying, and managing for improved systems and service delivery mechanisms will require strong leadership, clear strategic and tactical plans, and, where reasonable, comprehensive needs assessments to help identify the most important technology related City challenges.

Once new technologies are implemented, the City will need to actively communicate those services and their benefits to both internal and external stakeholders. For example, the City should not expect that new e-government services will be widely used unless the services are effectively communicated, trained, and promoted.

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

- Active executive management involvement and sponsorship will be critical to the successful adoption and continued support of the plan.
- Implementing a successful IT Strategic Plan will require significant planning, increased capital investment, and human resources in order to successfully implement the Plan Initiatives.
- Project goals and objectives should be clearly communicated to stakeholders and progress should be proactively monitored.
- Business processes should be evaluated, and, where necessary, redesigned to take advantage of new technologies in order to meet the City's desired objectives.
- Many changes will be non-technical. Rather, they will be cultural shifts, process changes facilitated by change management and policy and procedure adjustments.
- Departments must work cooperatively and collaboratively to facilitate effective change that is in the best interest of the City.
- Technical support staff will be critical to the success of the IT Strategic Plan's implementation. Internal stakeholders must be ready, willing, and able to use new technology and embrace effective change.

### Information Technology Steering Committee

The City has developed the framework for instituting an IT Steering Committee with the formation of the Information Technology Advisory Group (ITAG) and the Technical Working Group (TWG).

BerryDunn recommends that the City complete the implementation of an IT Steering Committee (ISC) that will be responsible for providing oversight of the plan. The IT Steering Committee may be one of these existing groups, or a combination of the two. It should be comprised of IT Leadership, one to two additional IS Resources, representation from executive management and two to three Department Heads. The ISC should be responsible for the following tasks:

1. Reviewing progress on the projects in the plan on a monthly basis. This meeting should be led by IT Leadership.
2. Meeting twice a year to lead the process to update the plan. These two meetings should accomplish the following:
    a. The first update of the year should be to track the progress made against initiatives.
    b. The second update during the year should 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 re-prioritize initiatives should be made by the ISC. As part of this update, the ISC should meet with Department Heads to obtain their input and communicate plans for the upcoming year.
3. It is anticipated that new projects will be identified throughout the year. Some of these projects may be the result of new State mandates or other unexpected events that create the need for an IT project. The ISC should be responsible for assessing new projects as they are identified and determine how they can be incorporated into the IT plan.

**Incorporating New Projects into the Plan**

BerryDunn recommends that the ISC develop a methodology for selecting and prioritizing IT projects. At a minimum, BerryDunn recommends that projects be selected and prioritized based on overall return on investment to the City, funding and resource needs, overall benefit to the City, other projects in progress and the ability for the City to dedicate appropriate resources to the project to increase the likelihood of success. The City can use the methodology and tools provided during the development of this IT Strategic plan by identifying and prioritizing critical issues impacting City needs and select new projects to be added to the plan based on the number of issues the project addresses in addition to the factors identified previously.

**Assessing Current Projects**

As important as selecting and prioritizing projects to be added to the plan in the future, will be the process of assessing the overall status of “in progress projects”. BerryDunn recommends that the IT Department develop project status reports to track and report on the status for all projects. Many organizations assess the overall “health” of a project by analyzing the scope, schedule and budget of the project, also known as the “Triple Constraints.” Indicators can be assigned to each of these project factors and a project that is failing to perform in one of these critical areas can be further analyzed to develop a corrective action plan to address project performance issues.

Many of the projects contained in this Plan include the implementation of enterprise-wide systems, such as a time and attendance system. For enterprise-wide system projects, the City can identify specific areas to assess as part of reviewing an in-progress project to determine the overall likelihood of a successful implementation of the system. BerryDunn recommends that the City consider analyzing the areas in the table summarized below when assessing an in-progress project that involves implementing an enterprise-wide system.

| Critical Assessment Areas | | |
|---|---|---|
| **No.** | **Assessment Areas** | **Description** |
| **1** | Project Participants Understand Activities Remaining Prior to Go-Live | All project activities and tasks must be adequately communicated to the responsible individuals and adequate resources must be designated to complete them. |
| **2** | Design, Development, and Configuration Activities are Complete | Design, development, and configuration activities must be completed in order for remaining project activities to occur. Design, development, and configuration activities that are completed after the official completion of appropriate User Acceptance Testing (UAT) testing would require additional testing. |
| **3** | Deliverables from vendors are Complete and Approved | All deliverables identified in the contract between the vendor and the City must be provided and accepted (signed off) by the City prior to live operation. In the event that modifications have been made to allow certain deliverables to be accepted after Go-Live, the deliverables schedule must be updated to reflect this. Deliverables that are intended to document the results of a testing phase, for example, should be used by the City as a means by which the phase can be evaluated and whether or not the City should proceed to the next phase. |
| **4** | Security is in Place and has Been Tested | A critical component of this project is the appropriate planning for, and implementation of, system security. |
| **5** | Interfaces are Complete | This assessment area relates to the various interfaces that are being developed during the implementation of the system. The development of these interfaces is critical to ensure full system functionality to users. Interfaces should be tested along with the testing of other system functionality and signed off on by the City. |
| **6** | Reports are Complete | As part of the system implementation, the City will identify standard reports needed in the system to replace the reports currently used. Areas where custom reporting needs exist will also need to be identified and the vendor and the City will need to develop a plan to create them. High quality, reliable, properly formatted and complete reports are often key indicators for how project stakeholders will ultimately define project success. |
| **7** | Testing is Complete | The City must be assured that appropriate testing methodologies have been implemented to prove that the system is capable of meeting expectations set in a Testing Plan delivered by the vendor. Furthermore, testing will prove that the system is able to operate in the live environment without significant system errors, defects, performance issues or other issues that could jeopardize daily operations. The City must sign off on the completion of UAT. |
| **8** | Department Readiness | This project activity considers those project tasks departments need to either complete or be aware of prior to go-live. |
| **9** | Training is Complete | City personnel need appropriate end-user training in preparation for live operation. Without proper training, City staff will not be |

| Critical Assessment Areas | | |
|---|---|---|
| **No.** | **Assessment Areas** | **Description** |
| | | adequately prepared to perform their daily responsibilities in the new system environment. |
| **10** | City Support Structure is Established | With any enterprise-wide system implementation, there is a large impact on the support structure in the organization. The implementation of an enterprise-wide system has similar implications and may require some dedicated roles within IS. Identifying and training these individuals is a critical activity in the project. |

**Table 16: Project Assessment Areas**

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

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

**Table 17: Project Assessment Indicators**

It will be important that the IT Department have an active role in the 16 projects contained in the IT plan. However, the IT Department involvement will vary depending on the project. The table below summarizes the IT Department's involvement depending on the particular project. The IT Department will either Lead (have ultimate responsibility for the entire life cycle of a project from initiation to completion) or Participate (be an active advisor and participant in a project and serve in an advisory role to departments that are identified as the Lead for a project) on the projects in the plan. The projects or initiatives are in the order of when they will be initiatives in the IT Strategic Plan.

| IT Project Roles | | |
|---|---|---|
| **ID** | **Project Description** | **IT Dept. Role (Lead or Participate)** |
| **A** | Develop and implement an enterprise-wide hardware replacement and operating system update schedule with standardization to include desktops, laptops, tablets, servers, and other items. | Lead |
| **B** | Reorganize the IT Department to align resources with the needs of the City, fill vacancies in the department, and identify a resource with a security focus. | Lead |
| **C** | Develop and implement an enterprise-wide mobile telephone | Lead |

| IT Project Roles | | |
|---|---|---|
| **ID** | **Project Description** | **IT Dept. Role (Lead or Participate)** |
| | policy based on a determination of supported technologies and capabilities. | |
| **D** | Develop and implement an enterprise-wide disaster recovery and business continuity plan. | Lead |
| **E** | Study the existing process of technology training and update policies and procedures to meet the needs of the City. | Lead |
| **F** | Develop and implement technology purchasing and project management policies and procedures to include promoting standardization of technologies, the selection and prioritization of technology projects, and change management. | Lead |
| **G** | Develop and implement a GIS management policy. | Participate |
| **H** | Select and implement an enterprise-wide time and attendance management application. | Participate |
| **I** | Conduct a needs assessment related to the SunGard applications to identify current challenges and gaps in available functionality. | Participate |
| **J** | Select and implement an application to manage the production and publishing of council meeting documents. | Participate |
| **K** | Conduct a needs assessment related to the applications that support processes for the Treasurer and the Commissioner of Revenue to identify additional needed functionality. | Participate |
| **L** | Select and implement a City-wide email and calendaring application. | Lead |
| **M** | Develop an action plan to make updates and improvements to the City's network including expanded connectivity, increased redundancy, and expanded wireless connectivity and remote access. | Lead |
| **N** | Develop a Virtualization Strategy to include a preferred technology and identified City resources to receive virtualization training. | Lead |
| **O** | Implement increased physical and environment controls in areas where sensitive components are housed. | Lead |
| **P** | Implement increased technologies to support in-person and remote meetings. | Lead |

**Table 18: IT Project Roles**

### Success Factors for the Plan

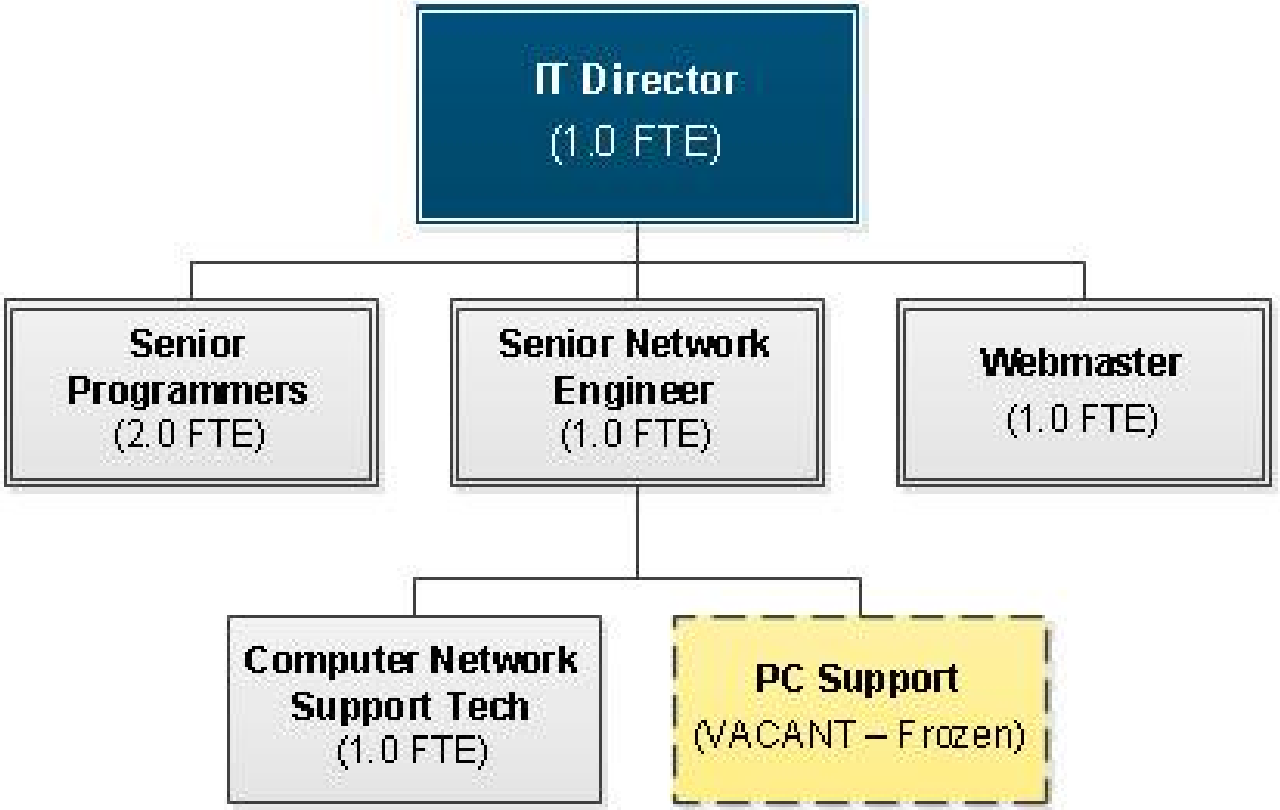
One of the critical success factors for the implementation of the IT Strategic Plan will be executive support for the projects in the plan. The IT Department has committed to undertaking the projects in this plan and support will need to be provided to allocate the appropriate City resources, as well as

ensuring that projects outside the scope of this plan in current and future years are thoroughly evaluated before adjusting the existing priorities of the projects in the plan.

