Scott County
Strategic Technology Plan

Final Version
June 2010

Prepared for:
Scott County
Information Technology Department
400 West Fourth Street
Davenport, Iowa 52801

In collaboration with:
Berry, Dunn, McNeil & Parker

Scott County
Strategic Technology Plan

Final Version
Table of Contents

Version	Delivered Date	Update Reason
1	April 16, 2010	Version 1 Draft Submitted to Scott County for Review
2	April 28, 2010	Version 2 Draft Updated with Scott County Project Team Feedback
3	May 6, 2010	Final Draft Submitted to the County
Final	June 16, 2010	Final Version Submitted Following County Board Approval

Table 1: Version History of the Plan

Acknowledgements

Berry, Dunn, McNeil & Parker would like to thank the employees of Scott County for collaboratively working with us to develop this Strategic Technology Plan for the County. Special thanks go to the Project Team members listed below, whose time and commitment were essential to the development of this plan.

- ❖ Dee Bruemmer, County Administrator

- ❖ Matt Hirst, Information Technology Director

- ❖ Sarah Kautz, Budget Manager

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

Finally, we would like to thank the participants in the benchmarking research study. Respondents provided valuable information that was utilized in both the Technology Assessment and this Strategic Technology Plan. The respondents were:

- ❖ Wayne Rovey, IT Director, Sangamon County, Illinois

- ❖ Russell Haupert, IT Director, Peoria County, Illinois

- ❖ Jean Schultz, IT Director, Johnson County, Iowa

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 Scott County provide services to the community.

Executive Summary

This section of the report contains an executive level summary of the overall Strategic Technology Plan.

In 2009, Scott County issued a request for proposal to acquire consulting services to perform a Technology Assessment and develop a Five-Year Strategic Technology Plan. More specifically, the County was looking for a Strategic Plan that would guide the direction of the County's technology with specific recommendations for projects and associated costs, timelines, and action plans to help the County achieve its mission and business goals. The County selected Berry, Dunn, McNeil & Parker (BDMP) to assist the County with conducting a Technology Assessment and to work collaboratively with the County to develop this Strategic Technology Plan.

Scott County has long been committed to technology planning. In 2000, the County worked with an outside firm to complete the 2000 Technology Strategic Plan. In 2005, the County utilized internal resources to develop the 2005 Updated Technology Strategic Plan. This document was largely based on the 2000 Strategic Plan, and identified areas where the recommendations of the original plan were met and areas for continued improvement. The initiation of the current Strategic Technology Planning Project resulting in this plan represents the County's continued commitment to technology planning.

The strategic technology planning project began in December of 2009 and concluded in April 2010. Since County-wide support for technology initiatives that would be developed as a result of the planning process is important, the County felt that meeting with representatives from every department would be imperative in the process of developing the Strategic Plan. As a result, the Strategic Technology Plan was developed collaboratively among BDMP, the County Project Team, and County Department Heads.

During fact-finding meetings with department heads, issues and needs related to technology used throughout the County were identified. The interviews allowed department heads to identify County-wide strategic issues that are impacting their departments. A strategic issue is a challenge, problem, or need that should be addressed by a project or initiative identified in the strategic technology plan.

Each strategic issue has been assigned to one of three areas: business environment, technology infrastructure, or management and governance. The strategic issue areas are further defined as follows:

❖ **Business Issues (B):** Business Issues are related to problems with the way that technology is used by internal and external customers of the County's departments.

❖ **Technology Issues (T):** Technology Issues are related to problems with the way that technology is used to assist with internal day-to-day business processes of the County's departments.

❖ **Management and Operations Issues (M):** Management and Operations Issues are related to how the County approaches technology planning, acquires new technology (hardware and software), and how it manages the technology it has in place today.

The resulting list of prioritized strategic issues, documented in the table below, guided the development of the initiatives identified in Section 3.0.

Issue Number	Issues Description	Score	Priority
	Scott County Strategic Issues		
B8	A significant number of important County business functions rely on manual processes.	48	Critical
B14	A budgeting process that supports forecasting, salary and benefit analysis as well as management reporting does not exist.	46	Critical
B3	Limited integration capabilities of County-developed legacy financial system.	44	Critical
B4	The County's current financial and HR systems do not support accepted governmental accounting and human resource best practices.	44	Critical
M13	The SECC will impact the County's current IT function.	44	Critical
M3	Lack of security focused resource in IT department.	43	Critical
B1	Scanning, storage, indexing, and retrieval of paper based and electronic documents in the current environment is inefficient for many County departments.	42	Critical
T1	Some production applications/systems are unsupported.	42	Critical
T6	The County's telephone system is outdated.	42	Critical
M2	No disaster recovery/business continuity plan currently exists.	41	Critical
M7	A process for managing and prioritizing IT projects does not exist.	41	Critical
M10	Executive level performance management and financial reporting and monitoring capabilities do not exist.	41	Critical
T2	No centralized monitoring of network and server systems.	40	Critical
M1	There is only one dedicated help desk resource in the IT Department.	39	High
T3	Some network infrastructure is outdated.	38	High
B2	Lack of online payment capabilities throughout the County.	35	High
B13	The current fixed asset system is not integrated with the financial system and requires an extensive amount of manual maintenance to keep current.	34	High
M6	Many IT functions and processes are not documented.	34	High
M15	Capital funding for a laptop/portable computer replacement program does not exist in the County.	34	High
M4	The Main Distribution Frame (MDF) location is not ideal.	33	High
T7	County-supplied mobile telephones are not reliable.	32	High
M9	The County has a significant number of in-house developed software applications and relies on custom software development.	32	High
B5	Portions of the County's payroll process are still paper based.	31	High
B10	The County's purchasing system needs to be updated.	31	High
M5	The Main Distribution Frame (MDF) networking closets lack sufficient access controls.	31	High

Scott County Strategic Issues			
Issue Number	Issues Description	Score	Priority
B7	Developing and managing meeting agendas and recording meeting minutes and resolutions for posting to the County's website is difficult.	30	High
T4	The County does not utilize a patch management system for deploying Microsoft or other critical patches.	30	Medium
B9	The current facilities management system is outdated.	29	Medium
T5	No automated software deployment mechanism.	29	Medium
B12	The Planning Department does not have access to critical applications while in the field.	27	Medium
T8	Many County staff reported that the County Internet connection is slow and the Web filtering software occasionally prohibits access to critical websites.	27	Medium
M12	IT related training for County end users is limited.	27	Medium
T10	Wireless network connectivity does not exist in all County buildings.	26	Medium
B15	A standard County-wide credit card acceptance policy does not exist.	25	Medium
B11	The County Health Department does not have a system to track animal bite information.	24	Medium
M8	Many departments reported they experience difficulty in having their COTS products supported by outside vendors due to Citrix and firewall access issues.	24	Medium
M11	Some County departments have purchased software or hardware without the involvement of IT, which has lead to support and maintenance issues.	24	Medium
M14	A public wireless internet policy does not exist.	23	Medium
B6	The County does not have a process or system for scheduling meeting spaces.	19	Medium
T9	Some County department-specific servers are located in the department they serve.	19	Medium

Table 02: Prioritized Strategic Issues

Department heads were asked to review the prioritized list of strategic issues and complete initiative planning templates to document technology projects that would address the strategic issues. BDMP also developed an initiative list that was combined with those submitted by County Department Heads. A "Projects and Initiative Work Session" was facilitated by BDMP and allowed Department Heads 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 Technology Plan.

The table below summarizes the final list of projects that was developed as a result of the facilitated work sessions and overall recommendations by BDMP. The detail of each initiative is contained in section 3.4 of the report.

	Prioritized Planned Strategic Initiatives		
ID	**Initiative Summary**	**Score**	**Page**
G	Enterprise Resource Planning System	93	21
A	Document Management System	93	25
Q	IT Department Organization	92	27
T	IT Department Policies and Procedures	90	30
F	eGovernment Capabilities	87	34
R	Disaster Recovery/Business Continuity Plan	77	37
H	Facility Management System	75	39
E	Computer Replacement Program	73	41
B	Document IT Resource Utilization Plan for Scott Emergency Communications Center	73	43
Y	IT Training	65	45
I	Laptop Computers for Employee Use	65	47
U	Transition County-Developed Applications to Supported Development Environments	60	49
C	Electronic Approval of Timesheets	60	51
X	Asset Management Vehicle Location	58	53
S	Establish Controls of the Main Distribution Frame	55	55
J	Credit Card Policy	52	57
P	Wireless Expansion and Policies	52	60
V	Health Department System	47	62
D	County Meeting Place Scheduling System	47	64
O	Network and Internet Speed Assessment	43	66

Table 03: Prioritized Planned Projects and Initiatives

Scott County has historically planned for significant investments in the development on-going support of their technology environment. Annual IT planned expenditures are regularly approaching 2.5 million dollars. However, in recent years actual spending has typically been lower than planned, resulting in spending levels of a little over 2.5 percent of the total County budget. The table below summarizes the overall future IT spending based on the budget amounts identified for the projects in the plan.

Future IT Spending Levels						
	Year 1 FY2012	Year 2 FY2013	Year 3 FY2014	Year 4 FY2015	Year 5 FY2016	5 Year Total
In-Progress Capital Projects Budget	400,000	-	-	-	-	400,000
Strategic Initiatives Capital Budget	508,000	1,100,000	725,000	605,000	400,000	3,338,000
Total Capital Budget	**908,000**	**1,100,000**	**725,000**	**605,000**	**400,000**	**3,738,000**
Operational Initiatives	215,000	225,000	140,000	140,000	115,000	835,000
Estimated Operational Budget	1,636,964	1,636,964	1,636,964	1,636,964	1,636,964	-
Additional Operational Funding to Support Prior Year Capital Projects	146,250	115,000	205,000	294,000	324,400	-
Total Operational Budget	**2,053,214**	**1,931,964**	**2,046,964**	**2,070,964**	**2,076,364**	**-**
Total IT Spending	**2,961,214**	**3,031,964**	**2,771,964**	**2,675,964**	**2,476,364**	**-**

Table 04: Future IT Spending Levels

Based on the budget amounts for the plan initiatives, the table below summarizes the percentage of IT spending compared to the overall County budget over the life of the plan.

Future IT Spending Ratios					
	Year 1 FY2012	Year 2 FY2013	Year 3 FY2014	Year 4 FY2015	Year 5 FY2016
Total IT Spending	2,961,214	3,031,964	2,771,964	2,675,964	2,476,364
County Budget	72,628,952	72,628,952	72,628,952	72,628,952	72,628,952
IT Spending as a Percent of Total County Budget	4.07%	4.17%	3.82%	3.68%	3.41%

Table 05: Future 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 5 percent. 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 throughout the five-year planning horizon.

The Strategic Plan will greatly impact the operations of the County. Planning, selecting, deploying, and managing improved systems and service delivery mechanisms will require strong leadership and clear strategic and tactical plans. It will also require comprehensive, and where reasonable, community needs assessments to help identify the most important technology related County challenges.

Once new technologies are implemented, the County will need to actively communicate those services and their benefits to both internal and external stakeholders. New technology services create significant opportunities to change how the County manages daily operations. The County must plan for significant business process changes that streamline operations and focus on using technology to improve customer service.

The County has taken the first step to plan, fund, and implement an IT Strategic Plan designed to address the needs of the County. The next goal of this project will be more difficult for the County to attain: it must now adopt the plan and carry-out regular plan maintenance with every department adopting and participating in County-wide IT governance. A successful technology improvement plan is as much about successfully implementing a continuous planning process as it is about developing a written plan.

1.0   Introduction

This section of the report describes the background and objectives of this project and technology in the County, the format of the report, and the work performed to develop the report.

1.1   Project Background

In August of 2009, Scott County issued a request for proposal to acquire consulting services to perform a Technology Assessment and develop a Five-Year Strategic Technology Plan. More specifically, the County was looking for a Strategic Plan that would guide the direction of the County's technology with specific recommendations of costs, timelines, and in some cases products. The County selected Berry, Dunn, McNeil & Parker (BDMP) to assist with County with conducting the Technology Assessment and to work collaboratively with the County to develop the Strategic Technology Plan.

As part of the strategic planning process, BDMP developed a Technology Assessment of five focus areas, as requested by the County. These focus areas were:

❖ Enterprise Application Architecture

❖ Internet Access and Development

❖ LAN/WAN Network

❖ Organization Structure

❖ Technology Project Management

The Technology Assessment was delivered to the County in March of 2010. Findings and recommendations from the assessment became the foundation for many of the strategic initiatives presented in this plan.

Strategic plans that are not regularly reviewed and updated or were not developed with the involvement of the appropriate stakeholders can lead to a potential lack of organizational wide support for information technology procurement. A critical objective of the strategic planning process to develop this plan was to involve all County Department Heads in order to gather input from many different stakeholders and to gain buy-in for the strategic planning process. Understanding the process undertaken to create this plan will be crucial in updating the plan in coming years.

1.2   Technology Planning Background

Scott County has long been committed to technology planning. In 2000, the County worked with an outside firm to complete the 2000 Technology Strategic Plan. In 2005, the County utilized internal resources to develop the 2005 Updated Technology Strategic Plan. This document was largely based on the 2000 Strategic Plan and identified areas where the recommendations were met and areas of continued room for improvement.

The year 2000 Plan presented a 24-phase method of implementing recommendations. By the year 2005, twelve of the phases were complete, three were nearing completion within six

months, and five were in progress.[1] Some of the major accomplishments in that five year timeframe included the implementation of a Technology Oversight Board and a Help Desk, establishment of technology standards for hardware and software, multiple network upgrades, and other items.

The initiation of the current Strategic Technology Planning Project resulting in this plan represents the County's continued commitment to technology planning.

1.3   Report Format

This plan is comprised of four primary sections, as described below:

1. **Introduction.** This section of the plan describes the background of the project, the background of technology planning in the County, the plan format, and the work performed to develop the plan.

2. **Planning Framework.** This section of the plan describes the considerations in the development of the Strategic Plan, including the organization and governance of the County, the current technology environment, the prioritized list of strategic issues, the mission and goals of the County and IT Department, and considerations as a result of the benchmarking research conducted during the Technology Assessment.

3. **County-Wide Technology Initiatives.** This section of the plan provides the detail of all County Initiatives, presents the overview of the format of each initiative, and describes the Prioritized Plan Initiatives.

4. **Implementing the Technology Plan.** This section of the plan describes the funding aspects of the recommended plan Initiatives and how the plan will be governed going forward.

1.4   Work Performed

The County retained Berry, Dunn, McNeil & Parker to facilitate the development of a Five Year Strategic Technology Plan. The project began in December of 2009 and concluded in April of 2010. Given the importance of receiving County-wide support for technology initiatives that would be developed as a result of the planning process, the County felt that meeting with representatives from every department would be imperative in the process of developing the Strategic Plan. As such, the Strategic Technology Plan was developed collaboratively among BDMP, the County Project Team, and County Department Heads.

Representatives from each of the departments listed below participated in the project:

Number	Department
1	Administration
2	County Assessor
3	County Attorney

---

[1] Scott County Iowa Technology Assessment Report, Section 3: Implementation Plan, Updated April 2005

Number	Department
4	County Auditor
5	Community Services
6	Conservation
7	Facility Support Services
8	Health Department
9	Human Resources
10	Information Technology
11	Juvenile Detention
12	Planning and Development
13	County Recorder
14	Scott Electronic Communications Center
15	Secondary Roads
16	Sheriff's Office
17	County Treasurer
18	County Board

Table 06: Department Participation List

During the initial stages of the project, BDMP requested background documentation in order to better understand the current environment at the County. BDMP also issued a strengths, weaknesses, opportunities and threats (SWOT) worksheet to all departments to complete prior to the first onsite visit. After review and analysis of this preliminary information, BDMP facilitated work sessions with Department Head representatives from each County functional area. These work sessions allowed participants to identify County-wide strategic issues as well as opportunities to leverage technology to meet their business objectives.

Interim findings included a summarized list of technology strategic issues identified by both BDMP and the County. A strategic issue is a challenge or problem faced by the County 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 BDMP 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 2.3 of this plan.

Department Heads 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. BDMP also developed a list which was combined with those initiatives submitted by County Department Heads. The "Projects and Initiative Work Session" facilitated by BDMP allowed Department Heads 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 information gathered from County stakeholders, the results of work sessions, research activities, and existing documentation was used to create this plan. Active involvement on the part of Department Heads will be necessary to continually update and refine the plan over the life of the plan. Section 4.0 of this plan describes the recommendations for maintaining and governing the plan.

2.0   Planning Framework

This section of the report describes the current organization and technology environment in the County and presents the list of strategic issues that was documented as a result of conducting this project. Also described in this section are the mission, vision, and goals for the Strategic Technology Plan, and considerations from the benchmarking research conducted with three counties similar in size to Scott County.

2.1   County Governance and Organization

Scott County has been organized as a County Board-County Administrator form of government since 1979. At that time, the Administration Department was established to "bring a professional management to county government."[2] The department serves many functions including acting as a liaison between the Board and County departments, advising the Board, and supervising all appointed Department Heads.

There are 16 departments in the County. Five of these departments are lead by the following elected officials: County Attorney, Auditor, Recorder, Sheriff, and Treasurer. The remaining 11 departments are lead by appointed Department Heads overseen by the County Administrator. Six departments are advised by specialized boards: Board of Health, Conservation Board, Board of Adjustment, Zoning Commission, Mental Health Planning Council, and the Veterans Commission.

2.2   Current Technology Environment

The current technology environment in Scott County was studied in relation to five focus areas as part of the Technology Assessment conducted by BDMP and delivered to the County in March of 2010. Findings and recommendations related to these focus areas were considered in the development of this Plan. The Assessment should be referenced for detailed information of these areas; however, high level descriptions are provided in the following sub-sections.

2.2.1. Enterprise Application Architecture

The IT Department currently uses Track-IT software to manage their average volume of 1,600 user contacts per quarter resulting in 400 work orders. This software does have limitations, and so data that would aid planning and managing of resources is not available. Similarly, costs are not currently allocated to departments in the County. Nearly all IT related costs are a part of the IT budget, but some remain within department budgets.

Scott County does not utilize any standard enterprise-wide business workflow technologies. In some cases, these technologies are used within departments, such as the case in GIS.

Document management in the County is conducted to the extent that paper based documents are stored electronically. The Cannon ImageWare software currently in place has limitations such that documents are not able to be easily searched.

Appendix E of this Plan contains a complete inventory of the applications in use in the County. Many of these applications are the product of custom development ongoing in-house. In some

---

[2] Scott County Website, www.scottcountyiowa.org, Administration: Role of the County Administrator

cases, these applications are developed in environments that are no longer supported, or may soon no longer be supported, such as the case with Zim. The IT Department is fully aware of these approaching situations, and is actively working to transition applications to more widely used environments.

2.2.2. Internet Access and Development

Scott County currently processes requests for information from the public without a formalized method. Requests are often routed to individual departments, or to the IT Department to fulfill. Conversely, updates to the County website are not handled by individual departments. This presents challenges as there is a disconnect between the information requested, and the ability of departments to post this information so that it is readily available on the County website.

Credit cards are accepted in three departments: Treasurer, Recorder, and Conservation. Additionally, the Treasurer and Recorder offices accept online payments through the State Treasurer Association's system. The County lacks a standard credit card policy for how the associated credit card fees will be handled, the types of cards accepted, and other policies to ensure credit cards are accepted consistently, with proper compliance and controls.

2.2.3. LAN WAN Networks

The Local Area Networks (LAN) and Wide Area Networks (WAN) in the County both utilize hub-and-spoke topology. In the LAN, most server and networking infrastructure is interconnected via 1 Gbps connections. It is estimated, however, that 90% of this infrastructure has met either end of life or end of support status with Cisco. The WAN connects six locations via single point-to-point T1 connections. Additionally, there are 12 IPSEC VPN connections to various sites in the County. The County uses CommValut to perform disk-to-disk backup and de-duplication operations before the data is written to tape.

The County is in the process of furthering server, application, and desktop virtualization where appropriate. Four servers are currently virtualized using VMWare vSphere 4 technology that is setup in a high availability, cluster configuration.

2.2.4. Organization Structure

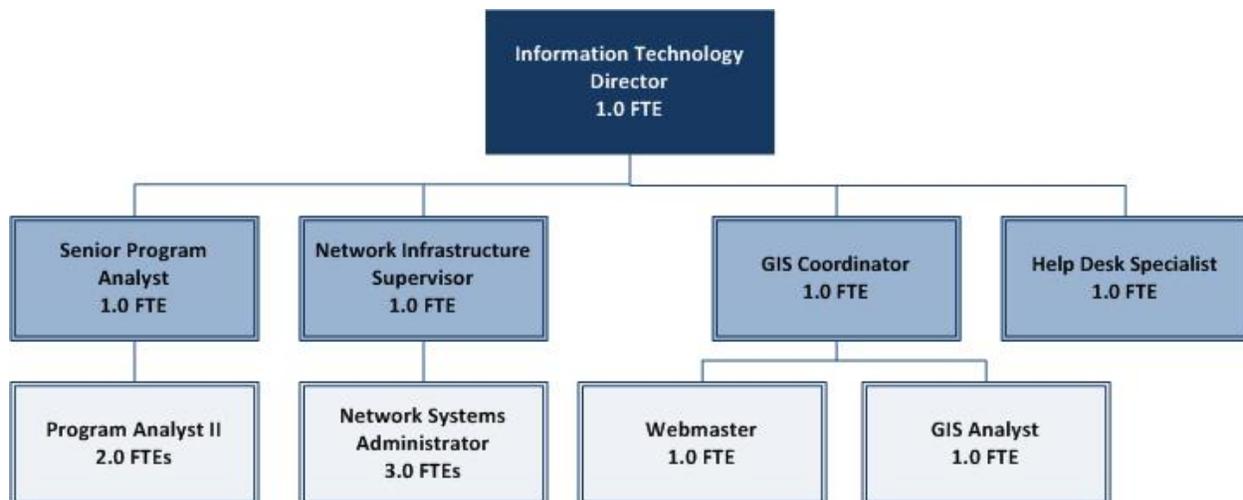The organization structure of the IT Department is depicted in Figure 01 below.

Figure 01: IT Department Organization Structure

Twelve full-time-equivalent (FTE) employees comprise the IT Department. The distribution of these employees is depicted below:

IT Department FTE Distribution			
Position	FTEs	Position	FTEs
IT Director	1	Geographic Information Systems	2
Help Desk	1	Programming Analytics	3
Webmaster	1	Network Administration	4

Table 06: IT Department Distribution

As the Scott Emergency Communications Center goes on-line, two additional FTEs will be added to the IT Department. One of these FTEs is currently slated as a help desk resource.

2.2.5. Technology Project Management

In the current environment, the IT Department is responsible for managing, overseeing, and ensuring success of all IT projects in the County. In some cases, departments will begin an IT project without the involvement of IT and subsequently request IT assistance as the project progresses, placing a great deal of strain on IT resources. Currently, there is no formalized process for selecting and prioritizing IT projects important to the County. Additionally, there are no formalized methods to track projects or report on project performance. 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 rather than strategically planning, selecting, and prioritizing projects.

The IT Department recognizes the need to develop and implement technology project management standards and methodologies at the County and as demonstrated by this Strategic Planning Project, desires to make improvements in the areas of technology project management.

2.2.6. Additional Areas

In addition to the five focus areas of the Technology Assessment, there are factors in place in the County that were considered in the development of this plan that were not analyzed as part of the scope of the Assessment, however these factors are described at various points in the strategic initiatives in section 3.4.

2.3 County-Wide Strategic Issues

During fact-finding meetings with department heads, issues and needs related to technology were identified. The interviews allowed department heads to identify County-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 County that relates to the use and/or management of technology. This list of strategic issues was reviewed and discussed as part of the "prioritization work session" that included representatives from each County department. As a result of this work session, the strategic issues were confirmed and prioritized.

These priorities provide high-level guidance from the County's perspective to determine when each issue should be resolved during the timeframe of the plan. The priority ranking identified when the County felt the strategic issues should be addressed over the planning horizon and is described below:

- ❖ **Critical:** Should be addressed during the first year of the Plan;

- ❖ **High:** Should be addressed during years 2 and 3; and

- ❖ **Medium:** Should be addressed in years 4 and 5.

Participants in the work session scored each issue on a number scheme with a 3 standing for Critical issues, a 2 for High, and a 1 for Medium. Among the final scores, higher numbers represent higher priority issues.

Each strategic issue has been allocated to one of three functional areas: the business environment, the technology infrastructure, and management and governance. The list of strategic issues is organized based on these categories, further defined below:

- ❖ **Business Issues (B):** Business Issues are related to problems with the way that technology is used by internal and external customers of the County's departments.

- ❖ **Technology Issues (T):** Technology Issues are related to problems with the way that technology is used to assist with internal day-to-day business processes of the County's departments.

- ❖ **Management and Operations Issues (M):** Management and Operations Issues are related to how the County approaches technology planning, acquires new technology (hardware and software), and how it manages the technology it has in place today.

The resulting list of prioritized strategic issues, documented in the table below, guided the development of the initiatives identified in Section 3.0.

Scott County Strategic Issues			
Issue Number	Issues Description	Score	Priority
B8	A significant number of important County business functions rely on manual processes.	48	Critical
B14	A budgeting process that supports forecasting, salary and benefit analysis as well as management reporting does not exist.	46	Critical
B3	Limited integration capabilities of County-developed legacy financial system.	44	Critical
B4	The County's current financial and HR systems do not support accepted governmental accounting and human resource best practices.	44	Critical
M13	The SECC will impact the County's current IT function.	44	Critical
M3	Lack of security focused resource in IT department.	43	Critical
B1	Scanning, storage, indexing, and retrieval of paper based and electronic documents in the current environment is inefficient for many County departments.	42	Critical

	Scott County Strategic Issues		
Issue Number	Issues Description	Score	Priority
T1	Some production applications/systems are unsupported.	**42**	**Critical**
T6	The County's telephone system is outdated.	**42**	**Critical**
M2	No disaster recovery/business continuity plan currently exists.	**41**	**Critical**
M7	A process for managing and prioritizing IT projects does not exist.	**41**	**Critical**
M10	Executive level performance management and financial reporting and monitoring capabilities do not exist.	**41**	**Critical**
T2	No centralized monitoring of network and server systems.	**40**	**Critical**
M1	There is only one dedicated help desk resource in the IT Department.	**39**	**High**
T3	Some network infrastructure is outdated.	**38**	**High**
B2	Lack of online payment capabilities throughout the County.	**35**	**High**
B13	The current fixed asset system is not integrated with the financial system and requires an extensive amount of manual maintenance to keep current.	**34**	**High**
M6	Many IT functions and processes are not documented.	**34**	**High**
M15	Capital funding for a laptop/portable computer replacement program does not exist in the County.	**34**	**High**
M4	The Main Distribution Frame (MDF) location is not ideal.	**33**	**High**
T7	County-supplied mobile telephones are not reliable.	**32**	**High**
M9	The County has a significant number of in-house developed software applications and relies on custom software development.	**32**	**High**
B5	Portions of the County's payroll process are still paper based.	**31**	**High**
B10	The County's purchasing system needs to be updated.	**31**	**High**
M5	The Main Distribution Frame (MDF) networking closets lack sufficient access controls.	**31**	**High**
B7	Developing and managing meeting agendas and recording meeting minutes and resolutions for posting to the County's website is difficult.	**30**	**High**
T4	The County does not utilize a patch management system for deploying Microsoft or other critical patches.	**30**	**Medium**
B9	The current facilities management system is outdated.	**29**	**Medium**
T5	No automated software deployment mechanism.	**29**	**Medium**
B12	The Planning Department does not have access to critical applications while in the field.	**27**	**Medium**
T8	Many County staff reported that the County Internet connection is slow and the Web filtering software occasionally prohibits access to critical websites.	**27**	**Medium**
M12	IT related training for County end users is limited.	**27**	**Medium**
T10	Wireless network connectivity does not exist in all County buildings.	**26**	**Medium**
B15	A standard County-wide credit card acceptance policy does not exist.	**25**	**Medium**
B11	The County Health Department does not have a system to	**24**	**Medium**

Scott County Strategic Issues			
Issue Number	Issues Description	Score	Priority
	track animal bite information.		
M8	Many departments reported they experience difficulty in having their COTS products supported by outside vendors due to Citrix and firewall access issues.	24	Medium
M11	Some County departments have purchased software or hardware without the involvement of IT which has lead to support and maintenance issues.	24	Medium
M14	A public wireless internet policy does not exist.	23	Medium
B6	The County does not have a process or system for scheduling meeting spaces.	19	Medium
T9	Some County department-specific servers are located in the department they serve.	19	Medium

Table 07: Prioritized Strategic Issues

2.4 Mission and Goals

The following sections outline the mission and goals of the County and the Information Technology Department. These guiding principles were developed by the Project Team and BDMP as well as the County Administrator during the course of the Project.

Mission:

A mission statement is a written statement of purpose that is used to communicate why an organization exists. It serves to guide business processes and decisions and the interaction with others. Understanding the overall mission of both Scott County and the Information Technology Department helps to guide the development of initiatives intended to solve the information technology issues that may exist at the County. The County's mission is demonstrated by its philosophy statement depicted in the table below.

Scott County Philosophy Statement
We serve our Citizens with P.R.I.D.E.: - **P**rofessionalism, Doing It Right; - **R**esponsiveness, Doing It Now; - **I**nvolvement, Doing It Together; - **D**edication, Doing It with Commitment; and - **E**xcellence, Doing It Well.

Table 08: Scott County Philosophy Statement

IT Department Mission Statement
The Scott County Information Technology Department mission is to provide dependable and efficient data and voice technology to County employees. IT strives to accomplish this mission by researching, implementing, and maintaining innovative computer and telephone hardware solutions and by researching, implementing, and maintaining innovative user-friendly software systems to address County business process requirements. IT additionally strives to further Scott County objectives by informing, educating and empowering County employees with technical knowledge and abilities.