As described in Initiative F (Technology Project Management Policies and Procedures), the City has struggled with the process of selecting, prioritizing, tracking, monitoring and reporting on IT projects. In order to implement the projects in this plan, it will be critical for the City to implement the recommended project management practices. Implementing the projects and initiatives in this plan not only take City resources and appropriate staff, but also a structured project management methodology to increase the likelihood of project success.

## Appendix A: Current IT Department Organizational Chart

### Current City of Winchester IT Department Organizational Structure



# Appendix B: Prioritized List of Strategic Issues

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| | ***Management and Operations Issues*** | |
| **M1** | **The City does not follow an enterprise-wide PC and tablet replacement schedule with standardization.** There are multiple instances throughout the City of outdated workstations that are due for replacement. Without an enterprise-wide replacement schedule and standards, support resources may be increasingly tasked with workstation triage and repair, long-term budget planning is limited, and ensuring standardization is difficult. In addition, there is a desire from multiple departments to use tablets; however, the City does not currently have a replacement plan that includes tablets. The City recognizes that the current processes for technology purchase budgeting and budget limitations is a primary factor. | **Critical 42** |
| **M2** | **Vacancies in the IT Department have caused strained workloads and inhibited the ability to maintain an efficient support structure.** The IT Department recently filled a position that was vacant since 2008 and another position has remained vacant since that time. This has caused the remaining IT staff to absorb the responsibilities of these two roles resulting in increased workloads, staff working beyond their prescribed roles, challenges with maintaining an efficient support structure, and reported extended response times. In addition, these vacancies have generally inhibited the IT Department from operating in a proactive manner. | **Critical 50** |
| **M3** | **The City does not follow a documented enterprise-wide process for managing technology support.** A majority of requests made to the IT Department are initiated through the dedicated email account and tracked in Numara Track-It. In some cases, employees reportedly call specific members of IT directly, most often with application-specific support needs. In instances where technology support is provided by individuals within departments or external agencies, limited documentation exists for how this support will be managed and how the IT Department will be made aware of any impacting support requests or responses. | **Critical 44** |
| **M4** | **The City does not have documented policies and procedures for the management of mobile telephones.** It was reported that the IT Department has identified a preferred mobile telephone technology; however, several other technologies are in use throughout the City. Support for these other technologies is largely left to individual users. There is a desire from multiple departments to implement an increased number of mobile telephones with capabilities of smart-phone technology including email and calendaring. | **Medium 29** |
| **M5** | **The City does not have a documented enterprise-wide Disaster Recovery and Business Continuity Plan.** While individual procedures may exist for particular components or applications in place, an enterprise-wide plan for the City as a whole does not exist. It was reported that the City is working towards | **Critical 47** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| | measures to improve disaster recovery and business continuity capabilities. However, the lack of a plan in the current environment may limit the City's ability to serve its users and restore basic business operations following a catastrophic event. | |
| **M6** | **Technology training of resources in the IT Department and City-wide is currently limited.** It was reported by City staff that while there have been proactive efforts to conduct training related to SunGard and office productivity tools in the past, current training opportunities are limited. Many of the City staff interviewed acknowledged that all departments could benefit from an increased technology training effort including utilizing documented technology proficiencies in job descriptions. Staff in the IT Department expressed a desire for increased training and professional development opportunities as well. | **High 40** |
| **M7** | **The City's decentralized technology purchasing model creates challenges with standardization and IT governance.** Purchases of technology-related items are made from department budgets with varying involvement from the IT Department. This has resulted in challenges with standardization across the City and governance of the IT Department's support responsibilities. Examples include various versions of MS Office and MS Windows, among several others. | **High 37** |
| **M8** | **The City does not have a documented process for managing and prioritizing IT projects.** A process or system and related set of policies and procedures for identifying, selecting, managing, prioritizing, collaborating, and implementing IT projects does not exist, which may make ongoing project management and support difficult. It has been several years since the City has committed a large amount of resources to technology projects. A consistent process for managing projects may result in a well-defined justification or rationale for the importance of a particular project. | **Critical 43** |
| **M9** | **The City's approach to managing IT security could be expanded; in the current environment, measures may be limiting functionality and cumbersome.** The City does not currently have a documented enterprise-wide security policy that sets forth security procedures including acceptable use by end-users, screen lock-out time thresholds, employee termination procedures, and vendor access to critical network components, for example. In addition, there is not currently a resource in the IT Department with a formalized focus on IT security. While the IT Department staff generally share security responsibilities and the department has implemented several security measures, the organization could benefit from increased efforts in this area. In some cases, security measures are in place that may limit functionality for City resources and external groups. | **Medium 27** |
| **M10** | **Change management and communication of IT changes and events to end users could be improved.** It was reported that the current communication methods of changes and events to technology do not always reach City users in a timely fashion and do not always allow users to prepare for and adopt necessary changes. This may include new functionality available as updates and upgrades to existing applications are deployed. | **Medium 26** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| **M11** | **The City could expand the use of GIS data.** The City has recognized the opportunities to leverage GIS information for use by multiple departments. In the current environment, most management of GIS information is done by a single employee, and policy and procedure documentation does not exist for how the City will manage a growing GIS database. Without such a policy, the risk of inaccurate or outdated information is increased as the database grows. | **Medium 23** |
| **M12** | **There is currently varying amounts of department-level inputs to the City website which has resulted in inconsistencies in data and outdated information.** It was reported that departments have varying involvement in the updates to their respective City website pages. There is a desire for increased capabilities for content management at the department level. | **Medium 24** |
| ***Applications Issues*** | | |
| **A1** | **The City does not have an application to track employee time and attendance.** In the current environment in the City, a paper-based process is most widely used to record and track time and attendance information for employees with a single department using non-networked time clocks. Most City departments reported that it takes an average of three to five hours per pay cycle to collect employee time records, review, approve, and in some cases enter them into an MS Excel spreadsheet before submitting them to Finance for processing. In one example, City staff is driving to other City buildings to collect employee time sheets. There is a desire from nearly every department to move towards using an application to track employee time and attendance. | **Critical 43** |
| **A2** | **Users reported challenges with the City's SunGard financial management application.** End-users reported the SunGard NaviLine application used for financial management is not user friendly and presents challenges with generating reports. Multiple end users reported the use of external spreadsheets for reporting purposes because the analytical and reporting capabilities of the NaviLine modules are not widely understood, cumbersome, or challenging to use or non-existent. In addition, contract management, inventory, project management, and grant management functionality is not being used. | **Critical 42** |
| **A3** | **The City's use of human resource management functionality within the City's SunGard application is limited.** It was reported that several challenges exist with the current application used for human resource management due to a lack of functionality in place including limited decentralized access to employee information and limited tracking of certifications, training, discipline, and FMLA data, among others. Employee self-service functionality is currently not available and a large amount of time is spent fulfilling requests from City staff for pay stub and W2 information. In addition, the City has recently implemented an applicant tracking system (NeoGov) but due to a lack of integration, several manual data entry routines are needed to link application data to employee files upon hiring. | **Medium 30** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| **A4** | **The City's electronic document scanning and storage system is not being used by all departments.** It was reported that the City has implemented a document scanning and storage application for use by City departments. There are some City departments that identified a need for document storage but have not implemented the system. In addition, there is a desire for increased document management capabilities to improve efficiencies with retrieving scanned documents. | **High 38** |
| **A5** | **The City's use of the SunGard application in Community Development and Utility Billing could be improved.** It was reported by several users that there is a desire for expanded functionality within the SunGard NaviLine application used for Community Development and Utility Billing. In addition to increased user-friendliness, there is a desire for workflow functionality, integration with the City's document management system, and web-based citizen self-service. | **High 33** |
| **A6** | **e-Government capabilities offered by the City are limited.** It was reported that there is a desire in multiple departments to expand e-Government capabilities through the City website. Examples include vendor self-service, a utility account management portal, an online application for Planning and Engineering, rental applications for monthly parking spaces as well as online bill pay functionality for tax and utility bills. | **Critical 44** |
| **A7** | **The process for developing and preparing City Council agendas is a manual process.** Currently, the Deputy Clerk must prepare the Council agendas using a combination of paper based processes and MS Word. This process requires City staff to spend an increased amount of time preparing items for the Council agendas. | **High 33** |
| **A8** | **Some City business processes rely on manual signatures and redundant approvals.** It was reported by City staff that in many instances, City business processes rely on manual signatures and redundant approvals. For example, it was reported that purchase orders can be approved online using functionality in HTE. However, in some cases once a requisition is approved, a second approval from the same staff is required again before the conversion to a purchase order. | **High 34** |
| **A9** | **Several processes are supported with a variety of applications that are not integrated.** The lack of workflow functionality and multiple instances of duplicate data entry create many inefficiencies. In addition, this increases the opportunities of data entry errors, or the existence of outdated and inaccurate data. For example, the inspection process for the Fire and Rescue department involves entry of data into both SunGard and Firehouse and then paper copies are delivered to City Hall. | **Medium 32** |
| **A10** | **There is a desire for increased functional-specific COTS applications and productivity tools.** Several departments have a desire to consider commercial off-the-shelf applications for functional-specific use. Examples include case management, scheduling, GPS tracking, Personal Property Tax, drawing tools as well as interfaces to existing City applications. Increased productivity tools are also desired such as Photoshop to be used for the City's marketing efforts. | **Medium 26** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| **A11** | **Current City systems may not include the functionality required by the Treasurer's Office. There were several challenges with existing billing and collections applications used by the Treasurer's Office including:**<br>• Inability for citizens to review Real Estate and Personal Property accounts online. The Treasurer's Office is currently receiving an average of ten requests per day for Real Estate and responding to these requests for information can be time consuming.<br>• Inability to scan a citizen's bill and post a payment to an account.<br>• Inability to move State Share Credits back to State Share GL Account through the system automatically. Currently these are processed manually.<br>• Inability to provide consolidated statements to citizens.<br>• Inability to process a partial payment on a license fee.<br>• Inability to re-instate a paid license fee.<br>• Inability to transfer Credits on Personal Property.<br>• Inability to run a collection action report at day's end.<br>• Inability to include method of payment on license fee receipt/report.<br>• Inability to show name of account holder on receipting screen.<br>• The cashier work stations in the Treasurer's Office are not designed to optimize productivity. The scanning and printing of receipts in the Treasurer's Office is currently a manual process that requires multiple steps and is labor intensive.<br>• The Business License system for posted payments and history is confusing. A posting today for prior years will post to the prior year history and this makes research on accounts time consuming and difficult.<br>• The handling of dog licenses using the business license module is cumbersome. | **High 40** |
| **A12** | **Current City systems may not include the functionality required by the Commissioner of the Revenue's (COR) Office. There were several challenges with existing billing and collections applications used by the COR, including:**<br>• Real Estate Assessment Software: currently use a combination of spreadsheets and a limited software application. Many factors and rates are hard-coded on a parcel by parcel basis, with limited analytical tools available.<br>• Business License/Personal Property Link: These two functions reside in entirely separate applications which currently have no link. This requires duplicate data entry and creates challenges in determining filing compliance.<br>• The personal property system is an in-house, custom built system that was developed due to the unique way the City handles personal property. This has caused a number of issues including a lack of reporting capabilities, limited integration with other City systems, and limited opportunity for enhancements.<br>• There is limited integration with the SunGard/NaviLine system with minimal | **High 37** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| | interdepartmental checks and data flow (e.g., the COR must manually verify that a new business has completed all the necessary steps with various City departments, or that new construction data is entered onto tax rolls upon completion).<br>• Tools are limited to help identify research and correct any errors. For example, when the Treasurer's Office keys in a payment for a business license a routine to validate that the payment is being applied to the correct license does not exist.<br>• Occupational License: This module requires several manual processes to process a license. The system does not have the functionality to view account history.<br>• COR relies on IT resources to write queries, which can be time consuming. | |
| ***Technology Issues*** | | |
| **T1** | **The City's current hosted POP3 email system creates several challenges.** The use of an externally hosted email server has created several challenges for end users at the City due to limitations with this arrangement. These include size restrictions on emails, size restrictions on inboxes, the inability to archive emails and the lack of 24/7 support, among others. It was reported by several City staff that they are frequently required to log in to their email account and delete files to keep their email inbox under the size limitations. This has created problems for staff on vacation that do not have the ability to log in and manage their email inbox. | **Critical 49** |
| **T2** | **The City does not have enterprise-wide calendaring capabilities**. The ability for City staff to share calendars, view free/busy information, reserve conference rooms electronically, and schedule appointments with other City staff is not available. It was reported by several City staff that a central calendaring system that allows staff to schedule meetings and book conference rooms by viewing City-wide calendars to determine availability does not exist. Many staff reported that they must call or email other staff to determine availability and then send a calendar invite to schedule a meeting. In addition, many of the conference rooms in City Hall have day planners in the room that are used to schedule room availability. | **High 40** |
| **T3** | **Remote access connectivity to the City's network is limited.** It was reported by end users that remote access connectivity is not available to all users. There is a desire by many City employees to have remote access capabilities to connect to email, specific applications, or to entire desktops when at other locations away from the City. | **High 34** |
| **T4** | **The City could increase the utilization of server virtualization technology.** The City has recognized the benefits that may be realized by virtualizing servers including reducing the number of physical servers housed at the City that may have excess capacity in the current environment. It was reported that staff training will need to take place before virtualization is initiated. | **High 34** |