Table 09: IT Department Mission

Goals:

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

Scott County Goals	
1	Financially Sound County Government
2	Growing County
3	Healthy, Safe Community
4	Service Excellence with P.R.I.D.E.
5	Regional Leadership
6	Leader as a Sustainable County

Table 10: Scott County Goals

2.5   Benchmarking Research Considerations

As part of the Technology Assessment BDMP prepared for the County, three counties similar in size to Scott County were contacted in order to better understand and gauge the breadth and depth of Scott County's current IT investment relative to these other localities. Appendix B contains the summary table of the research responses of each county contacted and Appendix C contains the contact information for the respondents in each county.

The responses and information gathered assisted in the development of this Strategic Plan and were incorporated as points of reference in various projects and initiatives. Some of the considerations resulting from the research included the organization of the IT Department, IT related funding, and IT governance topics.

3.0 County-Wide Technology Initiatives

This section of the plan summarizes all initiatives developed throughout the planning effort and describes how the list of prioritized planned initiatives was developed. The section includes an overview of the form used to present initiatives and provides the completed descriptions for all initiatives developed for the Strategic Technology Plan.

3.1 Strategic Initiatives Development

The table below summarizes all of the preliminary initiatives developed collaboratively among BDMP and the County following the Strategic Issue Prioritization Work Session. In addition to those that were developed by BDMP, each Department Head submitted multiple projects and initiatives. This is the preliminary draft list and is presented to demonstrate the entire breadth of initiatives identified.

Strategic Initiatives		
ID	**Initiative Summary**	**Strategic Issue(s)**
A	Document Management System	B1
B	Document IT Resource Utilization Plan for Scott Emergency Communications Center	M13
C	Electronic Approval of Timesheets	B5
D	County Meeting Place Scheduling System	B6
E	Laptop Replacement Program	M15
F	eGovernment Capabilities	B2, B7, B8
G	Enterprise Resource Planning System	B3, B4, B8, B10, B13, B14, M10
H	Facility Management System	B8
I	Laptop Computers for Employee Use	B12
J	Expand Credit Card Acceptance and Develop Related Policy	B15
K	Develop and Implement Network Monitoring Procedures	T2
L	Update Network Infrastructure	T1, T3
M	Develop and Implement Patch Management Plan and Procedure	T4
N	Update County Telephone System	T6, T7
O	Server Consolidation	T5, T9
P	Network and Internet Speed	T8
Q	Wireless Expansion and Policies	T10, M14
R	IT Department Organization	M1, M3

Strategic Initiatives		
ID	**Initiative Summary**	**Strategic Issue(s)**
S	Disaster Recovery/Business Continuity Plan	M2, M6
T	Relocate Main Distribution Frame with Appropriate Access Controls	M4, M5
U	IT Department Policies and Procedures	M6, M7, M8, M11, M12
V	Transition Outdated County-Developed Applications to Supported Development Environments	M9
W	Health Department System	B11
X	Management of Legislation and Public Records	B1, B7, B8
Y	"Lifecycle" Employee/HR System; Integration of NeoGov, SuccessFactors, Retain FML Tracking	B3, B5, B8, B9
Z	Develop an Information Management System for Juvenile Detention	B1, B8
AA	Asset Management Vehicle Location	M13
BB	Focus on Securities	M3
CC	Contract/Agreement Tracking System	B1, B8, M10
DD	IT Training	M1, M12
EE	Technology Advisory Committee	M7
FF	Technology Support 24 Hours a Day, 7 Days a Week	M1

Table 11: Preliminary List of Strategic Initiatives

The final list of projects and initiatives described in Section 3.4 of this plan is a result of the Project and Initiatives Work Session facilitated by BDMP with the County Project Team and County Department Heads. In the work session, the preliminary projects and initiatives were discussed, confirmed, edited, and in some cases combined. It was identified that K and M could be combined, along with X and F, Y and G, BB and G, CC and G, EE and U, and FF to R. Six projects and initiatives were also determined to be currently in progress, as depicted in table 12 below.

Strategic Initiatives in Progress	
ID	**Initiative Summary**
K	Develop and Implement Network Monitoring Procedures
L	Update Network Infrastructure
M	Develop and Implement Patch Management Plan and Procedure
N	Update County Telephone System
O	Server Consolidation
Z	Develop an Information Management System for Juvenile Detention

Table 12: Strategic Initiatives Currently in Progress

The strategic initiatives that were considered "in progress" have funding allocated to the project. These need to be evaluated in their impact on and ability to support the Strategic Technology Plan. In addition, planning needs to be conducted to ensure they are adjusted as necessary as the plan evolves. These considerations are discussed in Section 4.3.

At the end of the work session, 20 strategic initiatives remained and each department was asked to choose eight that they thought should be addressed in the first two years of the Strategic Plan. The top six chosen projects or initiatives were determined to be very high, the next seven were determined to be high, and the final seven were determined to be of medium priority. This ranking of each project or initiative was given a weight of 25% towards the final prioritization.

The input from County Department Heads 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. This score was calculated by adding the value of each issue after assigning a 3 to each critical issue, a 2 to each high priority issue, and a 1 to each medium priority issue that was addressed. Please refer to section 2.2 of this plan for the priorities of each strategic issue, and table 11 above for the strategic issues each project or initiative addressed.

The remaining 50% of the overall score for each project initiative was determined by BDMP and confirmed by the County Project Team. Thirty 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 10%, and was ranked as easy, medium or hard. The final 10% 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 table of these categories is contained in table 13 and also depicted in figure 02 below.

Strategic Initiatives Weighted Scoring Categories				
County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
25%	25%	30%	10%	10%
Very High	Very High	High	Easy	Established
High	High	Medium	Medium	Leading Edge
Medium	Medium	Low	Hard	Bleeding Edge

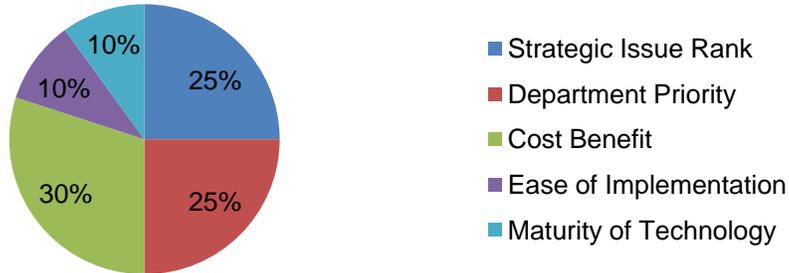**Table 13: Strategic Initiatives Weighted Scoring Categories**

Figure 02: Strategic Initiatives Weighted Scoring Categories

The recommended, prioritized list of plan initiatives is smaller than those initially identified in table 11 above. The final list of plan initiatives is contained in table 14 below.

	Prioritized Planned Strategic Initiatives		
ID	**Initiative Summary**	**Score**	**Page**
G	Enterprise Resource Planning System	93	21
A	Document Management System	93	25
Q	IT Department Organization	92	27
T	IT Department Policies and Procedures	90	30
F	eGovernment Capabilities	87	34
R	Disaster Recovery/Business Continuity Plan	77	37
H	Facility Management System	75	39
E	Computer Replacement Program	73	41
B	Document IT Resource Utilization Plan for Scott Emergency Communications Center	73	43
Y	IT Training	65	45
I	Laptop Computers for Employee Use	65	47
U	Transition County-Developed Applications to Supported Development Environments	60	49
C	Electronic Approval of Timesheets	60	51
X	Asset Management Vehicle Location	58	53
S	Establish Controls of the Main Distribution Frame	55	55
J	Credit Card Policy	52	57

Prioritized Planned Strategic Initiatives			
ID	**Initiative Summary**	**Score**	**Page**
P	Wireless Expansion and Policies	52	60
V	Health Department System	47	62
D	County Meeting Place Scheduling System	47	64
O	Network and Internet Speed Assessment	43	66

Table 14: Prioritized Planned Projects and Initiatives

These projects and initiatives are described in detail in Section 3.4 of the plan.

3.2 Technology Initiatives In Progress

Scott County is currently undertaking multiple technology projects that were identified as strategic initiatives during the planning process. Projects were determined to be "in progress" based on whether or not funding has been allocated to them and work had started on the project. It is imperative that this group of projects and the plan initiatives be considered together as each group will depend on one another. For example, as the in-progress project of updating the network infrastructure continues, plan initiatives that involve new systems to be utilized across the LAN and WAN must be considered so that the network infrastructure can be upgraded to support their use. Not considering these two groups together can result in greatly increased cost as the Strategic Plan is carried out over the next five years.

Each In-Progress Initiative is presented below along with the corresponding budget amounts from the County Capital Plan.[3] A zero budget amount represents no additional costs as internal resources will be used to support the initiative. A summary of the considerations of these Initiatives relative to the Strategic Plan is also provided.

Scott County In-Progress Initiative		
K	**Develop and Implement Network Monitoring and Patch Management Procedures**	$0
Functional Area:	Technology Issues	
Strategic Issues		
T2	No centralized monitoring of network and server systems.	
T4	The County does not utilize a patch management system for deploying Microsoft and other critical patches.	
Considerations:	Many of the initiatives in the Strategic Plan involve the implementation of new applications or capabilities that will operate at various locations on the wide and local-area-networks. To ensure adequate performance of these applications at the various locations, system monitoring and patch management procedures should be updated with each implementation. Proper network monitoring and patch management procedures will reduce the risk of system downtimes, ensure critical system updates and installed, and maintain the latest security features within the applications.	

---

[3] Scott County, Iowa, Five Year Capital Project Plan, Fiscal Year ending 2011 Budget Plan

Scott County In-Progress Initiative		
L	**Update Network Infrastructure**	**$190,000**
Functional Area:	Technology Issues	
Strategic Issues		
T1	Some production applications/systems are unsupported.	
T3	Some network infrastructure is outdated.	
Considerations:	As the County continues to develop the network infrastructure, constant analysis should be conducted as to how the implementation of new applications and capabilities will affect the networks. This analysis should be conducted prior to implementations, in order to ensure that the infrastructure is appropriately established. For example, should a strategic initiative involve an application that will be utilized from locations on the WAN, an analysis should be performed prior to the implementation to determine what upgrades may be necessary to ensure satisfactory performance at WAN locations.	

Scott County In-Progress Initiative		
M	**Update County Telephone System**	**$625,000 over two years**
Functional Area:	Technology Issues	
Strategic Issues		
T6	The County's telephone system is outdated.	
T7	County-supplied mobile telephones are not reliable.	
Considerations:	Updating the County telephone system to utilize VoIP technology is one of the larger projects currently in-progress. As efforts continue, it will be important that effective project management techniques are used to ensure that this project is best managed with consideration to the other projects of the Strategic Plan. A primary project management consideration will be the level of staffing needed to implement and support the new telephone system. As other initiatives in the strategic plan are addressed, they will also require staffing resources. An appropriate level of project management will be needed to plan the timing of these initiatives to ensure that it is most efficient with the greatest chance of success.	

Scott County In-Progress Initiative		
N	**Server Consolidation**	**$350,000**
Functional Area:	Technology Issues	
Strategic Issues		
T5	No automated software deployment mechanism.	
T9	Some County department-specific servers are located in the departments they serve.	
Considerations:	As the server consolidation continues, plans should be made to anticipate the server requirements of the various initiatives of this Strategic Plan. Depending on the type of project, there will be opportunities for server virtualization.	

Scott County In-Progress Initiative		
W	**Develop an Information Management System for Juvenile Detention**	**$0**
Functional Area:	Business Issues	
Strategic Issues		
B1	Scanning, storage, indexing, and retrieval of paper based and electronic documents in the current environment is inefficient for many County departments.	
B8	A significant number of important County business functions rely on manual processes.	
Considerations:	The fact that this initiative will utilize internal IT Department resources presents some unique considerations in relation to providing support for many of the initiatives of this Plan. The resource commitment to this initiative will need to be planned to ensure the resource demands of all other initiatives are also met. Key functionality of a future Juvenile Management System will be to retain documentation for the individuals that are housed in the Juvenile Detention Center. This entails similar functionality that a document management system would offer. Because of this, it is important that integration opportunities are fully realized as other plan initiatives are addressed, such as the document management system project.	

Most of the in-progress initiatives will be completed by the first or second year of the Strategic Plan. As new initiatives are undertaken, there will be a need for some of these in-progress initiatives to be readdressed. For example, infrastructure upgrades will most certainly need to be addressed again within the five-year timeframe of the Strategic Plan, especially in consideration of the some of the initiatives, such as Initiative G: Enterprise Resource Planning System. Based upon the future need for funding to address these current in-progress initiatives again in the coming years, $300,000 has been allocated in year 5 of the Strategic Plan, or fiscal year 2016.

3.3 Overview of Technology Initiatives

Each initiative in Section 3.4 has been presented utilizing a standard form to document each planned initiative. An initiative may also be referred to as a project. Below, BDMP has provided a sample template that includes a description of each field in the form and its contents.

Scott County Strategic Initiative				
This section of the template will contain the initiative number and name				
Initiative Description				
This section of the template will contain a description of the initiative				
Initiative Source Information				
Functional Area:	Technology Issues, Business Issues or Management & Operations Issues			
Priority Ranking:	X of XX, where X is this initiative's ranking among the total number of initiatives			
Strategic Issue(s)				
#	**Listing of the strategic issue(s) that this initiative or project addresses**			
Initiative Ranking (Each initiative ranking will be colored **Green**, **Yellow** or **Red** to help the reader understand the challenges inherent in each initiative.)				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Rating of Strategic Issue Rank **(Very High, High, Medium)**	**Rating of Priority to Departments** **(Very High, High, Medium)**	**Rating of the Cost Benefit** **(High, Medium, Low)**	**Rating of the Ease of Implementation** **(Easy, Medium, Hard)**	**Rating of the Maturity of the Technology** **(Established, Leading Edge, Bleeding Edge)**
Estimated Initiative Budget				

FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
X_1	X_2	X_3	X_4	X_5	Sum (X_1-X_5)

Budget Description	This section of the template will contain a high-level description of the cost estimate, including the methodology used to determine cost as well as the estimated cost over the next five years.
Action Items to Implement Initiative	
This section of the template will contain a checklist of the action items that are needed to implement the initiative	
Anticipated Benefits	
This section of the template will contain a checklist of the anticipated benefits that are expected from the initiative	

3.4　　Prioritized Plan Initiatives

Scott County Strategic Initiative
G: Enterprise Resource Planning System
Initiative Description

The County's current financial management infrastructure is supported by a combination of custom developed legacy applications and stand-alone Commercial Off The Shelf (COTS) products. The applications and systems used to support the County's financial processes, including purchasing, payroll and human resources, are not fully integrated, lack forecasting and executive reporting capabilities and require staff to track information outside of the system and perform redundant data entry in many cases.

This initiative is for the County to select and implement an Enterprise Resource Planning (ERP) system. As part of this initiative the County should plan to purchase several modules as part of the ERP system to address the strategic issues identified. The modules include, but are not limited to:

- General Ledger and Reporting
- Budget
- Accounts Payable
- Purchasing
- Fixed Assets
- Payroll
- Human Resources
- Grant Administration
- Cash Receipts
- Accounts Receivable
- Contract Management
- Work Orders

Other optional modules that may be part of an ERP system that the County could consider include:

- Fleet and Fuel Management
- Facilities Management

BDMP recommends that the County take a phased approach to implementing this initiative.

Phase 1 System Planning, Procurement and Implementation Planning.

This phase includes the planning activities related to selecting and preparing for an ERP system implementation. The County should begin this phase by establishing the internal project teams for the project. These teams should include, Project Sponsor, Executive Steering Committee, Project Manager/Project Management Team and Subject Matter Experts (SME). Since the need for a new ERP system has been identified as part of the strategic planning process, a formal Business Case analysis report may not be necessary, but could be an optional part of this phase. The budget for this project includes funding for the County to obtain assistance to guide the County through the entire lifecycle of the ERP project starting with a Needs Assessment report and concluding with system implementation. Outside assistance

may not be necessary if the County feels it has adequate internal resources to dedicate to the project and that have ERP system planning, procurement, and implementation experience. The County may also decide that the scope of the IT Planning Project and this initiative are adequate to serve as a Needs Assessment, which would allow the County to begin with requirements gathering for the ERP system.

Once the Needs Assessment and identification of County project teams has been completed, the County will need to conduct an analysis that identifies more detailed costs for the ERP system and overall benefits to the County. The results of this analysis may require the County to revise the preliminary budget for this initiative provided in this strategic technology plan. The County will then need to develop functional and technical requirements for all modules of the ERP system as well develop a Request for Proposal (RFP) document specific to an ERP system. Once the RFP has been issued, the County will need to conduct a level of fit analysis on the responses, conduct reference checks and develop a "short list" of ERP vendors based on the analysis conducted. The County should then conduct scripted demonstrations of the short-listed vendor's software by functional area. BDMP recommends a minimum of two days of demonstration time per vendor. Detailed scoring and feedback should be collected from County participants as a result of the demonstrations. At the completion of the demonstrations, the County should identify a "preferred" vendor and conduct one to two site visits to observe the proposed ERP product in use at another location.

At the completion of the site visits, the County should begin contract negotiations with the preferred vendor and begin planning for the purchase of hardware and any infrastructure upgrades that must be completed.

Phase 2: ERP Implementation (Phase 1 and start of Phase 2)

BDMP recommends that the County implement the ERP system using a phased approach. Phase 1 would include core financials, budgeting, procurement, accounts payable, accounts receivable, and cash receipts. This phase typically requires 10-12 months, with Go Live typically occurring at the start of the fiscal year. During this phase, the County would also start planning for Phase 2 activities.

Phase 3: ERP Implementation Completion (Complete Phase 2 and Phase 3):

During the second phase of the ERP implementation, the County would implement payroll and human resource modules. The modules usually requires between 12 and 14 months to implement and typically goes into live operations at the start of a calendar year to minimize the impact on accrual and payroll calculations. During this phase the County would also complete the implementation of the remaining ancillary modules including fleet and fuel management, grant administration, work orders, miscellaneous billing and capital improvement planning (CIP).

At the completion of the implementation phases, it will be important that the County have established internal support policies and procedures as well as a methodology for training new employees on the ERP system. The County should also continually analyze the use of the ERP system to determine where efficiencies can be gained and functionality of the system that can be leveraged to improve overall business process workflow and reporting.

Initiative Source Information	
Functional Area:	Business Issues and Management & Operations Issues
Priority Ranking:	1 of 20

Strategic Issues Addressed	
B3	Limited integration capabilities of County-developed legacy financial system.
B4	The County's current financial and HR systems do not support accepted government accounting and human resource best practices.
B8	A significant number of important County business functions rely on manual processes.
B10	The County's purchasing system needs to be updated.
B13	The current fixed asset system is not integrated with the financial system and requires an extensive amount of manual maintenance to keep current.
B14	A budgeting process that supports forecasting, salary, and benefit analysis as well as management reporting does not exist.
M10	Executive level performance management and financial reporting and monitoring capabilities do not exist.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	Very High	High	Hard	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Cost**
$500,000	$1,000,000	$500,000	$0	$0	$2,000,000

Budget Description	The budget for this initiative is comprised of the cost of procuring and implementing an ERP system as well as the County using external resources to assist with the planning, requirements gathering, system selection, and project management or oversight of the implementation of the system. The budget for the initiative is spread across three years to reflect the planning and multiple implementation phases of the project. The budget for this initiative is allocated as follows: **Phase 1: System Planning and initial implementation costs:** • ERP project planning, needs assessment, requirements development, system selection assistance: $200,000 • Initial ERP licensing and hardware costs: $300,000 **Phase 2: ERP Implementation (Phase 1 and start of Phase 2):** • ERP software and licensing costs and project management services: $1,000,000

	Phase 3: ERP Implementation Completion (Complete Phase 2 and Phase 3):
	• ERP software, licensing and project management services: $500,000

Action Items to Implement Initiative
☑ Complete a Business Case Study – optional
☑ Establish County Project Management Team to lead ERP implementation effort
☑ Develop a Needs Assessment report
☑ Document Functional and Technical Requirements for an ERP system
☑ Develop a Request For Proposal (RFP) and issue it to the ERP Vendor community
☑ Conduct a structured selection process that at a minimum includes:
• Level of fit analysis on RFP responses
• Scripted demonstration process
• Vendor reference checks
☑ Negotiate contract with preferred ERP vendor
☑ Conduct a phased implementation over an 18-24 month period as follows:
• Phase 1: Core financials, Budgeting, Procurement, Accounts Payable, Accounts Receivable
• Phase 2: Payroll, Human Resources
• Phase 3: Contracts, Grant Administration, Work Orders, Asset Management, Miscellaneous Billing, CIP and Bank Reconciliation

Anticipated Benefits
☑ Reduce reliance on legacy, in-house developed systems
☑ Reduce redundant data entry
☑ Improve efficiency and streamline internal processes
☑ Reduce risks to the County associated with using out of date, in-house custom developed software applications
☑ Provide ability for budget and revenue forecasting
☑ Provide the tools and framework for performance management
☑ Executive dashboards and reporting
☑ Ensure compliance with GASB, GAAP, IRS regulations and best practices
☑ Integrated system will provide for enterprise wide view of data and information
☑ Reduce reliance on paper copies of documents
☑ Increased reliability of financial data
☑ Reduce operating costs
☑ Support strategic planning

Scott County Strategic Initiative
A: Document Management System
Initiative Description

Scott County is currently using Canon Imageware for document archival and storage business functions. This technology has served the County well for basic document archival and storage needs. It was reported that support for the Canon Imageware software is being discontinued so there is concern about its long-term viability. In addition, Canon Imageware is not a full featured document management system (DMS). It lacks many of the access, searching, and sorting capabilities compared to the current DMS products in the marketplace.

Many departments within the County have already recognized the need for a document management system (DMS), and many more could gain efficiencies from this type of system. This initiative is to select and implement a Countywide document management system.

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

We recommend that the County develop a functional and technical requirements document as part of a Request for Proposal (RFP) to issue to vendors to propose a DMS for the County. The County IT Department, along with a selection committee of department staff should evaluate proposals and select a system based on the system's ability to meet the County's business requirements, cost, and overall ability to integrate with other County systems.

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

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

Today's document management systems provide greater searching, retrieval, and knowledge management capabilities as compared to what is offered by Canon Imageware. In addition, a more current DMS will be more tightly integrated with other applications to allow greater collaboration and enhanced security capabilities to help ensure documents can be shared and protected as needed. Many of the ERP systems that the County will review as part of initiative G, will provide some level of electronic document storage. It is BDMP's recommendation that the County pursue a standalone DMS and not rely on the document management capabilities provided by an ERP system.

Initiative Source Information				
Functional Area:		Business Issues		
Priority Ranking:		2 of 20		

Strategic Issue Addressed				
B1	Scanning, storage, indexing, and retrieval of paper-based and electronic documents in the current environment is ineffective for many County departments.			

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	Very High	High	Hard	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Cost**
-	-	$200,000	$150,000	-	$350,000

Budget Description	The budget for this initiative consists of the cost to purchase and implement a document management system, including the necessary hardware, outsource back-scanning of historical documentation, and to train County employees on the use of the system. It is expected that the initiative will begin in FY2014 and be completed by the end of FY2015. FY2014 will begin with the internal work of developing the RFP and outsourcing the back-scanning of documents. FY2015 budget is based upon the cost of completing the purchase and implementation of the system and outsourcing the scanning of the remaining documents.

Action Items to Implement Initiative

☑ Develop requirements and issue RFP for a new DMS.
☑ Evaluation proposals and select and implement a DMS.
☑ Establish policy on document management standards.
☑ Train County staff on the use of the DMS.
☑ Back-scan historical documentation.

Anticipated Benefits

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

Scott County Strategic Initiative
Q: IT Department Organization
Initiative Description

The purpose of this initiative is to adjust the organization of the IT Department in consideration of the current issues in the County as well as to support the future County IT environment. Currently, the department consists of a Director and 11 individuals distributed across four different focus areas:

1. Infrastructure
2. Application Development
3. Web/GIS
4. Help Desk

The distribution of the 12 resources is depicted in the current environment organization chart below.
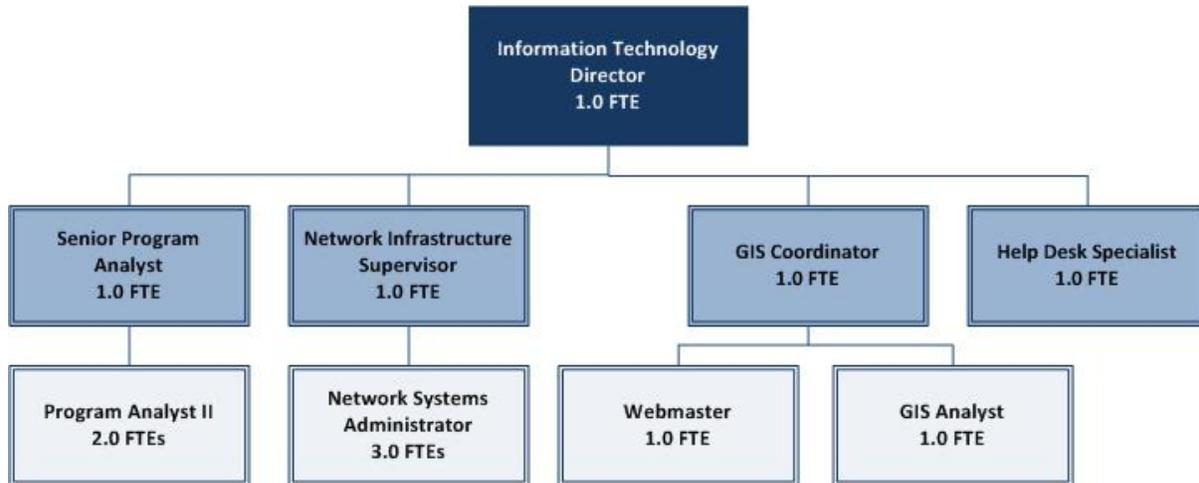

Figure 03: Current Environment IT Organization Chart

This strategic initiative is to add two new resources to the IT Department that represent an additional1.5 full-time-equivalent (FTE) staff positions. One resource will be a full-time network administrator focusing on security, and the other will be a half-time FTE administrative support person.

Throughout the Strategic Planning Project, help-desk staffing was identified as a focus area as well. This will be addressed by the new resource that is being added as part of the Scott Emergency Communications Center (SECC) project. A second additional resource will be added as SECC goes online and will be planned as a network administrator. Initiative B: Document IT Resource Utilization Plan for Scott Emergency Communications Center, addresses how these two new resources will be utilized.

The distribution of these additional resources is depicted in the future environment organization chart below.
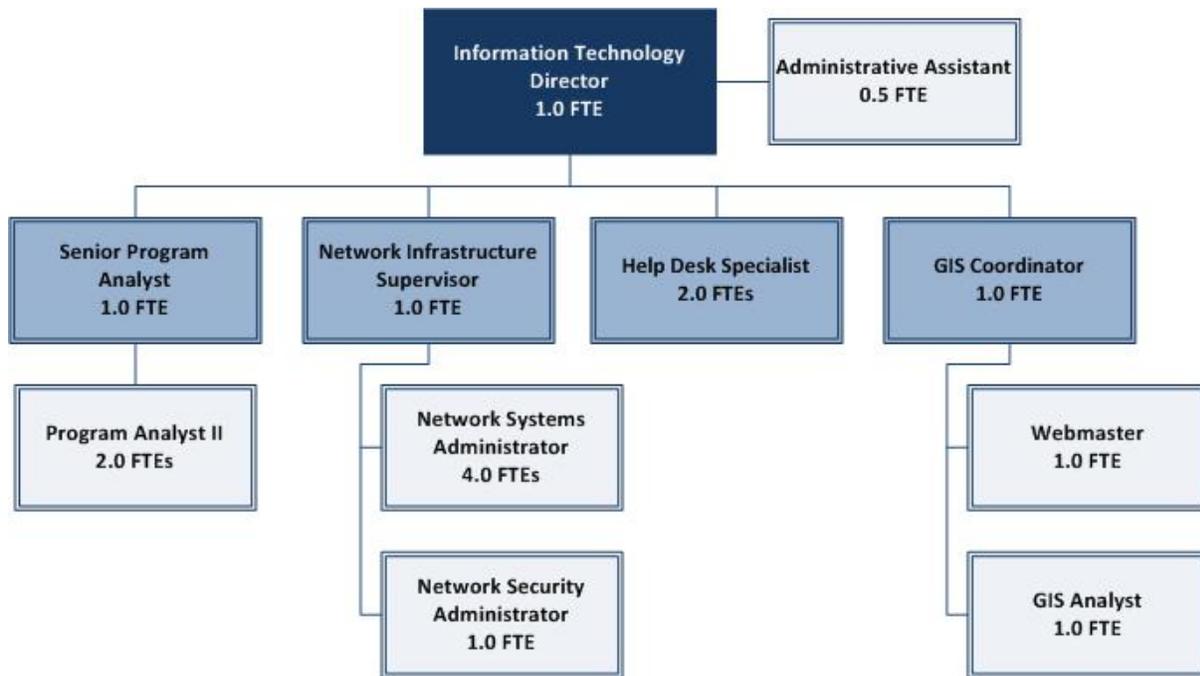
Figure 04: Future Environment IT Organization Chart

Research of industry best-practices shows that those organizations with IT Departments supporting less than 750 PCs typically have one security-focused IT staff member for every 700 users.[4] In addition, benchmarking research conducted with three counties similar in size to Scott County revealed that two have dedicated security staff members within their IT Departments. (See Appendix B) Scott County does not currently have a security-focused resource and although there are less than 700 users in the County, we recommend that a full FTE is dedicated for this purpose due to the nature of the projects and initiatives the County is currently, or will soon be undertaking.

The second additional resource that is part of this initiative is a half time (0.5 FTE) administrative assistant to the IT Director. Currently, such a resource is lacking in the IT Department, and these administrative tasks are completed either by the IT Director or the other members of the department. Of the three counties contacted during the benchmarking research, all three have an administrative resource in the IT Department. (See Appendix B)

Undertaking this strategic technology plan over the next five years will require adequate resources to manage and implement the identified projects and initiatives. The County IT department will need these additional resources to provide staff availability to manage and participate in the projects. It is important to note that project management and dedicated involvement from other County departments will also be required for some of the larger projects, especially initiative G: Enterprise Resource Planning System. Large, enterprise wide IT projects that plan for collaborative work between personnel from the IT department and other departments are more successful than projects that are led primarily by one department.