| Prioritized List of Strategic Issues | | |
|---|---|---|
| **No.** | **Issue Description** | **Priority & Score** |
| **T5** | **Physical and environmental controls of technology infrastructure could be increased.** It was reported that backup power controls in City buildings could be improved as the server room at City Hall does not have a backup generator and the power supply delivered by UPS devices at other locations is insufficient. A card swipe access system would increase control and give the City increased monitoring to critical locations throughout the City. HVAC and fire suppression devices should be reevaluated for functionality and ensure they are current. | **High 39** |
| **T6** | **The City's use of technology tools to support in-person and remote meetings could be increased.** Multiple City departments reported a desire for increased technologies to facilitate meetings such as smart boards and projectors such as at the City's Training Center, as well as the Community Room at the public safety building. There is also a reported desire for increased technology tools to support remote meetings such as table-top teleconference phones and video-conference tools. | **Medium 32** |
| **T7** | **The City's use of patch management can be expanded.** Currently, the City is utilizing a Windows Systems Update Server (WSUS) server to provide patching for all Windows-based Operating Systems. Patching and updates of firmware and other applications is currently not routinely performed. | **Medium 32** |
| **T8** | **The process for VPN network access creates challenges in the current environment.** City employees at the Timbrook access the City network through VPN. It was reported that on multiple occasions end users at Timbrook were not able to log into the VPN because there were too many users logged in at the same time. In addition users who momentarily lose connectivity have to re-authenticate through the VPN. | **High 34** |
| **T9** | **The City network does not extend to all facilities and connectivity from remote sites can be problematic.** It was reported by City staff that network connectivity is not reliable at remote sites and challenges exist with maintaining email connections as well as connections with other applications at these remote sites. | **Critical 42** |
| **T10** | **The City's network routes through the network of Winchester Public Schools for internet access.** The City does not own or control a router of its own, so all City employees' Internet traffic goes through the School Department's network. One challenge that exists with this configuration includes possible outages at the School disconnecting the City's network from the Internet. An additional issue is that coordination of maintenance windows can be a challenge. For example, maintenance performed by the schools after hours may impact the 24/7 operations of Public Safety. | **Critical 43** |
| **T11** | **The City does not currently have public or private wireless network access.** It was reported by several departments that there is a desire for wireless connectivity in City buildings for use by both City employees and the public. | **Medium 32** |

# Appendix C: Project Participants

| Project Participants | | | |
|---|---|---|---|
| **No.** | **Department** | **No.** | **Department** |
| **1** | Police Department | **14** | Economic Redevelopment |
| **2** | Commissioner of Revenue | **15** | Planning |
| **3** | Public Utilities | **16** | Tourism |
| **4** | Parks and Recreation | **17** | Emergency Communications |
| **5** | Finance | **18** | Fire and Rescue |
| **6** | Treasurer | **19** | Voter Registrar |
| **7** | Emergency Preparedness | **20** | Old Town Development Board |
| **8** | Zoning and Inspections | **21** | Winchester Public Schools |
| **9** | Information Technology | **22** | Social Services |
| **10** | Housing and Neighborhood Development | **23** | City Attorney |
| **11** | Transportation | **24** | Public Works |
| **12** | Human Resources | **25** | Customer Service |
| **13** | Facility Maintenance | **26** | Traffic |

# Appendix D: Information Technology Advisory Group

| Technology Advisory Group Roster | |
|---|---|
| **Department** | **User** |
| City Attorney | Tony Williams |
| City Manager | Craig Gerhart |
| Commissioner of the Revenue | Ann Burkholder |
| Council Clerk | Kari VanDiest |
| Economic Redevelopment | Jim Deskins |
| Emergency Communications | Erin Elrod |
| Emergency Preparedness | Lynn Miller |
| Finance | Mary Blowe |
| Fire and Rescue | Scott Kensinger |
| Human Resources | Joel Davis |
| Information Technology | Tom Lloyd |
| Old Town Development Board | Karen Helm |
| Parking Authority | Samantha Anderson |
| Parks and Recreation | Brad Veach |
| Planning | Tim Youmans |
| Police | Kelly Rice |
| Public Services | Perry Eisenach |
| Sheriff | Lenny Millholland |
| Social Services | Carla Taylor |
| Treasurer | Mark Garber |
| Visitor Center | Sally Coates |
| Voter Registrar | Joyce Brathwaite |
| Zoning and Inspections | Danny Mowery |

# Appendix E: Technical Working Group

| Technical Working Group Roster | |
|---|---|
| **Name** | **Title** |
| **Related User Groups** | |
| Brad Veach | Parks and Recreation |
| Power Users, Parks and Recreation, Social Services, OHND, Visitor Center, City Attorney | |
| John Merriner | Utilities Operations Superintendent |
| Utilities, Engineering, GIS, Customer Service, Facilities Maintenance | |
| Kevin Sanzenbacher | Chief of Police |
| Police, ECC | |
| Mary Blowe | Finance Director |
| Finance, Human Resources, Public Information, Clerk of Council, City Manager, and other administrative functions | |
| Mark Garber | Treasurer |
| Elected Officials (Treasurer, Commissioner, and Sheriff) Voter Registrar, taxation and payments | |
| Scott Cullers | Fire & Rescue Chief |
| Fire and Rescue, Emergency Preparedness | |
| Tom Denney | Public Works Operations Superintendent |
| Public Works, Traffic, Transit, Garage | |
| Tom Lloyd | Information Technology Director |
| Information Technology, Winchester Public Schools, cross department services, infrastructure | |
| Vince Diem | Zoning Administrator |
| Zoning and Inspections, Planning, OTDB, Economic Redevelopment, Parking Authority, development functions, interfaces with citizens | |

# Appendix F: Sample Technical Review Process Document

*This appendix contains a sample document that was used to put in place a technical review process at a government organization. This sample can be utilized as a starting point for the document the City of Winchester will develop.*

**Overview**

Purpose: To establish a process to evaluate the impacts of applying technology that extend, expand, or improve the services available to City employees, residents, businesses, civic groups, or other interested parties.

The Technology Review Process addresses the need for the City to review and prioritize appropriate technology projects for implementation. The review process offers a consistent framework for the City to develop and evaluate project requests. The review process is a method of identifying technical and organizational impacts related to technology projects. This process will not deal with detailed project design, engineering, coding, or implementation specifics.

City technology projects are defined as those projects that utilize computerization concepts and related technologies that can involve informational or financial transactions, or introduce new or changed business processes. Technology projects that are subject to review include initiatives that require Information Technology Department resources or other departmental resources, that provide the basis for capital projects, unscheduled technology requests, and/or those that might impact City-wide systems, networks, or infrastructures. Projects that have already been approved and are undergoing scope changes or require increased funding must undergo this review process to continue. Questions regarding whether a project needs to go through the review process should be forwarded to the Information Technology Director.

This process will be used to develop and advance project requests with the assistance of the City Technology Steering Committee and other identified persons for the purpose of submitting them for approval, prioritization, and inclusion in the Capital Planning and budgeting process. Please refer to the following sections for a complete description of the Technology Review Process.

**Roles and Responsibilities**

*Technology Steering Committee*
The purpose of the Technology Steering Committee is to receive and evaluate completed project requests received from the Information Technology Director. The Steering Committee is also responsible for providing technology review and project priority recommendations for the City budget review process. The Technology Steering Committee is comprised of various department heads, managers, and staff from the City Manager's Office.

*Technology Advisory Committee*
The purpose of the Technology Advisory Committee is a) assist the BA/PM and the Project Sponsor in the development of the business, functional and technical requirements for a technology project; b) act as Subject Matter Experts (SMEs) specific to their core area(s) of responsibilities; c); if requested, review projects for clarity and completeness prior to forwarding project requests to the Technology Steering Committee; and d) if requested, recommend to the Technology Steering Committee prioritization of technology projects based on 1) in-progress and pending projects; and 2) resource capability.

*Business Analysts/Project Managers (BA/PM)*
Information Technology BA/PM is the main contact point between City departments and Information Technology. The role of the BA/PM, in the Technology Request process, is to work closely with the Project Sponsor and Information Technology to build the overall Business Case for the Technology Request, seek Subject Matter expertise when and where required, and to guide the request through the entire process. As a group, the Information Technology BA/PM, will establish and submit the criteria and weighting scores for the submitted project(s).

*Business Services Administrator*
The Business Services Administrator coordinates and oversees the Technology Review Process. He (She) a) determine if the project can be accomplished within the current timeframe and within budget, or if it will impact other projects, b) reviews all technology requests with the other Information Technology administrators to insure all aspects of the projects are addressed, and c) assigns the unique project tracking number after final approval. The completed packet is forwarded to the Information Technology Manager for technical evaluation. The IT Business Services Administrator maintains the Project Portfolio and insures all published information is current and accurate.

*Information Technology Director*
The Information Technology Director reviews all Technology Requests with the City Manager, works with the Budget Division on the development of the budget and acts as the liaison with the Technology Steering Committee during project review and prioritization.

**Technology Review Process**

*Conceptual Development and Initial Estimate of Project Size*
When a department decides that it would like to embark on a technology project, the Project Sponsor (PS) will complete Section A, Statement of Need of the IT Project Initiation Document (See Appendix G). The PS will forward the document to the Business Services Administrator for initial review and assignment to a BA/PM. The BA/PM and Project Sponsor will determine the initial scope of the project and complete Sections B, C, D and E. That estimate will determine the next steps. The project will be defined as a Level 1, Level 2, or Level 3 project. If the ongoing operational impact or funding is significant, it can raise the level of the request.

**Level 1 Technology Projects**
If the project is considered a Level 1 project, it will not progress through the Technology Review Process. The Information Technology Department will determine if the project can be accomplished within the current timeframe and within budget, or if it will impact other projects. If they determine that it can be handled within the current portfolio, it would be assigned a project tracking number and scheduled within the current project portfolio. If it cannot be accommodated, it will be deferred to a later date unless deemed an emergency. If the Project Sponsor deems the request an emergency and the City Manager agrees and has approved immediate attention, projects will be re-prioritized to accommodate the emergency effort.

**Level 2 and 3 projects will proceed through the Technology Review Process.**
*Development of the Preliminary Business Case*
Working together, the BA/PM, Project Sponsor, Subject Matter Experts, and other required personnel would initiate the development of the Preliminary Business Case document for the requested project. For a project request to be considered for the upcoming year's Budget Cycle, it must be submitted within the specified timelines. This will allow the IT Department enough time to review and complete the full Business Case for evaluation. The Preliminary Business Case includes the information contained in the Technology Project Initiation Document, anticipated costs, preliminary ROI, the preliminary project milestones and project schedule.

*Fit within the IT Enterprise Architecture*
Based on the business and technology assumptions that are contained in the Preliminary Business Case portfolio, the BA/PM and Information Technology Department staff will determine whether the technical assumptions are appropriate for the existing Enterprise Architecture. If not, alternatives may be suggested and reviewed with the Project Sponsor. If no other alternative is appropriate, the Preliminary Business Case portfolio is updated with the associated risks and impact statements on City and Information Technology budgets.

*Completing the Final Business Case*
Accounting for all recommendations and adjustments made through the review process, the Business Case Portfolio, for the technology request is completed by the BA/PM and the Project Sponsor. This includes a ROI workbook developed and reviewed with Finance staff. The Business Case Portfolio will contain: Project Scope, Statement of Work, Work Breakdown Structure, Project Milestones, Project Work Plan, Project Investment Baseline, Roles and Responsibility Matrix, Project Control documents, Assumptions and Contracts, Risk

Assessment, and Return on Investment (ROI) Workbook. The completed packet is forwarded to the Information Technology Director for technical evaluation.