---

[4] IT Staffing Ratios and Trends, Computer Economics, Chapter: IT Security Staffing Ratios, 2009

These additional resources should be hired following the typical process used by the Human Resources department. Job descriptions should be developed by both the IT Director and Human Resources staff. Once hired, training of the new personnel will be important.

At this time, the need has been identified to hire the two new resources described in this strategic initiative. As progress against the plan is made and more projects are initiated it is likely that resources might again need to be reorganized. This could be a result of greater number of end-users, the need for more specialized support staff, or a variety of other reasons. In order to anticipate these changing demands, this initiative should be regularly updated as part of the Strategic Plan Governance process described in Section 4.3.

Initiative Source Information	
Functional Area:	Management & Operations Issues
Priority Ranking:	3 of 20

Strategic Issues Addressed	
M1	There is only one dedicated help-desk resource in the IT Department.
M3	Lack of security focused resource in IT department.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	High	High	Easy	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
$80,000	$80,000	$80,000	$80,000	$80,000	$400,000

Budget Description	The budget amounts for this initiative are based upon the salaries of the additional IT resources to be added. The resources will be added in the first year of the Strategic Plan and be retained moving forward. $65,000 each year is allotted for the security-focused resource and $15,000 each year is allotted for the half-time administrative resource.

Action Items to Implement Initiative

☑ Develop job descriptions for the two new resources
☑ Complete Human Resources hiring process to acquire the two new resources
☑ Train the two new resources
☑ Continually update this strategic initiative as part of the Strategic Plan Governance Model to proactively plan for the changing demands of the IT Department

Anticipated Benefits

☑ Transfer of administrative tasks from the IT Director and other department staff
☑ Proactive efforts to monitor and reduce security threats to the network

Scott County Strategic Initiative
T: IT Department Policies and Procedures
Initiative Description

There are several strategic issues related to overall IT Department policies and procedures that need to be addressed. This initiative is to update existing IT Department policies and procedures and create new policies (where needed) related to four areas:

1. IT Project Management
2. Network Access and Monitoring
3. Internal software development practices and standards
4. IT related purchases

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

1. IT Project Management

This phase of the initiative is to develop a project management function to lead the prioritization, selection, management and quality monitoring for all IT projects. In many government organizations today, a Project Management Office (PMO) has been established to manage all projects across the organization and/or for a specific department. A PMO provides a consistent project management framework, methodology, and tools to be used to manage projects. The County could benefit from a PMO model; however, at a minimum BDMP recommends that a staff person be dedicated to serve in a Project Management role. As part of the staffing allocation described in initiative *Q- IT Department Organization*, the opportunity exists to alleviate current staffing challenges (additional help desk and network administrator), which would allow the IT department the ability to dedicate more time to overall Project Management.

As part of the first phase developing overall project management standards, we recommend that the County 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 County can begin to develop a process for selecting and prioritizing projects.

The County currently has numerous IT projects in progress, ranging from laptop deployment for the Auditor to a Citrix upgrade. The County's IT Department is responsible for managing, overseeing, and ensuring success of all IT projects. This process has placed a great deal of strain on existing IT resources and made project planning and prioritization difficult. In addition, a methodology for selecting and prioritizing projects does not exist. 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. BDMP recommends that the Project Management role created as part of this initiative work in conjunction with the IT Director, County Administrator, Budget Manager and where appropriate the Facility Support Services to develop a

methodology for selecting and prioritizing IT projects. At a minimum BDMP recommends that projects be selected and prioritized based on overall return on investment to the County, funding and resource needs, overall benefit to the County, and other projects in progress and the ability for the County to dedicate appropriate resources to the project to increase the likelihood of success.

In the current environment at the County, the IT Department does not have an agreed upon methodology 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. BDMP recommends that as part of the development of project management standards, the County track key project indicators to monitor overall project health. At a minimum, reporting should be done on project scope, schedule, and budget (known as the triple constraints) along with staffing on larger projects. Monitoring and regularly reporting on key project indicators can increase the likelihood of project success and allow the County to shift resources to projects where necessary.

We recommend 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.

2. Network Access and Monitoring

This section of the policy and procedures manual should describe the procedure for connecting remotely to County systems such as network drives, email, and other systems. The procedure for requesting access, applicable security forms to be completed, security protocols, and logon and logoff procedures will be described in this section. Addressing these processes will eliminate some of the issues encountered by County staff when outside vendors attempt to provide support for their systems.

3. Internal Software Development Practices and Standards

The County currently maintains several custom developed applications. In some cases, the custom developed systems will be replaced with Commercial Off The Shelf (COTS) systems. However, in order to achieve integration of some systems and develop stand alone systems to address unique County needs, a need for custom development will always exist at the County. Currently, the County does not have documented policies or procedures related to software development standards and practices. The phase of the initiative is for the County to develop documented software policies and procedures. At a minimum, the policies should address the County's software development environments, how development is done, testing procedures, production roll out, and overall development standards.

4. IT Related Purchases

This section of the revised Policy and Procedure manual should describe how the County has centralized all IT purchases and that software, hardware, and any IT related equipment must be purchased with the involvement of the IT department. It is recognized that in some cases subject matter expertise from the individual departments will be needed to evaluate and recommend department specific applications, such as GIS or public safety systems. However, IT must be involved to understand and advise on the implementation planning, support,

ongoing maintenance, and overall impact the new system(s) or hardware will have on the existing IT infrastructure.

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

Initiative Source Information	
Functional Area:	Technology Issues and Management & Operations Issues
Priority Ranking:	4 of 20

Strategic Issues Addressed	
T2	No centralized monitoring of network and server systems.
M6	Many IT functions and processes are not documented.
M7	A process for managing and prioritizing IT projects does not exist.
M8	Many departments reported they experience difficulty in having their COTS products supported by outside vendors due to Citrix and firewall access issues.
M11	Some County departments have purchased software or hardware without the involvement of IT which has lead to support and maintenance issues.
M12	IT related training for County end-users is limited.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	Very High	Medium	Easy	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Cost**
$50,000	$0	$0	$0	$0	$50,000

Budget Description	The budget for this initiative is based on the costs for the County to implement project management tools such as MS SharePoint and MS Project. The County could also use part of this budget to obtain outside assistance from a company with experience establishing project management functions in government organizations. The budget amount for this initiative assumes that the County will develop the updated policies and procedures documents internally. In the event that the County decides to seek assistance to develop policies and procedures, the budget for this initiative will need to be increased.

Action Items to Implement Initiative
☑ Develop internal project management function
☑ Document policies and procedures for selecting, prioritizing, and managing IT projects

☑ Communicate and train County staff on policies related to IT Project Management
☑ Update (where necessary) policies and procedures related to remote access for vendor support
☑ Communicate and train County staff on policies and procedures related to remote access
☑ Develop and document IT change control policies and procedures related to software changes and communicate these to IT staff

Anticipated Benefits
☑ 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 County resources for upcoming projects
☑ Greater control over IT resources and spending through centralized purchasing.
☑ Greater likelihood that IT projects will align with overall County and IT department goals.
☑ Increased planning for support and maintenance of new systems due to centralized IT purchasing.
☑ Greater understanding of remote access capabilities and expectations for vendor support.

Scott County Strategic Initiative
F: eGovernment Capabilities
Initiative Description

This strategic initiative is to expand the eGovernment capabilities offered by the County. Scott County citizens are increasingly demanding eGovernment capabilities on the County website. Similarly, County employees are spending an increasing amount of time answering requests that could be avoided with improvements to the website.

Changes in technology, greater usage of web-based services in the community, and an increasing focus on on-line services for government organizations are all affecting Scott County. The current eGovernment capabilities of the County are limited and include static document postings and features coordinated with third-party systems on the website. Core applications developed in the government marketplace are making greater use of web-based functionality and interfacing with the public. This trend will certainly continue throughout the duration of this five-year Strategic Plan.

Formalizing an eGovernment strategy and plan will enable the County to communicate effectively with citizens and businesses regarding the plans for these services. Local governments often fail in this area by developing systems that the community is not ready for or willing to utilize. The County should develop a strategic plan document that describes their approach to eGovernment services, fully describes services that are available today, and effectively communicates the value of potential future services to the community. Department head input should always be considered.

Selecting, deploying, and managing eGovernment services will require strong leadership, effective project plans, and comprehensive, up-to-date community needs assessments to determine the most pressing issues. As development progresses, the County will need to actively promote these services and educate constituents on the value they can derive from using those services.

The County has identified multiple services currently in demand:

- Online general document retrieval including search capabilities;
- Online meeting and agenda and meeting minutes postings;
- Online payment capabilities County-wide; and
- Online work order requests.

As additional services are identified, it is important that the County follow a structured approach to eGovernment implementation, based on the following factors:

- Value to constituents;
- Potential use;
- Increasing regulatory requirements;
- Cooperative effort opportunities;
- Savings to the County; and
- Cost to implement.

Once the desired services are selected, the County will need to carefully plan the implementation of each. Some will be easier to deploy than others, especially as web-based components of future applications expand. For example, an on-line work order request form may easily integrate with a future work order management system the County implements. Similarly, a future Document Management System that is implemented in the County may offer the ability to easily post relevant documents on the website with searching functionality. Other services, such as online payment capabilities, will require significant policies and procedures to be developed.

Initiative Source Information	
Functional Area:	Business Issues
Priority Ranking:	5 of 20

Strategic Issues Addressed	
B1	Scanning, storage, indexing, and retrieval of paper-based and electronic documents in the current environment is ineffective for many County departments.
B2	Lack of online payment capabilities throughout the County.
B7	Developing and managing meeting agendas and recording meeting minutes and resolutions for posting to the County's website is difficult.
B9	The current facilities management system is outdated.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	Very High	Medium	Medium	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
$25,000	$25,000	$25,000	$25,000	-	$100,000

Budget Description	This strategic initiative will begin in the first year of the Strategic Plan and continue into the second, third and fourth years. The initial planning for services and the development of the eGovernment strategy will utilize internal resources and so does not have a budget amount attributed to it. The $25,000 in each of the four years is budgeted for the various expenses related to eGovernment expansion including hiring of outside resources for programming or consultation, purchasing of specific eGovernment applications, or purchasing of website interface components within other systems.

Action Items to Implement Initiative

☑ Develop an eGovernment strategy and plan
☑ Solicit requests for eGovernment services from County employees and citizens
☑ Select services that are strategic for the County to offer
☑ Develop action plans for each selected service offering

Anticipated Benefits
☑ Increase in the information and services provided to remote locations of the County
☑ Increased ability for County government to be responsive and accountable to its citizens
☑ Improved customer service to County citizens
☑ Decreased time spent answering citizen requests
☑ Increased level of well-informed, involved citizens
☑ Improved timeliness of payment for County fees

Scott County Strategic Initiative
R: Disaster Recovery/Business Continuity Plan
Initiative Description

Scott County currently does not have a formalized Disaster Recovery or Business Continuity Plan. Both of these documents are critical for the County to effectively react and to quickly resume operations in the event of a disaster. Furthermore, the County has an obligation to its citizens and businesses to provide assurance that in the event of a disaster, the County will be capable of delivering services.

This initiative will 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 County governments. This selection process will involve the identification of a selection team and the development of a request for proposal by internal County 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 County. 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. 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. This will involve the assistance of the consulting firm and will be a detailed process involving many County employees. It will be important to document the processes at multiple levels.

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 the SECC will be leveraged as an off-site data backup or operations facility.

Phase 4: Regularly Test and Update Plan

In order to be best prepared for a disaster, the County 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 update the Plan should take place annually.

Initiative Source Information	
Functional Area:	Management & Operations Issues
Priority Ranking:	6 of 20

Strategic Issues Addressed	
M2	No disaster recovery/business continuity plan currently exists.
M6	Many IT functions and processes are not documented.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	Very High	Low	Medium	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
-	$85,000	-	-	-	$85,000

Budget Description	The budget amount for this strategic initiative is to hire a consulting firm to assist the County in the development of an initial Disaster Recovery and Business Continuity Plan. This will occur in the second year of the Strategic Plan and will be updated in subsequent years by internal resources.

Action Items to Implement Initiative

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

Anticipated Benefits

☑ Increased risk mitigation
☑ Improved business continuity
☑ Decreased downtime
☑ Preservation of critical data

Scott County Strategic Initiative
H: Facility Management System
Initiative Description

The purpose of this initiative is to select and implement a facility management system to be used by both the Facility and Support Services (FSS) and IT Departments. Currently, the FSS department is using its own outdated system and the IT Department is using the Track-IT system for help desk and work order requests. Many of the requests to each individual department could be handled collaboratively, but currently are not. In addition, the current systems lack functionality readily available in today's marketplace including reporting of usage and key metrics.

The County (IT and Facilities) is currently evaluating a work order management/facility management system that would be used by FSS and the IT Department. However, it was reported that this system may be a short term solution that is used until a more comprehensive County wide system can be procured. A short term solution strategy to meet this need is appropriate since the County should first focus on acquiring an ERP system, then reevaluate the needs related to facility, work order, and asset management after it has been determined if and ERP system can meet some needs in these areas. If the County determines that the system under evaluation is adequate to meet the County's needs, this initiative can be closed. However, if a formal procurement process is needed in the future to select a more robust system, BDMP recommends the following steps.

The selection process will involve the identification of a selection team and the development of a Request for Proposal by internal County resources that is then released into the marketplace for responses. Based on the responses, the selection team will create a short list of potential firms that will present to the County. Following the presentations, the firm of preference will be selected.

The first step in the system selection process is to establish a selection team based on identified heavy-users of a future system. This team will likely be comprised of representatives from both the FSS and IT Departments, as well as likely a representative from County Administration.

The selection team will meet to identify the key system requirements and to develop the request for proposal. Key system requirements will include requirements related to key functionalities, technical requirements, and support requirements. Once the RFP is developed, it should be submitted to the vendor community for responses.

Based on the vendor responses, the selection team will then review proposals to identify a short-list of vendors to invite to present to the team. From these presentations, a preferred vendor will be chosen.

Once a vendor is selected, an implementation plan should be developed utilizing project management techniques to document the staffing levels and timing of the implementation. This will include identifying a project team made up of users from multiple departments in the County.

Initiative Source Information	
Functional Area:	Business Issues and Management & Operations Issues
Priority Ranking:	7 of 20

Strategic Issues Addressed	
B8	A significant number of County business functions rely on manual processes.
B9	The current facilities management system is outdated.
M7	A process for managing and prioritizing IT projects does not exist.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Very High	High	Medium	Medium	Leading Edge

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
$0	-	-	-	-	$0

Budget Description	If the County selects the system currently being reviewed, additional funding will not be needed because a budget already exists for that system. If the County does not select the system currently being reviewed, a new system should be considered in the first year of the Strategic Plan.

Action Items to Implement Initiative

☑ Identify system selection team
☑ Develop system requirements
☑ Develop a request for proposal
☑ Issue RFP to the vendor community
☑ Review vendor responses to develop a short-list of preferred vendors
☑ Invite short-listed vendors to present to the County
☑ Determine the vendor of preference following presentations
☑ Plan the implementation
☑ Implement the system

Anticipated Benefits

☑ Increased collaboration among the FSS and IT Departments
☑ Ability for County end-users to easily request work orders or submit help-desk tickets
☑ Ability to report on key metrics of work orders and other statistics

Scott County Strategic Initiative

E: Computer Replacement Program

Initiative Description

This initiative is to develop and secure funding for a replacement program for the laptop computers in use in the County. This will not involve an individual replacement program, but rather an addition to the replacement program of all PCs in the County.

The approximately 500 PCs in use in the County are currently on a four-year replacement program with the next planned deployment in FY2015, or the fourth year of the Strategic Plan. Laptop computers in use in the County are not currently on a replacement program. Based on the shorter expected life of laptop computers, the County should utilize a three-year replacement program for this equipment. This will help ensure a staggered approach to computer deployment in most years.

As future laptops and PCs are acquired in the County, adjustments should be made to the budget amounts requested for the replacement programs to ensure that all equipment is replaced on a regular schedule.

Development of the replacement program will include deciding upon the standard technical specifications of equipment purchased. This will ensure that all equipment meets the needs of County employees and is easily supported by the IT Department. Standardization of the applications installed on each PC or laptop will also ensure that employee and support needs are met.

Initiative Source Information

Functional Area:	Management & Operations Issues
Priority Ranking:	8 of 20

Strategic Issue Addressed

M15	Capital funding for laptop/portable computer replacement program does not exist in the County.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
Medium	Very High	Medium	Easy	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
-	$100,000	-	$400,000	$100,000	$600,000

Budget Description	The budget amounts for this strategic initiative represent the years that either the laptop computers or the PCs in use in the County will be replaced. The laptop computers in the County will be replaced in the second year of the Strategic Plan, and again in the fifth year, based on the three-year replacement schedule. PCs will be replaced in the fourth year of the Strategic Plan. Effort has been made to stagger the

	replacements both from a funding and deployment resource perspective but it is noted that FY2019 would plan for the replacement of all PCs and laptop computers. As that time approaches, planning should take place to best address the deployment.

Action Items to Implement Initiative

☑ Develop and continually update technical specification standards for PCs and laptop computers

☑ Secure funding for the replacement of laptop computers on a three-year schedule

☑ Continually update replacement budget based on the addition of new PCs and laptops in the County

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

Scott County Strategic Initiative

B: Document IT Resource Utilization Plan for Scott Emergency Communications Center

Initiative Description

Additional IT Resources will be acquired as the Scott Emergency Communications Center goes online adding two full-time-equivalents (FTEs). 1 FTE has been planned to be a help-desk resource allowing the County to extend the help desk hours in the IT Department. The second FTE is currently planned to be a network administrator.

This strategic initiative is to develop a plan that describes how these two new resources will be utilized. There are many issues this documentation will need to address, including:

- Basic job descriptions for both positions;
- Qualifications for each position;
- Scheduling of help desk staffing;
- Time accountability of both resources to SECC and the County;
- How both positions will be trained in the necessary areas specific to the technologies of SECC;
- How SECC end-users that are not County employees will be supported;
- How issues specific to SECC will be escalated if necessary; and
- Procedures for maintaining the utilization documentation in the coming years.

Developing the utilization plan should be a collaborative effort involving members of the IT Department, SECC, and County administration. There are diverse needs of all groups that must be considered. The plan should also be expected to evolve as both SECC and the County IT Department grow.

Initiative Source Information

Functional Area:	Management & Operations Issues
Priority Ranking:	9 of 20

Strategic Issue Addressed

M13	The SECC will impact the County's current IT function.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
High	High	Medium	Easy	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
$0	-	-	-	-	$0

Budget Description	This strategic initiative will take place in the first year of the Strategic Plan and does not have a budget amount attributed to it because the work effort will be conducted by internal County resources.

Action Items to Implement Initiative
☑ Identify representatives from SECC, the IT Department, and County administration that will collaboratively develop the utilization plan
☑ Develop utilization plan
☑ Implement the utilization plan including training and education to County employees
☑ Periodically revisit and update the utilization plan
Anticipated Benefits
☑ Established job descriptions for new IT resources
☑ Additional help-desk coverage
☑ Additional network administration functions
☑ Ability to support specialized technologies utilized by SECC
☑ Appropriate management of support for all SECC end-users
☑ Assurance of proper problem escalation for issues related to SECC

Scott County Strategic Initiative
Y: IT Training
Initiative Description

This strategic initiative is to provide IT related training to County employees. This initiative is not meant to replace existing IT training for the IT Department, but instead is intended to focus on the training needs of County Departments other than IT. Technology training is a critical component of any organization's ability to keep daily operations and business processes streamlined and efficient. To fully leverage the tools at hand, employees require introductory training on new technology and refresher training on existing technologies. Furthermore, an effective technology training program is most often supported by a strategy for training delivery. This training strategy should include the following components:

- **Ongoing training needs assessment.** As the County implements new technologies, employees' training needs will evolve; therefore, the training strategy should also evolve to respond to these changing needs. The IT Department must understand these needs to be able to adapt the training strategy as necessary. To do this, the IT Department should initially conduct an assessment of technology proficiencies to identify areas of greatest weakness that can be addressed by IT training. An assessment should be conducted periodically to monitor the progress of training and identify new areas of weakness.

- **Varied training delivery.** Training should be provided utilizing a variety of methods, including traditional classroom instruction, self-study, and computer-based delivery. On-line training, such as an Intranet portal, should be used whenever possible.

- **Seek external opportunities where appropriate.** Outsourcing of technology training can be highly cost-effective in some situations, especially when the material is highly technical in nature. The County should explore strategic partnerships or other cooperative agreements with local educational institutions or peer governments.

- **Budget and track IT training related costs.** As new investments in technology are made, this line item should be adjusted to compensate for the necessary training as the technologies are deployed. Tracking these costs can provide valuable information to use to develop metrics of the cost benefits of training investments.

- **Designate County employees to support end-users within functional areas.** Applications Experts, often referred to as Application Coordinators, should be designated to provide technical oversight and guidance to all County departments related to their specific knowledge area. These staff members would be those persons particularly skilled in an application and will not necessarily be members of the IT Department. In addition to responding to users' questions, Application Coordinators may also provide feedback to training coordinators within the Human Resources department regarding specific training needs in the County.

Initiative Source Information	
Functional Area:	Management & Operations Issues
Priority Ranking:	10 of 20

Strategic Issue Addressed	
M1	There is only one dedicated help-desk resource in the IT Department.
M12	IT related training for County end-users is limited.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
High	**Medium**	**Medium**	**Easy**	**Established**

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
$30,000	$30,000	$30,000	$30,000	$30,000	$150,000

Budget Description	The budget amounts for this strategic initiative are for costs associated with training, including outside education, training materials, or hiring training consultants. This initiative will begin in the first year of the Strategic Plan and continue into the future. It is noted that this initiative budget may redistribute among years based upon the delivery method of training. For example, County staff may attend an outside training session on a specialized application or function one year at a high cost, and then be utilized in a "train-the-trainer" approach the next year at no additional cost. The budget for this initiative is in addition to the existing IT training budget and is not meant to replace that budget.

Action Items to Implement Initiative
☑ Assess the current Information Technology proficiencies of County employees
☑ Develop a training strategy to address weaknesses in the County
☑ Conduct training activities utilizing the multiple methods identified in the training strategy

Anticipated Benefits
☑ Improved staff retention through effective, lifelong learning and training programs
☑ Improved productivity with existing IT tools
☑ Increased awareness of the importance of IT tools in the County
☑ Improved communication among County departments
☑ Enhanced end-user productivity and reduced downtime
☑ Increased empowerment of users, reducing help desk inquiries and allowing IT resources to focus on proactive IT issues.

Scott County Strategic Initiative

I: Laptop Computers for Employee Use

Initiative Description

This initiative is to acquire laptop computers for County employees to use while working in the field. This initiative was identified by multiple departments, including primarily the Planning Department. Laptop computers will provide the ability for employees to access and update data while in the field, which will increase the efficiency and accuracy of many critical business functions. BDMP recommends that as laptops are issued to County employees, that these devices become their primary piece of equipment and that their desktop computers are put back into inventory.

The first step in this initiative is to assess the needs of the employees who will use the laptop computers. This will include an analysis of how many employees will use the computers, as well as the functions for which the computers will be used. The results will be considered along with the support capabilities of the IT Department to develop the technical specifications. Consideration should also be given to other computers used by County employees to ensure as much consistency as possible.

The employees who will use the laptop computers will require training prior to the deployment of the computers. The training is likely to be an ongoing effort over weeks following deployment. The laptops should be configured to allow access to critical programs needed by remote staff. In the case of the Planning Department, this would include the permitting and inspection application, scheduling calendar, and GIS system. The final step in this initiative is to adjust the computer replacement program to account for the new acquisitions so they will be replaced on the appropriate schedule.

Initiative Source Information

Functional Area:	Business Issues
Priority Ranking:	11 of 20

Strategic Issue Addressed

B12	The Planning Department does not have access to critical applications while in the field.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
Medium	High	Medium	Easy	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
$8,000	-	-	-	-	$8,000

Budget Description	The budget for this initiative is based on the cost to purchase approximately four to five laptop computers and docking stations which will occur in the first year of the Strategic Plan.

Action Items to Implement Initiative
☑ Assess the needs of employees that will use the laptop computers
☑ Assess the support capabilities of the IT Department
☑ Develop technical specifications for the laptop computers
☑ Train employees of the proper use of laptop computers (see Initiative Y: IT Training)
☑ Configure laptops to allow for access to applicable applications
☑ Adjust Computer Replacement Program to account for acquired laptop computers (see Initiative E: Laptop Replacement Program)
Anticipated Benefits
☑ Data access while employees are working in the field
☑ Increased efficiency of employee tasks
☑ Increased data accuracy as information will be capture immediately

Scott County Strategic Initiative

U: Transition County-Developed Applications to Widely Supported Development Environments

Initiative Description

Scott County currently has thirteen applications that have been created in-house using a development platform from ZIM Corporation. The ZIM development platform uses a proprietary programming language and database that is not widely adopted in local government or the custom software development industry. The Technology Assessment report, developed as part of this project, recommended that these custom applications be migrated to commercial off the shelf (COTS) software where possible or redeveloped using the Microsoft development environment tools also in use by the County IT department.

We recommend that Scott County consider converting any ZIM application that would not be replaced by a possible ERP system implementation to a more widely adopted, industry standard programming and database platform.

Initiative Source Information

Functional Area:	Management & Operations Issues
Priority Ranking:	12 of 20

Strategic Issue Addressed

M9	The County has a significant number of in-house developed software applications and relies on custom software development.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
High	High	Low	Medium	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Cost
-	-	-	$0	$0	-

Budget Description	The budget for this initiative is $0, since the existing County programmers will lead the effort to convert the existing ZIM applications.

Action Items to Implement Initiative

☑ First determine which applications will not be replaced by a possible ERP implementation and would need to be re-written on the new development platform. It may not be known for a number of months exactly which applications can be addressed by a new ERP system. However, there may be some applications that are good candidates for being redeveloped by the County in the near term because it is clear that an ERP system cannot replace them.

☑ Evaluate and upgrade/purchase new development platform software if necessary.

☑ Re-program and test in-house developed applications using the new development suite.

Anticipated Benefits
☑ Enhanced integration opportunities from using industry standard database and programming platform.
☑ Easier access to resources familiar with industry standard development platforms.
☑ Reduced risk associated with using a software development environment that is not an industry standard.
☑ Greater access to training and support resources available from industry standard software development tools.

Scott County Strategic Initiative

C: Electronic Approval of Timesheets

Initiative Description

This initiative is to develop policies and procedures to utilize the capabilities of the NovaTime system in place to include the electronic approval of employee timesheets. Currently, employees are using the system to electronically record their time, but paper time sheets are still used to capture signatures. The NovaTime system has the capability for employees to electronically log-in and approve their time, but the County is not utilizing this feature due to a lack of policies and procedures.

The first step to developing these policies and procedures will be to conduct research regarding the State and local regulations related to electronic approval to ensure that the County will be in compliance. Research should also be conducted of the NovaTime system functionality by the IT Department to better understand the process for approving timesheets.

With the findings from this research, key Department Heads should meet as a group to determine the appropriate policies and procedures. This group should include representatives from multiple departments to ensure that the variety of needs in the County are met.

The final step of this initiative will be to train County employees based upon the established policies and procedures for electronically approving their timesheets.

Initiative Source Information

Functional Area:	Business Issues
Priority Ranking:	13 of 20

Strategic Issue Addressed

B5	Portions of the County's payroll process are still paper based.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
High	High	Low	Medium	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
-	$0	-	-	-	$0

Budget Description	This strategic initiative will occur in year two of the plan and does not have a budget amount as internal resources will be used for all of the work efforts, and no additional software applications or functionalities will need to be purchased.

Action Items to Implement Initiative

☑ Research State and local regulations related to electronic approvals
☑ Research NovaTime system functionalities related to electronic approvals

☑ Conduct work session with key Department Heads to develop the appropriate policies and procedures
☑ Train staff on how to electronically approve timesheets
Anticipated Benefits
☑ Reduced reliance on paper-based processes in the County
☑ Improved efficiency of the process of employees approving their timesheets
☑ Compliance with State and local regulations

Scott County Strategic Initiative

X: Asset Management Vehicle Location

Initiative Description

The purpose of this initiative is to provide the ability to track County vehicles. It was identified that SECC will have this capability for emergency response vehicles and that a similar functionality could benefit the Secondary Roads department, among others. An example of a situation where tracking vehicles would be beneficial is during a snow storm to identify where plow trucks are, and where they have been.

The first step of this initiative is to determine if the same tracking systems used in SECC and in the emergency response vehicles could be used in other County vehicles. In addition, it must be determined whether or not terminals that will show vehicle locations are available from this same system that will work in other departments. For example, a suitable tracking system for other departments would likely be one that is stand-alone and can work on a typical County workstation. It needs to be determined if the system currently in place in SECC can work on these computers.

Once this analysis is complete, IT Department resources should be utilized to either purchase additional equipment to expand the system in place in SECC, or to seek to acquire a unique system for these other departments.

If the decision is made that an expansion of the system in place in SECC will work in the other County departments, the IT Department will need to coordinate the following activities:

1. Purchase additional hardware for new vehicles to be tracked;
2. Work with departments to have hardware installed in vehicles;
3. Install tracking software on department computers;
4. Train users on the tracking system; and
5. Support the system going forward.

If it is determined that the system in place in SECC will not meet the needs of the other County departments to track vehicles, then a new system should be purchased following the same procedures of other system procurements. The activities of this process will include:

1. Identify a selection team for the system;
2. Develop a list of requirements a new system must meet;
3. Develop a request for proposal for a new system;
4. Issue RFP to the marketplace;
5. Score vendor responses as a selection team; and
6. Select a system of preference.

Once a system is selected, the steps outlined above to coordinate the installation of new hardware and train County employees will take place.

Initiative Source Information

Functional Area:	Management & Operations Issues
Priority Ranking:	14 of 20

Strategic Issue Addressed

M13	The SECC will impact the County's current IT function.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
High	Medium	Medium	Medium	Leading Edge

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
-	-	$25,000	$25,000	-	$50,000

Budget Description	This initiative will be addressed over the third and fourth years of the Strategic Plan. The budget amounts for those two years represents an even split of estimated cost vehicle location technology.