*Completed Business Case is submitted to IT for technical review and specifications*
The IT Director the Business Case Portfolio to the appropriate areas within the Department, where a full review of the project and the associated effort to complete is evaluated and preliminary technical specifications are associated to the document. Once the technical review is completed, it is returned to the Information Technology Director for final review and summarization and, schedules a project review with the City Manager and his (her) staff.

*Completed Business Case is submitted to City Executive for strategic fit assessment*
The Project Sponsor, assigned Budget Analyst/PM, and the Information Technology Director will present the request and associated Business Case to the City Manager. The purpose of this meeting is to allow the City Manager to determine whether the technology request fits within the Strategic Plan for the City. If disapproved by the City Manager, the technology request is returned to the requesting department, with explanation by the Information Technology Director, and no further action will be taken on the request. Projects approved by the City Manager are to be reviewed and prioritized by the Technology Steering Committee. Approval by the City Manager for fit within the City's Strategic Plan does not imply approval for work or for budget at this point in the process.

*Technology Steering Committee meets to establish priority*
The Information Technology Director informs the Technology Committee Chair there are technology request(s) that are in need of prioritization. The ideal timeframe for this prioritization meeting is quarterly, but will depend on the number of requests that have been submitted for their review. The meeting is scheduled and at that meeting, the Information Technology Director will present the new technology request(s) for their consideration. The Business Case Portfolio will be made available for committee review. The Information Technology Director will summarize the requests and present each Business Case and review the Project Portfolio impact. The Committee will vote on the rank order prioritization of the requests in the overall City Project Portfolio. A multi-year technology project plan will be developed and updated annually (known as the Project Portfolio) based on the rank order of priority of projects established by the Steering Committee. The Information Technology Department will adjust the workload for the department, if needed, and if budget is available.

*Budget prepares Operating Impact or Capital Budget determination*
Requesting department staff needs to work with Budget staff in preparing an Operating Impact assessment from the ROI information for all technology requests. Budget management will determine whether a project request is appropriate for inclusion in the Operating Budget or the Capital Plan. These projects will be advanced if there is Budget funding available and approved by the City Manager. If the request is an approved emergency project that needs immediate action, it will be forwarded, by the Information Technology Director, to the Budget staff for preparation with the Project Sponsor for ordinance or fund transfer request for board approval if necessary. If it is not an emergency, the projects are held for the next Budget Cycle.

*Budget Cycle for next fiscal year*
By the specified date, for preparation of the coming year's Capital Plan and Budget Cycle, all Technology Review Process efforts that are to be considered by the City Manager and the City Council, for the coming year's Capital Plan and Operating Budget process needs to be completed. Departments will have to submit Capital Project Request documentation or incorporate the project into their Operating Budget for consideration of available project funding.

*Operating and Capital Plan are developed based on Project Prioritization*
Based on the prioritized Project Portfolio and appropriation levels or tax levy target set for the upcoming budget, the Budget group working with the Information Technology Director will prepare the Capital Plan and Operating Budget for Information Technology. Operating Budget projects requested by sponsoring departments will have to be included as part of their upcoming operating budget. The Capital and Operating Budget is presented to the City Manager for his consideration and inclusion or exclusion in the upcoming year's Budget proposal. The Project Portfolio costs and the funding sources will be listed in the Budget and identify whether the project is part of the Capital Plan or in the Operating Budget. The City Manager will review this and a decision will be made as

to which projects will be forwarded or postponed to a later year. This Project Portfolio is approved by the City Manager and submitted to the Council as part of the next year budget.

*City Council approves Capital Plan and operating Budgets*
The Proposed Budget, which will include the Information Technology Project Portfolio is reviewed and submitted to the City Council for full approval. The Information Technology Director as part of planning process then addresses those projects approved.

*IT Project Portfolio is updated based on City Board action and Priority if necessary*
The Information Technology Director has the Business Services Administrator update the Project Portfolio for the approved projects for the coming year(s) and communicates to departments by publishing the new Project Portfolio Calendar on the Intranet.

*Projects are assigned based on the Project Portfolio and the Return on Investment*
At the appropriate time, the Business Services Administrator moves approved projects into the active status when an audit date is established.

*The Project Portfolio is reviewed on an annual basis*
For all projects in the Project Portfolio, a detailed review will be conducted to determine if there has been any significant scope or budget changes for the projects. All projects identified to have significant changes in either of these areas could result in a different prioritization.

*Project completion triggers post project review and evaluation*
At the completion of all projects (when the project work is completed and the system is considered in production), a post-project review will commence at 60, 90, or 120 days after completion, depending on the level of the project. This effort is to document “Lessons Learned”, determine action to be taken on all deferred work, and to insure that all documentation for the project is complete. Based on the Return on Investment statement, the post-project audit date is assigned. This is the date at which the project results will be reviewed to determine whether the anticipated Return on Investment has been achieved. Participating in the Return on Investment review will be the Project Sponsor, BA/PM, Budget representative, and Finance representative.

*Project Folder is updated for Post Project Findings and Evaluation is distributed*
With the completion of the Return on Investment audit, Post-project findings will be published and forwarded to all interested parties

## Appendix G: Examples of Desired Reports

*This appendix contains a list of desired reports identified by City staff during the fact-finding meetings with end-users in multiple departments. It is important to note that reports listed in the following table may in fact be able to be produced; however, they are not currently available to users or users are not familiar with the process required to develop the reports. The IT and Finance Departments offer periodic training with the City's analytical reporting tool, Qrep, to assist City staff in the development of adhoc and analytical reports not currently available.*

| Examples of Desired Reports | | |
|---|---|---|
| **No.** | **Report** | **Summary of Desired Report** |
| **1** | Report of Businesses by Category | Listing of business by category of business |
| **2** | Report of trends by business category | Listing of trends, i.e. new, closed by business category |
| **3** | Real Estate Assessments | Analytical report that provides comparison data for historical trends in Real Estate Assessments |
| **4** | Building History report | Ability to print a report that summarizes the permit, inspection and other related historical events related to a building or property |
| **5** | Pawn shop activity | A report that can be run by date range that summarizes activity at Pawn Shops in the City |
| **6** | Budget Analytical report | A report that displays historical budget information with user defined parameters |
| **7** | Technology Inventory report | A report that can be produced that summarizes inventory items, i.e. PC's and laptops |
| **8** | Dispatch statistics | A report that can be run to summarize public safety call statistics, i.e. number of calls take, time to close, response time etc. |
| **9** | Work Order Inventory Report | A report that summarizes work orders that impact inventory items |
| **10** | Inventory Valuation Report | A report that assess the value of current inventory items |
| **11** | Tourism Report | Statistical report of visitors that have visited/registered at the Visitor's Center |
| **12** | Motor Vehicle Report | Report that summarizes "move-outs" based on DMV import |
| **13** | Business License Control # | A report that links the business license control number with the second social security number currently contained in the personal property system |
| **14** | Personal Property Reports | Reports that summarize historical personal property account information |
| **15** | Occupational License | A statement/report that summarizes Occupational License (OL) |

| Examples of Desired Reports | | |
|---|---|---|
| **No.** | **Report** | **Summary of Desired Report** |
| | Statement | information in a statement format |
| **16** | Fixed Asset Listing | Report that summarizes Fixed Asset information including Location, Description, Serial #, Model, Depreciation amount, remaining amount |
| **17** | Sheriff Paperwork Report | End of day report that summarizes papers (subpoenas etc) served, papers entered, papers not served, papers served by (Deputy name) |

# Appendix H: Hardware Replacement Schedules

*This appendix contains a summary of the recommended replacement schedules for a set of hardware items. These replacement schedules are based upon the recommended schedules of similar government organizations.*

| Hardware Replacement Schedules | | |
|---|---|---|
| **No.** | **Hardware** | **Replacement Schedule** |
| **1** | Desktop Computers | 4-5 years |
| **2** | Laptop Computers | 3-4 years |
| **3** | Tablets | 2-3 years |
| **4** | Servers | 5-7 years |
| **5** | Disk Arrays | 5-7 years |

In addition to maintaining regular replacement schedules for Hardware, it is equally important that the City maintains existing software applications by following vendor recommended patching and upgrade schedules. The City will also need to assess software applications periodically to ensure organizational needs are being met. The assessment process for reviewing software applications can include:

1. Issuing an end user survey to gauge current level of satisfaction with applications
2. Conducting user group meetings to document needed functionality
3. Assess whether current system is meeting needs based on user feedback
4. If necessary, involve current vendor to respond to additional functionality requirements
5. Based on vendor response and level of user satisfaction, issue a Request for Information to collect potential cost and resource requirements for a new system.
6. If the results of the RFI process indicate that a new application can purchased to address documented concerns, consider initiating procurement process for replacement system
7. Conduct procurement process following guidelines described earlier in this plan

# Appendix I: Security Guidelines

*This appendix contains a sample table of contents for a Security Policy that includes the subject areas the policy should include. This sample should be used as a starting point as the City begins to develop their policy.*

### Security Policy - Sample Table of Contents

1. Version Control and Updates
   - 1.1. Version Update History
   - 1.2. Policy Review Process
   - 1.3. Policy Update Process

*This section should list the complete history of version updates and what content was changed. The section should also describe the frequency in which the policy will be regularly reviewed as well as the process for which the policy will be reviewed.*

2. Communicating the Policy
   - 2.1. Ongoing "Refreshed" Training
   - 2.2. New Hire Training
   - 2.3. Communication of Policy Changes
   - 2.4. Review Acknowledgement Process

*This section should describe the processes by which the policy will be communicated across the organization on a regular basis, for new hires and when specific changes are made. Included in this section should be any steps the organization determines to implement for employees to sign-off that they have reviewed any changes or updates and acknowledge their understanding of them.*

3. Roles and Responsibilities
   - 3.1. Security Review Group
   - 3.2. Policy Coordinator
   - 3.3. IT Department
   - 3.4. Users

*This section should describe the roles and responsibilities for the groups that are established related to the Security Policy. A Security Review Group should be established and described that will be responsible for reviewing all policy changes and making decisions. This group may have a similar composition as a Steering Committee. One individual should be made responsible for coordinating all changes and facilitating the review by the Security Review Group of all pending changes. Additional groups include the IT Department and users. It is important that any additional groups who will have substantial unique policies are also identified. For example, if a "super-user" group is established related to a particular application that have increased access controls, this group should be described.*

4. Controls – Applications, software and systems
   - 4.1. Email
   - 4.2. Web Traffic
   - 4.3. Applications

*This section should describe the controls to be in place related to applications, software and systems. A selection of the specific components includes email, web traffic, and applications. Similar organization will consider implementing separate policies as they relate to specific applications, such as for an assessment application. If these are implemented, reference should be made to them in this primary security policy and that the individual policies take precedence.*

5. Controls – Infrastructure
    - 5.1. Backups and Testing
    - 5.2. Network
    - 5.3. Physical
    - 5.4. Environmental

*This section should describe the controls to be in place related to the City's infrastructure. This should include network components as well as hardware and extend to logical, environment, and physical security. This is an area where the process for access from external contractors should be described. This process should include a sign-off of acceptance of the policies by the contractor before they are provided access.*

R-2012-69

# CITY OF WINCHESTER, VIRGINIA

## PROPOSED CITY COUNCIL AGENDA ITEM

**CITY COUNCIL/COMMITTEE MEETING OF:** September 18, 2012 **CUT OFF DATE:** _____

**RESOLUTION** _X_ **ORDINANCE** __ **PUBLIC HEARING** __

**ITEM TITLE:** New Water Supply Agreement with Middletown

**STAFF RECOMMENDATION:** See attached.

**PUBLIC NOTICE AND HEARING:** NA

**ADVISORY BOARD RECOMMENDATION:** NA

**FUNDING DATA:** See attached.

**INSURANCE:** NA

The initiating Department Director will place below, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda.

| DEPARTMENT | INITIALS FOR APPROVAL | INITIALS FOR DISAPPROVAL | DATE |
|---|---|---|---|
| 1. Finance | TB | | 9-5-12 |
| 2. City Attorney | AW | | 9/5/2012 |
| 3. City Manager | DF | | 9-5-12 |
| 4. Clerk of Council | | | |

Initiating Department Director's Signature: _____ 9/3/12 Date

CITY ATTORNEY'S OFFICE Received SEP 5 2012 WINCHESTER, VA

APPROVED AS TO FORM: _____ 9/5/2012 CITY ATTORNEY

Revised: September 28, 2009

Winchester public services Virginia

Rouss City Hall
15 North Cameron Street
Winchester, VA 22601

Telephone: (540) 667-1815
FAX: (540) 662-3351
TDD: (540) 722-0782
Website: www.winchesterva.gov

# AGENDA ITEM MEMORANDUM

**Date: Work session – September 18, 2012**

**Subject: New Water Supply Agreement with Middletown**

## Background and Current Situation:

Last September, the City received a request from Middletown to develop a new water supply agreement that would increase the maximum volume of water they can purchase from the City from the existing 235,000 gallons/day maximum to 500,000 gallons/day. Over the past several months, City staff has met with representatives from Middletown on multiple occasions in an effort to develop proposed terms for a new water supply agreement.

At the June 19 work session, Council reviewed the proposed terms for a new agreement that had been developed and provided consensus and direction to staff to develop a proposed formal agreement incorporating these terms. This proposed agreement has been prepared and is attached for Council's consideration. The current agreement is also attached for reference. Staff has received verbal confirmation that the proposed new agreement is acceptable to Middletown.

## Recommendation:

The Public Services Department is recommending that City Council adopt the attached resolution authorizing the City Manager to execute the new agreement with Middletown.

## Fiscal and Policy Implications:

The current agreement with Middletown generates approximately $370,000 per year in water sales.

THE COMMON COUNCIL

Rouss City Hall
15 North Cameron Street
Winchester, VA 22601
540-667-1815
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www.winchesterva.gov

# RESOLUTION

**AGREEMENT BY THE CITY OF WINCHESTER, VIRGINIA TO SELL SPECIFIED QUANTITIES OF POTABLE WATER TO THE TOWN OF MIDDLETOWN, VIRGINIA**

**WHEREAS**, the City currently sells potable water to Middletown under the terms of an agreement signed in 1989; and

**WHEREAS**, Middletown has requested that the terms of the current agreement be revised so that the volume of water purchased under the agreement can be increased; and

**WHEREAS,** the City has the ability and authority to sell Middletown additional water; and

**WHEREAS**, a proposed new agreement between the City and Middletown has been developed that would replace the current agreement in its entirety.

**NOW, THEREFORE, BE IT RESOLVED THAT**: The City of Winchester Common Council hereby approves and authorizes the City Manager to execute the new "Agreement by the City of Winchester, Virginia to Sell Specified Quantities of Potable Water to the Town of Middletown, Virginia".

**Resolution No.**

**ADOPTED by the Common Council of the City of Winchester on the 9th day of October, 2012.**

***Witness my hand and the seal of the City of Winchester, Virginia.***

# AGREEMENT BY THE CITY OF WINCHESTER, VIRIGNIA TO SELL SPECIFIED QUANTITIES OF POTABLE WATER TO THE TOWN OF MIDDLETOWN, VIRGINIA

THIS AGREEMENT, dated this ____ day of _____, 2012 ("effective date"), by and between the City of Winchester, Virginia (hereinafter "City"), and the Town of Middletown, Virginia (hereinafter "Town"), collectively hereinafter referred to as "the parties"

**WITNESSETH**

WHEREAS, the parties contracting hereto recognize that the Town is presently purchasing water from the City under the terms of a Contract dated January 1, 1989; and

WHEREAS, the Town wishes to purchase additional water from the City to meet the demands of projected growth within the Town; and

WHEREAS, the City currently has the ability and authority to sell the Town additional water, and both parties agree that it is of mutual benefit to enter into an agreement for such.

NOW for the consideration and mutual benefits recited in this Contract, the City and Town agree as follows:

## A. DEFINITIONS:

1. *Agreement* shall mean this Agreement by the City of Winchester, Virginia to sell specified quantities of potable water to the Town of Middletown, Virginia.

2. *City* shall mean the City of Winchester, Virginia, a municipal corporation formed and operating under the laws of the Commonwealth of Virginia.

3. *Town* shall mean the Town of Middletown, Virginia, a municipal corporation formed and operating under the laws of the Commonwealth of Virginia.

4. *Parties* shall mean the collective parties to this Agreement – the City of Winchester, Virginia and the Town of Middletown, Virginia.

5. *1989 Contract* shall mean the Contract entered into between the City of Winchester, Virginia and Town of Middletown, Virginia which was approved by Common Council for the City of Winchester on December 13, 1988 and by Middletown Town Council on December 8, 1988 regarding the sale of potable water by the City of Winchester to the Town of Middletown.

6. *Contract Expiration Date* shall mean the date upon which this Agreement shall automatically expire – December 31, 2042 unless otherwise extended by written Agreement signed by all parties.

7. *Material Breach* shall mean a breach of any of the express terms of this Agreement.

**B. GENERAL PROVISIONS:**

8. This Agreement replaces and supersedes the 1989 Contract in its entirety.

9. This Agreement is solely for the purpose of memorializing the terms of the exchange of goods and services between two independent parties. Nothing in this Agreement shall be construed to create an employment relationship or agency of any kind between the City and Town or any of their respective employees, agents, and assigns.

10. During periods of drought or low water supply when the City issues orders that mandatory water conservation measures and water use restrictions are to be implemented by all City water customers, these water use restrictions shall apply to all Town water customers. The Town shall be responsible for enforcing these water use restrictions for their customers.

**C. CITY RIGHTS AND RESPONSIBILITIES:**

11. The City shall provide water from the City's water distribution system to the Town for resale by the Town to its water customers within and without its corporate limits. The Town shall not resell water to customers located outside of Frederick County without written approval of the City. All new connections to the City's system shall only be made upon written approval by the City granted at the sole discretion of the City. The City shall not charge the Town any availability fees for new connections to Town water mains. The parties agree that an extension from existing connections shall not require approval of the City.

12. The City agrees to provide water to the Town at pressure equal to that which would normally be available to the City customers from City water mains in the area of Town's metering points. The City agrees that the quality and pressure of the water delivered to the Town shall meet the minimum requirements of the applicable Water Works Regulations for the Commonwealth of Virginia. In any area where the water pressure provided by the City, as per this provision, is not satisfactory for the Town's needs, the Town shall provide such additional water pressure at its sole expense.

13. The City shall have the right to inspect all work done in connection with the construction, maintenance, repair, and operation of the water facilities constructed or provided in the Town under the provisions of this Contract and connected with the City's water distribution system to determine whether such work is done in accordance with the provisions of this Contract. The Town agrees to permit such inspection to be made.

14. The City will not sell water to customers in the Town without the approval of the Town. However, it is agreed that the City shall have the right to serve its existing customers and future customers adjacent to City water mains in Frederick County. If the Town annexes the property of any such customer and connects that customer to a Town water main, that customer shall become the customer of the Town upon 30 days written notice to the City.

15. The City shall read all meters at delivery points on a monthly basis. The Town shall have the right to read such meters simultaneously with the City for the purpose of verifying the accuracy of the readings made by the City. The Town, at its own expense, shall have the right to test and verify the accuracy of such meters.

**D. <u>TOWN RIGHTS AND RESPONSIBILITIES:</u>**

16. The Town shall pay the City for all water delivered to the Town at the rates set forth herein. This rate shall be applied to the summation of all water meter readings serving the Town. The Town shall not pay any service or demand charge. The initial water rate under this Contract shall be $5.35 per 1,000 gallons of water used. Throughout the term of this Contract, the rate charged to the Town shall increase at the same percentage as all rate increases approved and implemented for all the other City retail water customers. For example, if the rate increase for all City retail water customers increases by ten percent (10%), the rate charged to the Town shall likewise increase by ten percent (10%).

17. The Town agrees that the allowable water usage under this Agreement shall not exceed the following volume of water per day:

    a. During the period beginning on the first day of this Contract and ending on December 31, 2021, the maximum volume of water used by the Town shall not exceed 360,000 gallons per day.

    b. Beginning on January 1, 2022, and thereafter, the maximum volume of water used by the Town shall not exceed 500,000 gallons per day.

18. The Town agrees that it shall purchase a minimum 150,000 gallons of water per day, calculated on an annual basis, during the first year of this Contract. This minimum volume shall increase yearly by 2,500 gallons per day, throughout the term of this Contract.

19. The Town shall be responsible for the design and installation of all connections to the City mains, necessary meters, equipment related to such meters, and meter vaults, to the specifications approved by the City. For the purposes of this Contract, the term "equipment related to such meters" shall mean piping within a meter vault, valves, check valves, bypass piping and valves, fittings, and any other equipment located in the meter vault. The term "meter vault" shall mean the vault, access hatches, lids, locking devices, and ladders. After installation, the City shall be responsible for the maintenance of the meters. The Town shall be responsible for the maintenance and repair of all other equipment. If any such equipment related to a meter or a meter vault is not repaired by the Town within ninety (90) days of notification to the Town by the City of any damage or disrepair, the City may repair the equipment and bill the Town, which the Town agrees to pay with the next succeeding water bill.

20. The Town shall furnish to the City all information required regarding the actual location of all Town water mains and connections.

21. The City shall render to the Town each month as soon as practicable a bill for water delivered to the Town through all the meters. The Town shall pay the full amount of the

bill to the City within thirty days after issuance. Such bill shall itemize the readings for each meter. Where a meter is found to be defective or ceases to register, the City shall bill the Town for the quantity of water delivered to the Town through said meter for the same month from the previous year. If the town fails to pay the full amount o the bill to the City within thirty days after issuance, in addition to the originally invoiced amount, the Town shall pay a late charge equal to ten percent (10%) of the full amount owed which shall accrue all sums owed are paid in full. The failure to pay the full amount owed plus all applicable late charges within thirty (30) days of invoice shall be a material breach of this Agreement, and the City shall be immediately relieved of any further obligations under this Agreement.

**E. FORCE MEJEURE**

22. Neither the City nor the Town shall be liable in damages to the other for any act, omission, or circumstances occasioned by or in consequence of any act of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrection, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, droughts, arrests, and restraints of rules and peoples, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause, whether of the kind therein enumerated or otherwise, not reasonably within the control of the party claiming suspension and which by the exercise of due diligence such part is unable to prevent or overcome. Failure to prevent or settle a strike or strikes shall not be considered to be a matter within the control of the party claiming suspension. Such causes or contingencies affecting the performance hereunder by either the City or the Town, however, shall not relieve it of liability in the event of its concurring negligence to remedy the situation and to remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting such performance relieve either party from its obligations to make payment of amounts then due hereunder in respect of water theretofore delivered.

**F. TERMINATION OF CONTRACT**

23. Either party may immediately terminate this Agreement "for cause" upon material breach of any of the terms of this Agreement or as otherwise described herein. Upon discovery of a material breach, the non-breaching party shall provide the breaching party with written Notice, effective upon delivery, allowing ten (10) days for the breaching party to cure. Unless otherwise provided herein, the failure of the breaching party to cure the breach within the ten (10) day period shall cause this contract to immediately terminate and the non-breaching party shall have no further obligations under this Agreement. Except as expressly provided, nothing in this Agreement shall be construed to limit any party's right of recovery for a material breach of any terms.

24. The City may terminate this Agreement if its Water Treatment Plant and/or associated water transmission facilities are or become mechanically incapable of delivering the specified quantities of water required under this Agreement as determined at the sole discretion of Common Council for the City of Winchester.

**G. CONTRACT TERM**

25. This Contract shall remain in force until December 31, 2042 ("contract expiration date") unless terminated by the City by giving the Town a five years' written notice of termination; or terminated by the Town by giving the City a two years' written notice of termination.

26. This contract expiration date may be extended by written agreement signed by all parties on or before December 31, 2042.

**H. MISCELLANEOUS**

27. This Agreement shall be construed under the laws of the Commonwealth of Virginia.

28. Any dispute arising under this Agreement shall be litigated in the Circuit Court for the City of Winchester, Virginia.

29. This Agreement replaces and supersedes any and all other agreements concerning the matters described in this Agreement. All other agreements concerning the matters described in this Agreement which are not incorporated into this document by a written Addendum signed by all parties are hereby declared null and void.

30. If any provision of this Agreement is found to be illegal, invalid or unenforceable, that shall not affect the validity or enforceability of any other provision of this Agreement.

IN WITNESS WHEREOF, the following duly authorized signatures of the respective parties hereto, affixed upon duplicate copies hereof.

CITY OF WINCHESTER, VIRGINIA

By:_____
City Manager

ATTEST:

_____

TOWN OF MIDDLETOWN, VIRGINIA

By: _____
Mayor

ATTEST:

_____

THIS CONTRACT, made the 1st day of January, 1989, by and between the City of Winchester, Virginia, party of the first part, hereinafter referred to as "City", and the Town of Middletown, Frederick County, Virginia, party of the second part, hereinafter referred to as "Town";

W I T N E S S E T H :

WHEREAS, the parties contracting hereto recognize that the Town is presently purchasing water from the City for resale to its customers, and that the City has an ample supply available to meet the Town's normal requirements for the foreseeable future, subject to the maximum consumption rates set forth herein for the Town, or as amended, it is deemed of mutual benefit by the parties hereto for the Town to continue to purchase water from the City.