Action Items to Implement Initiative

☑ Determine the level of fit of the system currently in place in SECC to other County departments

☑ Decide to expand the system in place in SECC or purchase a stand-alone vehicle tracking system for other County departments

☑ Install additional hardware in County vehicles

☑ Train new users on the functionalities of the system

Anticipated Benefits

☑ Ability to track County vehicles

☑ Ability to develop reporting metrics related to County vehicles

☑ Opportunities to provide greater information to County citizens

Scott County Strategic Initiative
S: Establish Controls of Main Distribution Frame
Initiative Description

This strategic initiative is to establish physical and environmental controls of the Main Distribution Frame (MDF). These controls will include procedures for access by support vendors and will ensure consistent operation of the components of the MDF.

Multiple organizations publish standards for information technology that can be referenced as part of this initiative. Chief among these is the International Organization for Standardization (ISO) which publishes the ISO 17799:2005 standard related to information security management.[5] Section 6.2 of the standard presents controls of external party access and section 9 presents controls of physical and environmental security. Some of the controls in these sections include:

- Acceptance of policies by third-party support vendors;
- Monitoring of location access;
- Procedures for access by third party support vendors;
- Protection from damage from fire, flood, earthquake or explosion; and
- Protection from brief or extended power loss.

The first step of this strategic initiative is to research published standards for information technology such as the ISO standard described above. This should be conducted by the security-dedicated resource in the IT Department, implemented as part of Initiative *Q: IT Department Organization.* Once an understanding of the industry best-practices is reached, an analysis should be conducted of the weaknesses in the County.

Based on the analysis of the current environment in the County, an action plan should be developed to address the physical and environmental controls and to develop policies and procedures for third party support vendor access to the MDF.

Initiative Source Information	
Functional Area:	Management & Operations Issues
Priority Ranking:	15 of 20
Strategic Issues Addressed	
M4	The Main Distribution Frame location is not ideal.
M5	The Main Distribution Frame networking closets lack sufficient access controls.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
High	**Medium**	**Low**	**Easy**	**Established**

---

[5] International Organization for Standardization, ISO 1779:2005: Information technology – Security techniques – Code of practice for information security management. 2005

Estimated Initiative Budget					
FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
$0	$0	-	-	-	$0
Budget Description	This strategic initiative will be addressed in the first and second year of the Strategic Plan and does not have a budget amount because internal resources will be utilized for all of the work effort involved in the initiative.				

Action Items to Implement Initiative

☑ Study published standards related to information technology security management

☑ Analyze the current environment in the County, focusing on the MDF

☑ Develop and action plan to implement necessary controls and develop necessary policies

☑ Implement controls and develop policies

Anticipated Benefits

☑ Increased security of the MDF

☑ Tracking of access to the MDF by third-party support vendors

☑ Reduced risk of outages or downtime due to environmental factors

Scott County Strategic Initiative
J: Credit Card Policy
Initiative Description

This strategic initiative is to develop a standardized credit card policy that will be adopted County-wide. Currently, only three departments accept credit card payments in person, and only two accept online credit card payments. The method in which credit cards are accepted as a form of payment varies among most of these departments. In some situations, departments are nearing conflicts with Payment Card Industry (PCI) compliance.

To address this initiative, the County should either designate internal resources to research considerations for the policy, or hire an external consultant to assist the designated County resource in this research. It is estimated that consulting services for this effort would cost approximately $25,000.

Once research has been conducted, a group of key stakeholders from the County must be established to determine the policy. This group should include:

- IT support resources;
- Heads of departments that will accept credit cards;
- County Administration representation;
- County Board representation; and
- County citizen representation.

The final policy will need to include procedures to continually update it.

The areas that should be researched, as well as the policy that should be addressed, include:

Credit Card Fee Structure

There are two options available related to the credit card fees that the merchant charges:

- **Convenience Fee Model:** This model assesses a fee to the customer for the "convenience" of paying for a transaction by credit card. In this model, the customer is assessed an additional fee above the transaction amount in the form of either a flat fee or a percentage of the overall transaction amount. Credit card companies have restrictions for when and how much of a convenience fee may be charged. For example, Visa typically only allows a fee to be assessed in a face-to-face transaction for tax payments. In addition, County Boards and State Governments often have regulations related to convenience fees.

- **Absorption Fee Model:** In this model, the County would be responsible for paying all of the fees associated with the credit card transaction. The customer would not be charged any additional fees when paying by credit card. As with the Convenience Fee Model, County boards and State Governments also usually have regulations related to this fee model.

Credit Card Types to be Accepted

The County needs to determine which types of credit cards will be accepted for payment. The fees associated with the use of different cards vary, which can be an important consideration if

the absorption fee model is chosen. If a convenience fee model is chosen, this is also an important consideration because the rules for issuing this fee vary among the card companies.

Existing Business Processes

As a policy is developed, the County must consider how departments currently accepting credit cards are doing so. Every effort should be made to minimize the changes to the business processes of credit card acceptance.

Internal Controls

The need for internal controls related to credit card acceptance is of the upmost importance. Controls must be established to ensure that the County maintains compliance with all standards, whether determined by PCI or otherwise. Such controls will occur at multiple levels, such as in the departments that are taking payments, and with the IT Department that will support the future credit card systems.

Customer Considerations

As the ability for citizens to pay with their credit cards in the County is expanded, these citizens will expect the transaction to be conducted in the same fashion as most of their purchases with credit cards. Citizen response, while not necessarily the driving factor in the credit card policy, is something that needs to be considered, whether in the actual choice that is made, or in explanations of the process. For example, although a citizen may not be accustomed to paying a convenience fee, that might be the favorable fee model for the County to utilize. If this is the case, signage, documentation, or other communications should be prepared to explain the rationale for this fee model to citizens.

Initiative Source Information	
Functional Area:	Business Issues
Priority Ranking:	16 of 20

Strategic Issues Addressed	
B15	A standard County-wide credit card acceptance policy does not exist.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Medium	High	Low	Medium	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
$25,000	-	-	-	-	$25,000
Budget Description	The budget amount for this initiative is to hire a consultant to assist the County in researching and developing the credit card policy, in collaboration with County resources. The County may decide to only use internal resources, and consequently this budget amount might not be needed.				

Action Items to Implement Initiative
☑ Determine if an outside consultant will be utilized to research and develop the credit card policy
☑ Conduct research of credit card acceptance
☑ Determine the group that will develop the credit card policy
☑ Meet to develop the credit card policy
☑ Continually update the policy in future years
Anticipated Benefits
☑ Expanded acceptance of credit cards in the County
☑ Consistent policies regarding credit cards throughout the County
☑ Compliance with regulations of credit card acceptance and fees

Scott County Strategic Initiative
P: Wireless Expansion and Policies
Initiative Description

Scott County currently provides limited wireless access to County users. During interviews with County employees and stakeholders, preliminary interest was expressed in having the County provide additional wireless access in communal County spaces.

We recommend that the County undertake an analysis to determine where expanded wireless access for County users and the general public would be appropriate. Based on the work conducted during this technology planning project, the County should determine as part of this analysis which County buildings/locations should provide wireless public Internet access, secured wireless County network access, or both.

As part of this initiative, the County should take this opportunity to develop a wireless access policy to specify acceptable use of County wireless resources. Once the survey and policies have been completed, the County should commence wireless access expansion throughout County buildings and spaces.

Initiative Source Information	
Functional Area:	Technology Issues and Management & Operations Issues
Priority Ranking:	17 of 20

Strategic Issues Addressed	
T10	Wireless network connectivity does not exist in all County buildings.
M14	A public wireless Internet policy does not exist.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
High	**Medium**	**Low**	**Medium**	**Established**

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Cost**
$5,000	$5,000	$5,000	$5,000	$5,000	$25,000

Budget Description	The estimated budget for this initiative is based on the expected cost of additional wireless access points and related hardware necessary for the County to expand its current wireless offering. The County should prioritize which locations should provide wireless access and implement this availability based on need and budget.

Action Items to Implement Initiative

☑ Conduct survey of County users to determine where the need for wireless access is greatest.

☑ Analyze and identify locations and buildings utilized for public meetings.

☑ Develop policy dictating acceptable use of the County's wireless resources and who will be

allowed access and how that access would be granted.

☑ Install additional wireless access points and hardware where appropriate.

Anticipated Benefits
☑ Ability to provide County employees and guests with network and/or Internet access without needing a physically wired connection.
☑ Enhanced ability for County workers and stakeholders to collaborate and access network resources in conference rooms.
☑ Provide Internet access to the general public for use during public meetings and when conducting business activities with outside parties.

Scott County Strategic Initiative
V: Health Department System
Initiative Description

This strategic initiative is to select and implement a system that will be used primarily by the County Health Department but also other departments to varying degrees. The Health Department requested such a system to store and track important information in a centralized manner. Other departments, such as the Sheriff, would likely use the system to access relevant information as well.

The first step of this initiative is to establish a selection team based on identified heavy-users of a future system. This team will be comprised primarily of Health and IT Department staff, but should include any members of departments who might also use the system. This team then will meet in a collaborative work session to identify their needs in a future system. These needs should be combined with research that is conducted by an IT Department resource of marketplace options. Once all of this information is gathered, bids should be requested from vendors.

Due to the low cost of this type of system, a competitive request for proposal process is not necessary. Instead, a system should be selected based on a collaborative review of marketplace options by the selection team based upon factors including:

- Level of fit to the County's needs;
- Findings from the research conducted by the IT department;
- Ability for the IT Department to support the system;
- Ability for the County network infrastructure to sustain the system; and
- Cost of the system.

Once a desired system has been selected, an implementation plan should be developed utilizing project management techniques to document the staffing levels and timing of the implementation. This will include identifying a project team made up of users from multiple departments in the County.

Initiative Source Information	
Functional Area:	Business Issues
Priority Ranking:	18 of 20

Strategic Issues Addressed	
B11	The County Health Department does not have a system to track animal bite information.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Medium	**Medium**	**Low**	**Easy**	**Established**

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
-	-	-	$20,000	-	$20,000

Budget Description	The budget amount for this initiative is based on the estimated cost of a suitable system currently available in the marketplace. The initiative will be addressed in the fourth year of the Strategic Plan. Internal resources will be utilized for the work efforts of the selection and implementation of the system which attributes to no additional budget amounts.

Action Items to Implement Initiative

☑ Identify selection team
☑ Develop list of desired features
☑ Conduct marketplace research
☑ Request bids from marketplace vendors
☑ Review options based on selection criteria
☑ Select a system
☑ Identify implementation team
☑ Plan the system implementation
☑ Execute the system implementation

Anticipated Benefits

☑ Expansion of the types and amounts of information retained in the Health Department
☑ Ability for information to be accessed at multiple locations in the County
☑ Increased sharing of health information throughout the County

Scott County Strategic Initiative

D: County Meeting Place Scheduling System

Initiative Description

This strategic initiative is to select and implement a meeting place scheduling system that will be used County-wide. Multiple departments requested this capability, and the Facilities and Support Services identified the lack of such a system as a major weakness and noted that significant staff time is spent utilizing a manual process to manage the meeting places in the County.

The first step of this initiative is to identify and select a team comprising the heavy-users of a future system. This team will then meet in a collaborative work session to identify their specific needs in a future system. These should be combined with research of marketplace options that is conducted by an IT Department resource. Once all of this information is gathered, bids should be requested from vendors.

Due to the low cost of this type of system, a competitive request for proposal process is not necessary. Instead, a system should be selected based on a collaborative review of marketplace options by the selection team based upon factors including:

- Level of fit to the County's needs;
- Findings from the research conducted by the IT department;
- Ability for the IT Department to support the system;
- Ability for the County network infrastructure to sustain the system; and
- Cost of the system.

Once a desired system is selected, an implementation plan should be developed utilizing project management techniques to document the staffing levels and timing of the implementation. This will include identifying a project team comprising users from multiple departments in the County.

Initiative Source Information

Functional Area:	Business Issues
Priority Ranking:	19 of 20

Strategic Issues Addressed

B8	A significant number of important County business functions rely on manual processes.

Initiative Ranking

County		BDMP		
Strategic Issue Rank	Department Priority	Cost Benefit	Ease of Implementation	Maturity of Technology
Medium	Medium	Low	Easy	Established

Estimated Initiative Budget

FY2012	FY2013	FY2014	FY2015	FY2016	5-Yr Total Budget
-	-	-	$10,000	-	$10,000

Budget Description	This strategic initiative will be addressed in the fourth year of the Strategic Plan and has a budget amount of $10,000 associated with it. This number is based upon research of the cost of current vendor offerings of systems designed for organizations similar in size to Scott County with the appropriate number of licenses. Internal resources will be utilized for the work efforts of the selection and implementation of the system which attributes to no additional budget amounts.

Action Items to Implement Initiative
☑ Identify selection team
☑ Develop list of desired features
☑ Conduct marketplace research
☑ Request bids from marketplace vendors
☑ Review options based on selection criteria
☑ Select a system
☑ Identify implementation team
☑ Plan the system implementation
☑ Execute the system implementation

Anticipated Benefits
☑ Reduced time spent by FSS resources scheduling, confirming, and setting up rooms
☑ Reduced double-bookings of County meeting places
☑ Ability to generate reports of usage metrics

Scott County Strategic Initiative
O: Network and Internet Speed Assessment

Initiative Description

This strategic initiative is for a member of the County's IT Department to conduct an assessment of the speed of the network and internet at various locations in the County. It was reported that some locations, particularly those located on the wide-area-network (WAN), experience slow response times. Multiple factors may be contributing to these times including the network infrastructure, applications, or individual computers. Additionally, it was reported that the current configuration of the web filtering software occasionally prohibits access to critical website. As part of the assessment, the configuration of this software should be studied to determine its effectiveness.

Based on the outcome of the assessment, the IT Department should plan for the necessary solutions utilizing the project planning process, described in Initiative T above, IT Department Policies and Procedures. These solutions can range from specific infrastructure upgrades, to employee training and education, or to adjustments of the web filter software.

Initiative Source Information	
Functional Area:	Technology Issues
Priority Ranking:	20 of 20

Strategic Issues Addressed	
T8	Many County staff reported that the County Internet connection is slow and the Web filtering software occasionally prohibits access to critical websites.

Initiative Ranking				
County		**BDMP**		
Strategic Issue Rank	**Department Priority**	**Cost Benefit**	**Ease of Implementation**	**Maturity of Technology**
Medium	Medium	Low	Medium	Established

Estimated Initiative Budget					
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5-Yr Total Budget**
$0	-	-	-	-	$0
Budget Description	This initiative does not have a budget as it will be utilizing the efforts of internal IT resources. The initiative will be conducted in the first year of the Strategic Plan.				

Action Items to Implement Initiative

☑ Request additional information from departments reporting slow network and internet speed.

☑ Plan for an assessment among IT Department resources based on the additional information received.

☑ Conduct assessment.

☑ Develop action plan utilizing project management techniques based on the outcome of the assessment.

Anticipated Benefits
☑ Increased data access capability   ☑ Increased productivity

4.0 Implementing the Technology Plan

This section of the report outlines the budget and timeline for the initiatives that make up this Strategic Plan with comparisons to historical spending levels in the County. This section also describes the process for governing the Strategic Plan and ensuring that it is periodically updated.

4.1 Budget and Timeline

The previous section of the Strategic Plan provided detailed descriptions for each initiative and what each entails, 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.