NOW THEREFORE, for and in consideration of the mutual benefits from the undertakings of the parties to this contract, the City and the Town covenant and agree as follows:

1. The City shall provide water from the City's water distribution system to the Town for resale by the Town to water customers located within and without its corporate limits. The Town shall not resell water to customers located outside of Frederick County without written approval of the City. No new water connection to the City's main line requested by the Town shall be permitted unless it shall show the eventual connection of 100 residential or commercial connections or an industrial park layout which will eventually serve five industrial connections. All connections shall be made only upon written approval of the City. The parties agree that an extension from an existing connection shall not require approval of the City.

2. (a) The Town shall pay the City for all water delivered to the Town at the rates set forth herein. This rate shall be applied to the summation of all meter readings serving the Town. The Town shall not pay any service or demand charge.

(i) For the period beginning January 1, 1989 through December 31, 1989 the rate shall be eighty cents ($0.80) per thousand gallons.

(ii) Beginning January 1, 1990 the rate then in effect shall be increased by fifteen cents ($0.15) per thousand gallons, which rate, as adjusted pursuant to this section, or as otherwise amended by the parties, shall remain in effect during the term of this contract.

(b) Throughout the term of this contract, the City shall increase the rate outlined in paragraph 2(a) each time the City has a general water rate increase. The amount of increase shall be at the same percentage increase as the water increase approved for the City retail water customers. It is neither implied nor agreed that if the City's rate is decreased to its customers during the term of this contract that a corresponding decrease will be passed on to the Town.

(c) Beginning three years after the date of this contract, the City may increase the then-current rate, from time to time, in addition to any increases pursuant to paragraph 2(b), upon 180 days' notice to the Town. The City shall notify the Town of such increase in writing. Such rate increase shall become effective with the second succeeding quarter.

3. (a) During the term of the contract the Town agrees that it shall utilize no more than an average of 235,000 gallons per day, and the Town further agrees that on no given occasion will the maximum daily use exceed 350,000 gallons per day.

(b) The Town shall provide the City annually, on or before November 1, the projected water requirements of the Town for the average daily flow for the maximum month of record for the next five calendar years.

MARK K. FLYNN
CITY ATTORNEY
CITY OF WINCHESTER
VIRGINIA

(c) The Town agrees to provide at its expense such water storage and pumping facilities as shall be reasonably necessary to meet the Town's peak demands in excess of the actual average and maximum daily flows set forth in paragraph 3(a).

4. The City agrees to provide water to the Town at pressure equal to that which would be normally available to other City customers from City mains in the area of the Town's metering points. The City agrees that the quality and pressure of the water delivered to the Town shall meet the minimum requirements of the applicable Water Works-Regulations of the Commonwealth of Virginia.

In any area where such pressure is not satisfactory for the Town's needs, the Town shall provide such additional pressure at its expense.

5. The Town shall be responsible for the design and installation of all connections to the City mains, necessary meters, equipment related to such meters and meter vaults. For the purposes of this agreement, the term "equipment related to such meters" shall mean piping within a meter vault, valves, check valves, bypass piping and valves, fittings and any other equipment located in the meter vault. The term meter vault shall mean the vault, access hatches, lids, locking devices and ladders. After installation, the City shall be responsible for the maintenance of the meters. The Town shall be responsible for the maintenance and repair of all other equipment. If any such equipment related to a meter or a meter vault is not repaired by the Town within ninety days of notification to the Town by the City of any damage or disrepair, the City may repair same and bill the Town, which the Town agrees to pay with the next succeeding water bill.

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CITY ATTORNEY
CITY OF WINCHESTER
VIRGINIA

6. The City shall have the right to inspect all work done in connection with the construction, maintenance, repair and operation of the water facilities constructed or provided in the Town under the provisions of paragraph 5 of this contract and

connected with City's water distribution system, to determine whether such work is done in accordance with the provisions of this contract. The Town agrees to permit such inspection to be made.

7. The City will not sell water to customers in the Town without the approval for the Town; however, it is agreed that the City shall have the right to serve its existing customers and future customers adjacent to existing City water mains in the County. However, if the Town shall annex the property of any such customer and shall connect the customer to the Town's water line, the customer shall become the customer of the Town upon thirty days' notice to the City.

8. The Town shall furnish to the City, from time to time, such information as may be required by it which will permit the accurate recordation of the location of the main or mains and connections thereto constructed or provided by the Town.

9. The City shall read all meters at delivery points quarterly. The Town shall have the right to read such meters simultaneously with the City for the purpose of verifying the accuracy of the readings made by the City. The Town, at its own expense, shall have the right to test and verify the accuracy of such meters.

10. The City shall render to the Town each quarter as soon as practicable a bill for water delivered to the Town through all meters after each quarterly reading thereof. The Town shall pay the amount of the bill to the City within thirty days after its receipt. Such bill shall itemize the readings for each meter. Where a meter is found to be defective or ceases to register, the City shall bill the Town for the quantity of water delivered to the Town through said meter for the comparable period during the previous year.

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CITY ATTORNEY
CITY OF WINCHESTER
VIRGINIA

11. Neither the City nor the Town shall be liable in damages to the other for any act, omission, or circumstances occasioned by or in consequence of any act of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrection, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests, and restraints of rules and peoples, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause, whether of the kind therein enumerated or otherwise, not reasonably within the control of the party claiming suspension and which by the exercise of due diligence such part is unable to prevent or overcome. Failure to prevent or settle strike or strikes shall not be considered to be a matter within the control of the party claiming suspension.

Such causes or contingencies affecting the performance hereunder by either the City or the Town, however, shall not relieve it of liability in the event of its concurring negligence or in the event of its failure to use due diligence to remedy the situation and to remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting such performance relieve either party from its obligations to make payment of amounts then due hereunder in respect of water theretofore delivered.

12. The Town shall indemnify and hold, harmless the City from liability on account of injury or death to any person or any damage to or destruction of any property resulting directly or indirectly from the acts or omissions of the Town in the distribution of water supplied by the City and any other obligations of the Town under this contract. In the event that suit shall be brought against the City, either independently or jointly with the Town on account thereof, the Town shall defend the City in any such suit at the cost of the Town; and in the event of final

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CITY ATTORNEY
CITY OF WINCHESTER
VIRGINIA

judgment being obtained against the City, either independently or jointly with the Town, the Town shall pay such judgment with all costs and attorneys fees assessed and shall hold the City harmless therefrom.

The City shall indemnify and hold harmless the Town from liability on account of injury or death to any person or any damage to or destruction of any property resulting directly or indirectly from the supply of water to the Town and any other acts or omissions of the City in any of its obligations under this contract. In the event that suit shall be brought against the Town, either independently or jointly with the City on account thereof, the City shall defend the Town in any such suit at the cost of the City; and in the event of final judgment being obtained against the Town either independently or jointly with the City, the City shall pay such judgment with all costs and attorneys fees assessed and shall hold the city harmless therefrom.

13. This contract shall remain in force from the date first appearing above unless terminated by the City by giving the Town five years' written notice of termination. Further, whereas the Town is evaluating the possibility of obtaining its own water supply, the Town may terminate this contract upon six months' written notice to the City.

IN WITNESS WHEREOF, the following duly authorized signatures of the respective parties hereto, affixed upon duplicate copies hereof.

for Approved by Common Council of the City of Winchester the 13 day of December, 1988.

CITY OF WINCHESTER, VIRGINIA

By Edwin P. Daley
City Manager

ATTEST:

James W. Kimmel

MARK K. FLYNN
CITY ATTORNEY
CITY OF WINCHESTER
VIRGINIA

TOWN OF MIDDLETOWN, VIRGINIA

By Raymond D. Steele
Mayor

ATTEST:

Patricia J. Steele

for Approved by Middletown Town Council the 5th day of December, 1988.

MARK K. FLYNN
CITY ATTORNEY
TY OF WINCHESTER
VIRGINIA

O-2012-29

# CITY OF WINCHESTER, VIRGINIA

## PROPOSED CITY COUNCIL AGENDA ITEM

**CITY COUNCIL/COMMITTEE MEETING OF:** September 18, 2012 **CUT OFF DATE:**

**RESOLUTION** __ **ORDINANCE** _X_ **PUBLIC HEARING** __

**ITEM TITLE:** Modifications to City Code Pertaining to Utility Billing Terms and Deposits

**STAFF RECOMMENDATION:** See attached.

**PUBLIC NOTICE AND HEARING:** NA

**ADVISORY BOARD RECOMMENDATION:** NA

**FUNDING DATA:** See attached.

**INSURANCE:** NA

The initiating Department Director will place below, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda.

| DEPARTMENT | INITIALS FOR APPROVAL | INITIALS FOR DISAPPROVAL | DATE |
|---|---|---|---|
| 1. Finance | | | 9-5-12 |
| 2. City Attorney | | | 9/6/2012 |
| 3. City Manager | | | 9-10-12 |
| 4. Clerk of Council | | | |

Initiating Department Director's Signature: _____ 9/4/12 Date

APPROVED AS TO FORM:

_____ 9/6/2012
CITY ATTORNEY

CITY ATTORNEY'S OFFICE Received SEP 5 2012 WINCHESTER, VA

Revised: September 28, 2009

Winchester public services Virginia

Rouss City Hall
15 North Cameron Street
Winchester, VA 22601

Telephone: (540) 667-1815
FAX: (540) 662-3351
TDD: (540) 722-0782
Website: www.winchesterva.gov

# AGENDA ITEM MEMORANDUM

**Date: Work session – September 18, 2012**

**Subject: Modifications to City Code Pertaining to Utility Billing Terms and Deposits**

**Background and Current Situation:**

Earlier this year, the General Assembly of Virginia amended and reenacted §§ 15.2-2119 and 15.2-5139 of the Code of Virginia relating to fees for water and sewer systems. These modifications to the Code of Virginia require modifications to Chapter 29 (Utilities) of the City Code so that both are consistent.

The summary of the changes to City Code that are being required by the State so that the property owner remains ultimately responsible for the payment of the water and sewer bills for a property are:

1. In order for the City to be able to file a lien on a property due to unpaid water and sewer bills, the utility deposit must be sufficient to collateralize the locality for not less than three months of water and sewer charges. Based on current rates and a minimum usage of 3,000 gallons of water per month, the deposit amount must be increased from the current amount of $90.00 to $150.00. Effective June 1, 2013, when the next rate increase takes effect, the amount of the deposit needs to be increased to $170.00.

2. The City will no longer be able to refund the deposit to a customer who is not the owner of the property following one-year of service without a payment delinquency.

3. The City may not require a security deposit from a lessee or tenant if the lessee or tenant presents the City with a property owner authorization letter which has attached documentation showing such lessee or tenant receives need-based local, state, or federal rental assistance.

4. Any lien placed on a property shall not exceed three months of delinquent water and sewer charges.

**Recommendation:**

Adoption of the attached ordinance.

In addition, though not required by the changes to the Code of Virginia, the Public Services Department recommends that Council consider increasing the fee for disconnecting the water service due to non-payment of the bill from the current fee of $20 to $40 to more accurately reflect the actual cost of disconnecting and reconnecting the service. The current fee has not been modified since at least 2003.

**Fiscal and Policy Implications:**

These proposed modifications to Chapter 29 of City Code are required to ensure that the City retains the ability to require the property owner to be ultimately responsible for the payment of the water and sewer bills on a property.

**AN ORDINANCE TO AMEND AND RE-ENACT SECTIONS 29-16, 29-19, AND 29-20 OF THE WINCHESTER CITY CODE PERTAINING TO UTILITY BILLING TERMS AND DEPOSITS**

**WHEREAS,** the General Assembly of Virginia amended and reenacted §§ 15.2-2119 and 15.2-5139 of the Code of Virginia relating to fees for water and sewer systems; and,

**WHEREAS**, these changes enacted by the General Assembly require modifications to certain sections of the City Code so that City Code is consistent with the Code of Virginia.

**NOW, THEREFORE, BE IT ORDAINED** that Sections 29-16, 29-19, and 29-20 of the Winchester City Code is hereby amended and re-enacted to read as follows:

**SECTION 29-16. BILLING TERMS.**

a) All water and sewer bills shall be rendered on a 60-day billing cycle for residential users and a 30-day cycle for commercial and industrial users. Payment must be postmarked or received 30 days from the date of billing for residential accounts and 25 day for commercial and industrial accounts.

b) Any bill not paid by the due date or by the next regular workday if the due date falls on Saturday, Sunday or legal holiday for the office of the government of the City of Winchester, shall be assessed a 10% late payment charge.

c) Where any water and sewer bill has not been paid by the due date, the water service shall be subject to disconnection ten (10) days after the mailing of a second notice to the customer's address of record. Except as provided in paragraph (f), ~~T~~the water and sewer account, once subject to disconnection for non-payment of bill, shall be assessed a processing fee of forty~~twenty~~ dollars ($4~~2~~0.00). Service shall not be reconnected until all outstanding water and sewer bills, including a late payment charge, are paid.

d) Except as provided in paragraph (e), ~~T~~the owner of the property shall be responsible to the City of Winchester for the payment of water and sewer bills. On written request of the owner of the property, the tenant may be billed in the owner's name for water and sewer service, but this request shall not relieve the owner from responsibility. The City may place a lien on the property in the amount of up to three months of delinquent water and sewer charges, any applicable penalties and interest of such delinquent charges, and reasonable attorney fees and other costs of collection not exceeding 20 percent of such delinquent charges.

e) The owner of any property may authorize the lessee or tenant in writing to obtain water and sewer services in the name of such lessee or tenant in accordance with the applicable provisions of the Code of Virginia. Pursuant to said provisions, the City shall not require the owner to put water and sewer services in the name of the owner,

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except in the case where a single meter serves multiple tenant units, and shall not require a security deposit or a guarantee of payment from an owner of property where such authorization has been issued.

f) Unless a lien has been recorded against the property owner, the City shall not deny service to a new tenant who is requesting service at a particular property address based upon the fact that a former tenant has not paid any outstanding fees and charges charged for the use and services in the name of the former previous tenant. In addition, the City shall provide information relative to a former tenant or current tenant to the property owner upon request of the property owner. If the property owner provides the City with a request to be notified of a tenant's delinquent water bill and provides an email address, the City shall send the property owner notice when a tenant's water bill has become 15 days delinquent.

g) All water and sewer bill for the billing period ending May 1, 1999 and each month thereafter shall be computed on the rates prescribed in Sections 29-11 and 29-13.

(Ord. No. 022-2003, 6-10-03)

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**SECTION 29-19. DEPOSIT.**

Before service shall be rendered to any of the following water and sewer customers, a deposit of $150~~90~~.00 shall be paid to the City of Winchester. Effective on June 1, 2013, this deposit amount shall be $170.00.

(a) Any customer who is not the owner of the property to be served and for which the property owner has authorized the water and sewer account to be placed in the name of that individual through the signing of a Tenant Form. The deposit shall not be required if the customer has an authorization letter from the property owner agreeing to not require the deposit and also providing documentation that the customer receives need-based local, state, or federal rental assistance.

(b) Any homeowner establishing a residential account who has not had an account with the City of Winchester.

(c) Any homeowner with an existing account prior to the effective date of this Ordinance who established a new account to another location served by the City and who has been delinquent in payment of a water and/or sewer bill within the last two years.

~~An individual's deposit is transferable from one service location to another within the City's service area.~~ (Ord. No. 022-2003, 6-10-03)

**SECTION 29-20. DEPOSIT REFUND.**

When a customer that owns the property terminates service or has one year of service without delinquency, the deposit shall be refunded, without interest, by crediting it to the customer's account. Upon termination of service and after deducting any charges due to settle the customer's account with the City, the balance shall be refunded within fourteen (14) calendar days. ~~Refunds shall be made only to the individual in whose name the water and sewer was established~~. The deposit for a customer who is not the owner of the property shall only be refunded upon termination of service and after deducting any charges due to settle the customer's account. (Ord. No. 009-99, 4-13-99)

**Ordinance No. _____**

**ADOPTED by the Common Council of the City of Winchester on the ____ day of _____, 2012.**

***Witness my hand and the seal of the City of Winchester, Virginia.***

*Deputy Clerk of the Common Council*

# CITY OF WINCHESTER, VIRGINIA

## PROPOSED CITY COUNCIL AGENDA ITEM

**CITY COUNCIL/COMMITTEE MEETING OF:** September 18, 2012 **CUT OFF DATE:** __

**RESOLUTION** ___ **ORDINANCE** ___ **PUBLIC HEARING** ___ DISCUSSION__X_

**ITEM TITLE:**
Fund Balance Policy Revisions

**STAFF RECOMMENDATION:**
Adopt as presented

**PUBLIC NOTICE AND HEARING:**
N/A

**ADVISORY BOARD RECOMMENDATION:**
N/A

**FUNDING DATA:**

**INSURANCE:**
No liability assumed.

The initiating Department Director will place below, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda.

| DEPARTMENT | INITIALS FOR APPROVAL | INITIALS FOR DISAPPROVAL | DATE |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. City Attorney | AW | | 9/11/2012 |
| 6. City Manager | | | 9-12-12 |
| 7. Clerk of Council | | | |

Initiating Department Director's Signature: _____ 9-11-12
Finance Director Date

CITY ATTORNEY'S OFFICE Received SEP 11 2012 WINCHESTER, VA

**APPROVED AS TO FORM:**
9/11/2012
**CITY ATTORNEY**

Revised: September 28, 2009

# CITY OF WINCHESTER
## FUND BALANCE POLICY

*Adopted December 9, 2003 and Amended September __, 2012*

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## I. BACKGROUND AND PURPOSE

The City believes that sound financial management principles require that sufficient funds be retained by the City to provide a stable financial base at all times. To retain this stable financial base, the City needs to maintain a General Fund Balance sufficient to fund all cash flows of the City, to provide financial reserves for unanticipated expenditures and revenue shortfalls and to provide funds for all existing encumbrances.

The purpose of this policy is to provide guidance as to the composition of this General Fund Balance and a method of funding this balance.

## II. COMPONENTS OF GENERAL FUND BALANCE

The following individual items shall constitute the General Fund Balance:

A. *Non-Spendable* – the portion of the fund balance that is not in a spendable form or is required to be maintained intact.
B. *Restricted* – the portion of the fund balance that can be spent only for the specific purposes stipulated by constitution, external resource providers, or through enabling legislation.
C. *Committed* – the portion of fund balance that represents resources whose use is constrained by limitations that the government imposes upon itself at its highest level of decision making.
D. *Assigned* – the portion of fund balance that reflects a government's intended use of resources.
E. *Unassigned* – the residual classification that includes all spendable amounts not contained in the other classifications. This would grow or decrease depending on whether we have a surplus or deficit at the end of each fiscal year.

## III. FUNDING REQUIREMENTS OF COMPONENTS OF GENERAL FUND BALANCE

A. An Assigned amount shall be established each year at an amount equal to the appropriated yet unexpected funds at fiscal year end. These funds shall not be subject to current appropriations without the approval of City Council.

B. A Committed Balance shall be established at an amount equal to all non-expended Capital Outlay projects, and any re-appropriations of prior year balances.
C. An Unassigned Fund shall be established at an amount equal to 20% of the Total Governmental Fund Expenditures less any Capital Outlay projects funded with Bond Proceeds.
D. A second Committed ("Capital Reserve Account") shall be established at an amount at or above a target level of $200,000 in Fiscal Year 2013, and an interim target level of $300,000 by Fiscal Year 2014. By Fiscal Year 2015, the Fund must be maintained at or above a target level of $500,000. Use of the Fund shall occur only by appropriation of City council for pay-as-you-go capital projects consistent with Council's goals and objectives. The fund may not be used for new expanded services or for operating or recurring expenditures.

## IV. MONITORING AND FUNDING

A. The City shall annually prepare a report documenting compliance with this Policy.

1. If the City is not in compliance at this time of policy adoption, a Plan to comply with this Policy within 36 months of its adoption shall be presented to the Board.

2. If the City is not in compliance with this Policy at a time other than the adoption of this Policy, or within the first 36 months, a plan to comply with the Policy within 12 months of the first notice of non-compliance shall be presented to the Board.

B. The City shall annually demonstrate that it will comply with this Policy based on its proposed Operating and Capital Budget for each year.
C. The Capital Reserve Account will be maintained on a level at or above its current fiscal year Fund Minimum. In the event that the Fund declines below the current fiscal year Fund Minimum, it must be restored within one fiscal year.

## V. FUND BALANCES – OTHER FUNDS

Fund balances in the School Board Fund and Other Funds are encumbrances and/or reappropriation of prior year balances. These funds are otherwise funded by the General Fund with any surplus or deficits at year end reverting back to the General Fund.

Fund Balance (retained earnings) of the Enterprise Funds shall include amounts sufficient to maintain their operations without ongoing operating support from the General Fund.

Winchester
finance Virginia

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15 North Cameron Street
Winchester, VA 22601

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FAX: (540) 723-0238
TDD: (540) 722-0782
Website: www.winchesterva.gov

September 18,2012

**TITLE:** **Fund Balance Policy Revisions**

**BACKGROUND:**

City Council first adopted our fund balance (and debt service) policies in December 2003. At that time we utilized our financial accounting terminology to write and establish our policies. At that time, we referred to *reserved* and *unreserved* fund balances.

**CURRENT SITUATION**:

The Government Accounting Standards board issued statement number 54 which changes the fund balance terminology to *assigned, unassigned, committed, restricted* and *non- spendable* which are being utilized in our CAFR (FY 2011 for the first time). Definitions for these classifications can be found on page 3h of our FY 2011 CAFR. All else will remain the same with our 20% of total governmental fund expenditures less any capital outlay projects funded with bond proceeds to be in fund balance at fiscal year end. The second part of the change to this policy is a recommendation to set a policy for the $200,000 reserves for CIP projects that we incorporated into our FY 2013 budget.

**RECOMMENDATION:**

To be consistent and comply with GASB 54, we need to change our terminology to be consistent with our balance sheets and CAFR.

Regarding the current capital reserve fund, we recommend the following approach:

- Fund Minimum- The fund will be maintained at or above a target level of $200,000 in FY 2013 and an interim target level of $300,000 by FY 2014. By FY 2015 the fund must be maintained at or above a target level of $500,000
- Fund Drawdown- Use of the fund shall occur only by appropriation of City Council for pay-as-you-go capital projects consistent with Council's goals and objectives. The fund may not be used for new expanded services nor for operating or recurring expenditures.
- Fund Replenishment- The fund will be maintained on a level at or above its current fiscal year fund minimum. In the event the fund declines below the current fiscal year fund minimum, it must be restored within one fiscal year.

## FISCAL AND POLICY IMPLICATIONS:

This policy will help guide and direct City staff in the preparation of the FY 2014 annual budget coming up this fall. Also, it is always advantageous and a positive approach to have a policy set on any reserves from the Bond Rating agencies perspective. This shows fiscal control by the City of Winchester. It is important to note that once adopted, the rating agencies will expect the City to comply in full with our policies. The rating agencies view noncompliance with adopted policies as a significant credit weakness. As the City becomes more highly leveraged, the rating agencies will view adherence to strong financial management practices and policies as a leading indicator of the City's ability to weather changing financial times.

R-2012-71

# CITY OF WINCHESTER, VIRGINIA

## PROPOSED CITY COUNCIL AGENDA ITEM

**CITY COUNCIL/COMMITTEE MEETING OF:** 9/18/12 10/9/12 **CUT OFF DATE:** 9/10/12

**RESOLUTION** x **ORDINANCE** ___ **PUBLIC HEARING** ___

**ITEM TITLE:** A Resolution to designate a portion of the pavilion and shuffleboard court at Christianson Familyland in Jim Barnett Park as the site of the new skate park.

**STAFF RECOMMENDATION:** Designate the site as a skate park and open up the area to allow skateboarding during fundraising.

**PUBLIC NOTICE AND HEARING:** None required. Two public meetings were held in August to gather input from the community.

**ADVISORY BOARD RECOMMENDATION:** Unanimously endorsed the site for the skate park.

**FUNDING DATA:** Staff and a volunteer committee will seek private funds for construction. Staff requests Council designate up to $35,000 in matching funds from the Park/General Fund Balance.

**INSURANCE:** Skate park will be a skate at your own risk facility. Helmets will be required.

The initiating Department Director will place below, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The Director's initials for approval or disapproval address only the readiness of the issue for Council consideration. This does not address the Director's recommendation for approval or denial of the issue.

| DEPARTMENT | INITIALS FOR APPROVAL | INITIALS FOR DISAPPROVAL | DATE |
|---|---|---|---|
| 1. Finance Director | | | 9/11/12 |
| 2. Police Chief | | | 9/10/12 |
| 3. Risk Management/Purchasing Agent | | | 9/11/12 |
| 4. | | | |
| 5. City Attorney | | | 9/11/2012 |
| 6. City Manager | | | 9-12-12 |
| 7. Clerk of Council | | | |

Initiating Department Director's Signature: Bradley Vinson 9/11/12 Date

CITY ATTORNEY'S OFFICE Received SEP 11 2012 WINCHESTER, VA

APPROVED AS TO FORM: 9/11/2012 CITY ATTORNEY

Revised: October 23, 2009

**A RESOLUTION TO AUTHORIZE THE PARKS & RECREATION DEPARTMENT TO DESIGNATE A PORTION OF THE CHRISTIANSON FAMILYLAND PAVILION AND SHUFFLEBOARD COURT IN JIM BARNETT PARK AS A SKATE PARK**

**WHEREAS,** the City of Winchester, Virginia strives to offer its citizens with quality recreational facilities, amenities and parks; and

**WHEREAS,** the City of Winchester, Virginia and its citizens has talked for several years about constructing a skate park facility; and

**WHEREAS,** a skate park at Christianson Familyland would provide a safe and legal recreational space for skateboarders and in-line skaters to enjoy their sport; and

**WHEREAS,** the Parks & Recreation Department will prepare a request in the FY 2014 budget for public matching funds, not to exceed $35,000.00, from the Park/General Fund Balance to support the construction of the skate park; and

**WHEREAS,** the proposed skate park would be constructed with public and private contributions and be maintained by parks and recreation staff with the goal of establishing a perpetual maintenance fund to support the routine maintenance and upkeep; and

**NOW THEREFORE BE IT RESOLVED**, that the Common Council of the City of Winchester, Virginia hereby authorizes the Parks & Recreation Director to designate a portion of the pavilion and shuffleboard court at Christianson Familyland as a skate park.


WINCHESTER
Skate Pavilion
Christianson Familyland in Jim Barnett Park
http://www.winchesterva.gov/parks/skate-pavilion

# Proposed Winchester Skate Pavilion

- Goals
  - Provide a legal and safe skate venue for local skating enthusiasts
  - Bring about awareness in the community that skate parks are enjoyed by all ages and are as common across the country as traditional sports facilities
  - Construct a venue that will spark interest in skateboarding and justify the need to build new and larger skateboarding facilities throughout our community
  - Embrace and promote the sport of skateboarding.

# Reclaiming Underutilized Space

# Christianson Familyland Pavilion

- Proposed modular street skating equipment including rails, transition wall, Hubba, picnic table, stairs or ramp, skate bench and grind boxes

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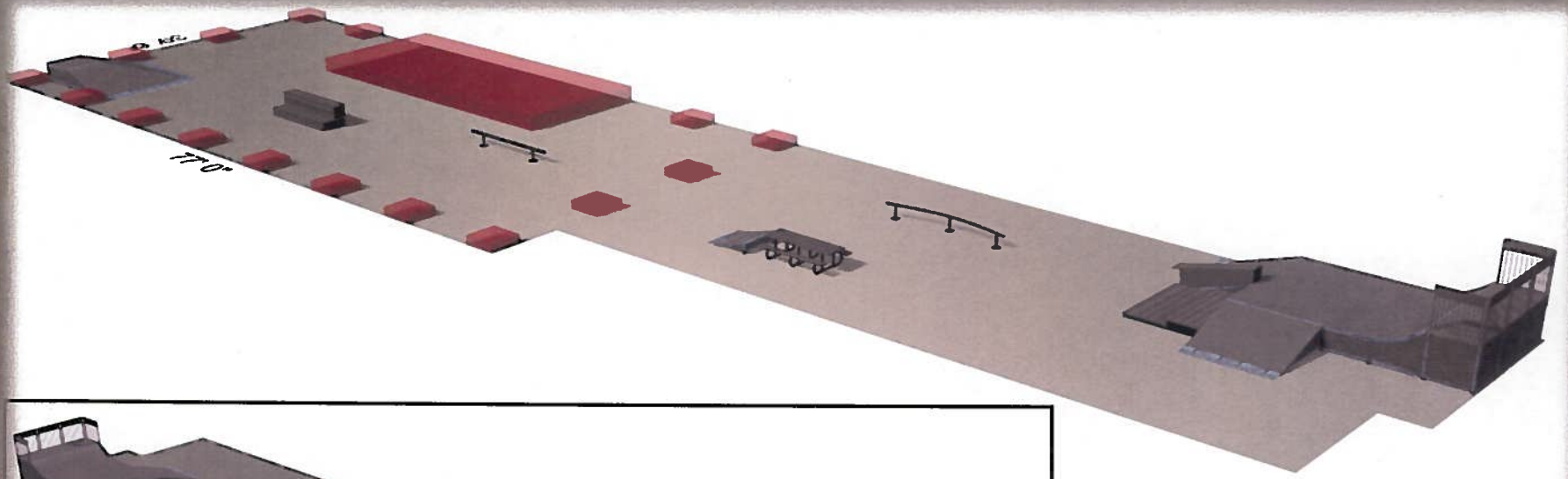
Benefits of using Familyland

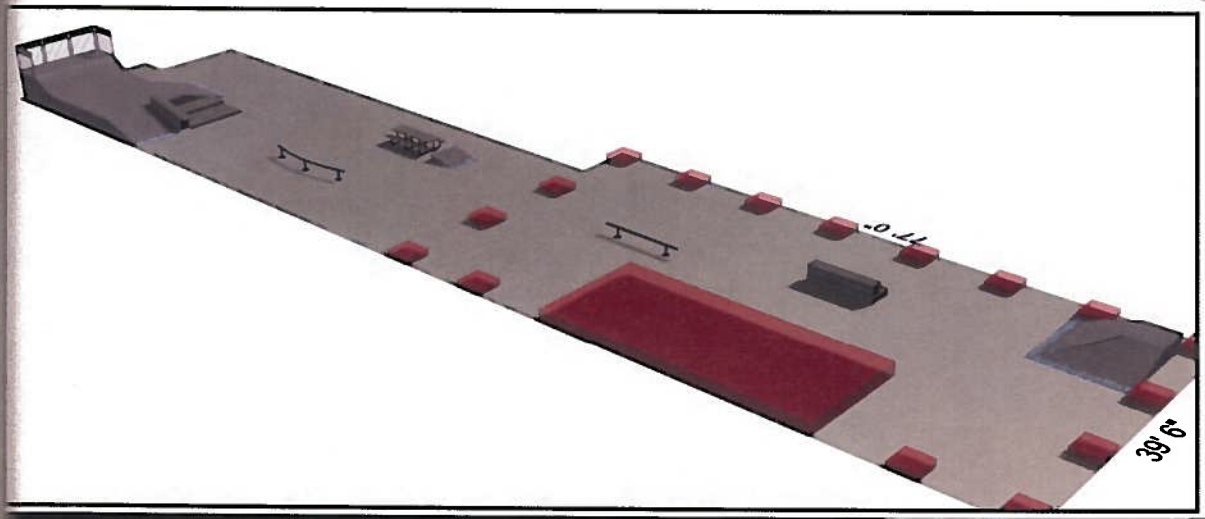
- Minimal prep needed-relocate picnic tables and benches from pavilion to concrete pad near playgrounds
- Restrooms nearby
- Highly visible and desirable location
- Less expensive because infrastructure is existing. Better use of City and taxpayer funds (nearly $90,000 less than previous estimates)
- Offers a year-round skateboarding venue
- Adequate space to grow including potential retail space

# Skate Pavilion Fundraising Plan

- Volunteer Skate Committee has developed a fundraising plan and will seek community support once project is approved by City Council.
- 6-9 month goal for fundraising.
- Estimated cost of the project: $50,000-$75,000 and includes a perpetual maintenance fund to sustain the project over time.
- Request City Council match donated funds with City funds, up to $35,000 in the FY2014 budget from the Park/General Fund Balance.

# Sample Design




City of Winchester Skate Park

SW3_144_62824-1-2

9/10/2012

SPARKS @ play

Skatewave
Modular Skatepark Systems

Winchester police department Virginia

**A Virginia Accredited Law Enforcement Agency**

Timbrook Public Safety Center
231 East Piccadilly Street
Winchester, VA 22601

Telephone: (540) 545-4700
FAX: (540) 542-1314
Website: www.winchesterva.gov

# WINCHESTER POLICE DEPARTMENT
# MONTHLY COUNCIL REPORT
# August 2012

*5 YEAR TREND FOR MAJOR CRIMES- August*

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| **THEFT** | 81 | 78 | 59 | 66 | 68 |
| **GRAND THEEFT** | 22 | 16 | 21 | 16 | 24 |
| **MVT** | 7 | 1 | 2 | 6 | 1 |
| **ROBBERY** | 3 | 4 | 1 | 0 | 1 |
| **RAPE** | 0 | 2 | 0 | 0 | 1 |
| **B&E** | 20 | 14 | 10 | 9 | 23 |

*5 YEAR TREND ENFORCEMENT -Enforcement for August-5 year trend*

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Felony Arrests | 24 | 21 | 24 | 23 | 25 |
| Misdemeanor Arrests | 138 | 95 | 170 | 198 | 128 |
| Legal Document - Felony | 59 | 63 | 16 | 29 | 50 |
| Legal Document - Misdemeanor | 126 | 170 | 168 | 147 | 135 |
| DUI Arrests | 27 | 16 | 34 | 21 | 19 |
| Incident Reports | 424 | 310 | 368 | 354 | 436 |
| Field Contacts Documented | 8 | 11 | 18 | 56 | 48 |
| Speeding - Radar | 90 | 58 | 83 | 81 | 59 |
| Speeding - Non Radar | 5 | 0 | 0 | 0 | 0 |
| Traffic Violations | 405 | 230 | 290 | 245 | 199 |
| Vehicle Crash Investigations | 68 | 61 | 66 | 66 | 55 |
| Parking Violations | 89 | 161 | 18 | 144 | 85 |

Our annual report for 2011 can be found on our website at www.winchesterpolice.org/forms/index.html and up-to-date crime maps are available at www.crimereports.com.

# MONTHLY ACTIVITY

For the Month of August 2012

| Incident Types | Structure Fire | Fire Other | ALS 1 | ALS 2 | BLS | PT Refusal | TOTALS | Mon.% Up/Dn |
|---|---|---|---|---|---|---|---|---|
| Fire | **5** | **101** | | | | | **106** | |
| EMS | | | **158** | **1** | **122** | **27** | **356** | |
| **TOT0AL Incident Types** | | | | | | | **462** | **-0.6%** |

| City Property Loss vs. Property Saved | |
|---|---|
| Fire Loss | Fire Saved |
| **$21,300.00** | **$225,005.00** |
| Other Property Loss | Other Property Saved |
| **$25,000.00** | **$4,995,000.00** |

| Resuscitation Efforts | |
|---|---|
| CPR Initiated **0** | Saved **0** |
| Respiratory Arrest **0** | Saved **0** |

| Station Runs | Number |
|---|---|
| Friendship Fire Station 1 | **163** |
| Rouses Fire Station 2 | **79** |
| Shawnee Fire Station 4 | **153** |
| South End Fire Station 5 | **210** |

| Mutual Aid | Given | Received |
|---|---|---|
| | **30** | **23** |

| Vehicles on Incidents | Number | Average |
|---|---|---|
| Fire | **290** | **2.74** |
| EMS | **620** | **1.74** |
| **TOTAL Vehicles** | **910** | **1.97** |

| Personnel on Incidents | Number | Average |
|---|---|---|
| Fire | **520** | **4.91** |
| EMS | **1309** | **3.68** |
| **TOTAL Personnel** | **1829** | **3.96** |

| Casualties | Number |
|---|---|
| Fire Service | **0** |
| Civilian | **4 (2 deaths)** |

| Total Training Hours Logged |
|---|
| **868.05** |

| Public Education | Number | | Number | |
|---|---|---|---|---|
| Smoke Detectors Installed | **3** | | | |
| Car Seats Installed | **17** | | | |
| Public Education | # of Children | **33** | # of Adults | **127** |

| EMS Revenue Recovery |
|---|
| Revenue increase of **8%** for this fiscal year to date |

| Fire and Life Safety Division | |
|---|---|
| Plan Reviews | **5/$1005.72** |
| Fire Safety inspections/follow-ups | **22/9** |
| Sprinkler/Alarm/Suppression/Site Inspections | **1/2/2/0** |
| Other Permit Related Inspections | **2 massage permit** |
| Fire Marshal Investigations | **1 fatal fire** |