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

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

	Initiative Budget and Timeline Matrix						
	Strategic Initiative	**Year 1 FY2012**	**Year 2 FY2013**	**Year 3 FY2014**	**Year 4 FY2015**	**Year 5 FY2016**	**5 Year Total**
	Initiatives Starting in Year One						
G	Enterprise Resource Planning System	500,000	1,000,000	500,000	-	-	2,000,000
Q	IT Department Organization	80,000	80,000	80,000	80,000	80,000	400,000
T	IT Department Policies and Procedures	50,000	-	-	-	-	50,000
F	eGovernment Capabilities	25,000	25,000	25,000	25,000	-	100,000
H	Facility Management System	0	-	-	-	-	0
B	Document IT Resource Utilization Plan for Scott Emergency Communications Center	0	-	-	-	-	0
Y	IT Training	30,000	30,000	30,000	30,000	30,000	150,000
I	Laptop Computers for Employee Use	8,000	-	-	-	-	8,000
S	Establish Controls of the Main Distribution Frame	0	0	-	-	-	0
J	Credit Card Policy	25,000	-	-	-	-	25,000

Initiative Budget and Timeline Matrix						
Strategic Initiative		**Year 1 FY2012**	**Year 2 FY2013**	**Year 3 FY2014**	**Year 4 FY2015**	**Year 5 FY2016**	**5 Year Total**
P	Wireless Expansion and Policies	5,000	5,000	5,000	5,000	5,000	25,000
O	Network and Internet Speed Assessment	0	-	-	-	-	0
Initiatives Starting in Year Two						
R	Disaster Recovery/Business Continuity Plan	-	85,000	-	-	-	85,000
E	Computer Replacement Program	-	100,000		400,000	100,000	600,000
C	Electronic Approval of Timesheets	-	0	-	-	-	0
Initiatives Starting in Year Three						
A	Document Management System	-	-	200,000	150,000	-	350,000
X	Asset Management Vehicle Location	-	-	25,000	25,000	-	50,000
Initiatives Starting in Year Four						
U	Transition County-Developed Applications to Supported Development Environments	-	-	-	0	0	0
V	Health Department System	-	-	-	20,000	-	20,000
D	County Meeting Place Scheduling System	-	-	-	10,000	-	10,000
Initiatives Starting in Year Five						
	IT Infrastructure Updates	-	-	-	-	300,000	300,000
		FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**5 Year Total**
Total Plan Initiatives Budget		723,000	1,325,000	865,000	745,000	515,000	4,173,000

Table 15: Initiative Budget and Timeline Matrix

4.2 Funding

Scott County has historically planned for significant investments in the development on-going support of their technology environment. Annual IT planned expenditures are regularly approaching 2.5 million dollars. However, in recent years actual spending has typically been lower than planned resulting in spending levels of a little over 2.5 percent of the total County budget. The table below summarizes the overall future IT spending based on the budget amounts identified for the projects in the plan.

Figure 05 below depicts the planned versus actual IT related spending levels in FY2008 and FY2009.

Current IT Spending Levels					
	FY2008		FY2009		FY2010
	Planned	Actual	Planned	Actual	Planned
Total Operational	1,550,336	1,428,581	1,596,658	1,608,752	1,636,964
Total Capital	907,500	328,471	850,000	444,116	975,000
Total IT Spending	2,457,836	1,757,052	2,446,658	2,052,868	2,611,964
County Budget	70,816,565	68,147,865	72,852,147	72,005,615	72,628,952
Percent of Total County Budget	3.4707%	2.5783%	3.3584%	2.8510%	3.5963%

Table 16: Current IT Spending Levels
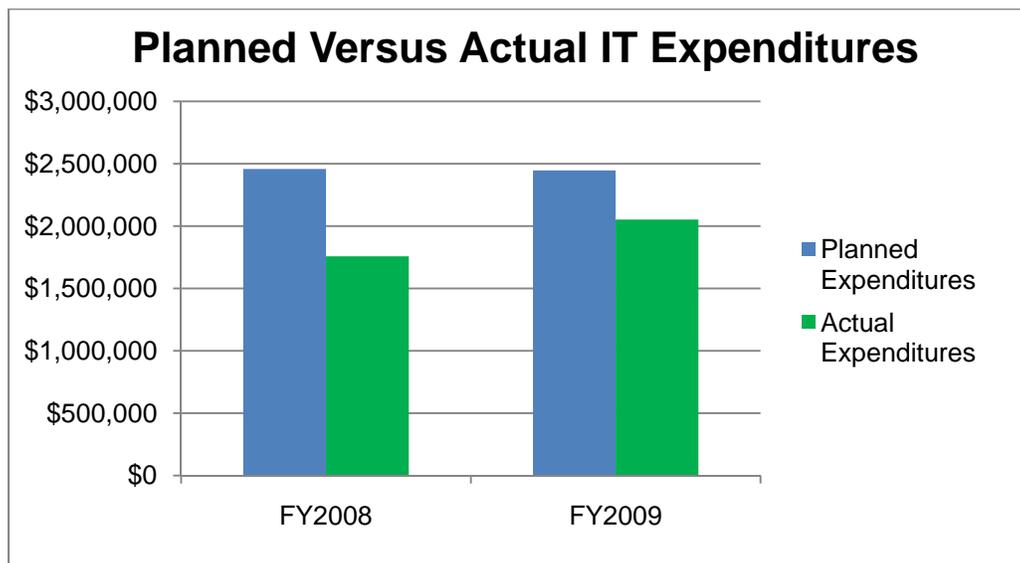
Figure 05: Planned vs. Actual IT Expenditures

Scott County determines that investments requiring Board approval are typically capital in nature. These projects are generally valued at over $10,000 and have a useful life of at least five years. Based on these guidelines, the strategic initiatives for the five year Strategic technology Plan equate to $3,338,000 in capital funding and $835,000 in operational funding. This distribution is depicted in figure 6 below.

Figure 06: Strategic Plan Funding

As the annual IT budget is developed, it is important that operational funding is secured to support those capital 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. For example, Initiative E, *Computer Replacement Program* is a capital investment but is replacing existing hardware, not adding to the total inventory. These calculations are depicted in table 17 below.

Future IT Spending Levels						
	Year 1 FY2012	Year 2 FY2013	Year 3 FY2014	Year 4 FY2015	Year 5 FY2016	5 Year Total
In-Progress Capital Projects Budget	400,000	-	-	-	-	400,000
Strategic Initiatives Capital Budget	508,000	1,100,000	725,000	605,000	400,000	3,338,000
Total Capital Budget	**908,000**	**1,100,000**	**725,000**	**605,000**	**400,000**	**3,738,000**
Operational Initiatives	215,000	225,000	140,000	140,000	115,000	835,000
Estimated Operational Budget	1,636,964	1,636,964	1,636,964	1,636,964	1,636,964	-
Additional Operational Funding to Support Prior Year Capital Projects	146,250	115,000	205,000	294,000	324,400	-
Total Operational Budget	**2,053,214**	**1,931,964**	**2,046,964**	**2,070,964**	**2,076,364**	**-**
Total IT Spending	**2,961,214**	**3,031,964**	**2,771,964**	**2,675,964**	**2,476,364**	**-**

Table 17: Future IT Spending Levels

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 5 percent. In the three counties contacted as part of the benchmarking research component of this project, the respondents reported spending levels lower than those projected for Scott County, but more consistent with the historic actual IT spending ratios in Scott County. 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 calculations of the IT spending ratios are depicted in table 18 below.

Future IT Spending Ratios					
	Year 1 FY2012	Year 2 FY2013	Year 3 FY2014	Year 4 FY2015	Year 5 FY2016
Total IT Spending	**2,961,214**	**3,031,964**	**2,771,964**	**2,675,964**	**2,476,364**
County Budget	**72,628,952**	**72,628,952**	**72,628,952**	**72,628,952**	**72,628,952**
IT Spending as a Percent of Total County Budget	**4.07%**	**4.17%**	**3.82%**	**3.68%**	**3.41%**

Table 18: Future IT Spending Ratios

The fluctuations of this IT spending ratio are depicted in figure 07 below.
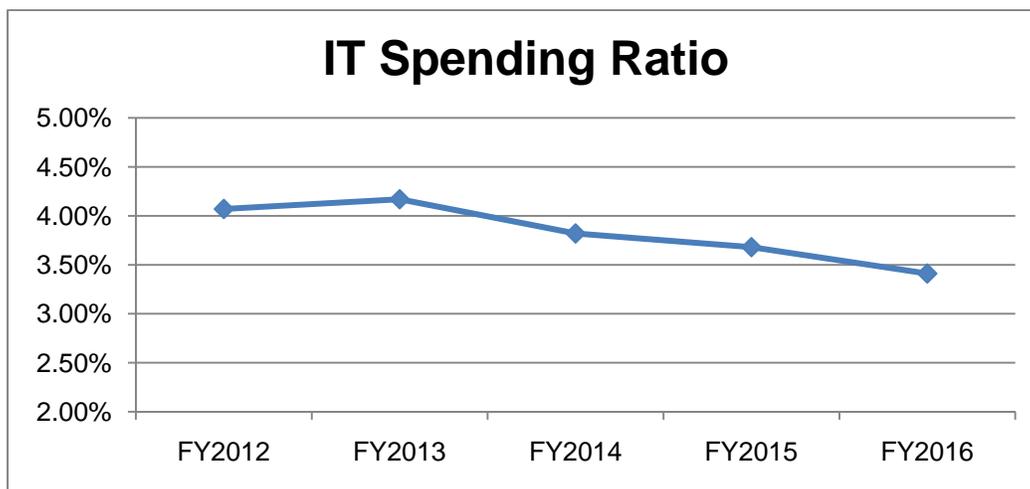

Figure 07: IT Spending Ratio

Fiscal Year 2016 will call for IT spending levels of approximately 3.41% of the total County budget. The planned expenditures in Fiscal Year 2010 are 3.59% which shows that following the initiation of the projects in this Strategic Technology Plan, the spending levels will decrease to historic levels.

The Strategic Plan involves significant future investments in the IT environment in the County 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 4.3, Strategic Plan Governance.

4.3   Strategic Plan Governance

The Strategic Plan will greatly impact the operations of the County. 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 community needs assessments to help identify the most important technology related County challenges.

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

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

☑ Active executive and management involvement and sponsorship will be critical to the successful adoption and continued support of the plan.

☑ Implementing a successful Strategic Plan will require significant planning, increased capital investment, and human resources in order to successful 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 County's desired objectives.

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

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

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

The current Strategic Planning Project Team should actively lead the governance process of this plan. At a minimum, the Project Team should review the plan twice a year. The first update of the year should be to track the process made against initiatives.

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 reprioritize initiatives should be made by the Project Team. As part of this update, the Project Team should meet with Department Heads to obtain their input and communicate plans for the upcoming year.

As described in Initiative T – IT Policies and Procedures, the County 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 County to implement the recommended project management practices described in Initiative T. Implementing the projects and initiatives in this plan not only take County resources and appropriate staff, but also a structured project management methodology to increase the likelihood of project success.

Appendix A: Project Participant List

This section of the report lists all of the departments and their representatives from Scott County that participated in this Strategic Technology Planning Project.

Project Participant List	
Project Team	
1	Dee Bruemmer, County Administrator
2	Matt Hirst, Information Technology Director
3	Sarah Kautz, Budget Manager

	Department	**Representative(s)**
1	Administration	Dee Bruemmer Sarah Kautz Christine Berge
2	County Assessor	Dale Denklau Pam Holst
3	County Attorney	Mike Walton Kathy Walsh
4	County Auditor	Roxanna Moritz Roland Caldwell Peter Kurylo Wesley Rostenbach
5	Community Services	Lori Elam Janet Kimmel
6	Conservation	Roger Kean Marc Miller Barbbara Harden John Valliere Dave Ong Roger Larson Joan Noon
7	Facility Support Services	Dave Donovan Tammy Speidel Barbara Schloemer
8	Health Department	Larry Barker Amy Thorenson
9	Human Resources	Mary Three Jill Niebuhr
10	Information Technology	Matt Hirst Sam Samara John Heim James Bainbridge Robert Fox Gary Gilkison Stephanie McCuga

		Lynn McCartney
		Lorraine Robinson
		George Tollerud
		Jeff Ward
		Raymond Weiser
11	Juvenile Detention	Jeremy Kaiser
12	Planning and Development	Tim Huey
13	County Recorder	Rita Vargas
		Sue Brewer
14	Scott Electronic Communications Center	Gloria Fitzpatrick
		Brian Hitchcock
15	Secondary Roads	Jon Burgstrum
		Russ Stutt
16	Sheriff's Office	Sheriff Dennis Conrad
		Pam Bennett
		Jennifer Witherspoon
		Michael Brown
		Mike Becker
		Le Roy Kunde
		Timothy Lane
17	County Treasurer	Bill Fennelly
		Craig Hufford
		Rhonda Skahill
		Barbara Vance
County Board		
1	County Board	Chris Gallin
		Larry Minard

Appendix B: Benchmarking Response Summary Table

This section of the report contains the summary table of the responses from Counties to the benchmarking research. The memo and list of questions is included in Appendix A of this report, and the detailed responses are included in Section 2.0.

County	Sangamon, IL	Peoria, IL	Johnson, IA	Scott, IA
Number of Staff in IT Department	11 FTEs	20.5 FTEs	11.5 FTEs	12 FTEs
Organizational Structure of IT Department	1 Director 1 Admin. Asst. 1 GIS 3.5 Operations/ Networking/ PC Support 4.5 Application Development & Application Support	1 Director 1 Admin. Asst. 1 GIS 1.5 Office Systems and Services 7.5 Enterprise Application and Support 8.5 Technical Services	1 Director 1 Operations Support/ Secretary 3 Programming/ Database Administration 3 Network Administration 3 GIS 1 Webmaster	1 Director 1 Help Desk 2 GIS Analysts 1 Webmaster 3 Programmer/ Analysts 4 Network Administrators
Current Annual IT Spending	$1.03 Million	$3.6 Million	$1.8 Million	$2.1 Million
Current County Budget	$92.9 Million	$120 Million	$90 Million	$72.0 Million
IT Spending as Percentage of Budget	1.1 %	3.0 %	2.0%	3.0 %
Centralized IT Purchasing	Mostly	Completely	Mostly	Mostly
System of charge-backs used	Yes	Yes	No	No
Number of End Users	600 direct 200 indirect	1,000	476	500
Number of PCs	600	850	322	500
Number of Laptops	150	20	252	130
Number of Applications	23	51	25	55
ERP system in place	New World's Public Administration for Finance Modules	Sungard Pentamation for Financial and HR Modules	None	None
Date if ERP installation	1988, 1992 for Payroll	2006	None	None

County	Sangamon, IL	Peoria, IL	Johnson, IA	Scott, IA
eGov Service Offerings	Tax Payments Document Posting	10 to 20	Tax Payments Motor Vehicle GIS Voter Regis. Document Posting	Tax Payments Document Posting
Credit Card Acceptance	No	No	Some	Some
Custom Development of Systems	Yes, using AS/400 for 20 applications	Yes, but moving away from the concept. Custom development now only occur when no suitable COTS application exists	Yes, using .NET, MVC framework, SQL databases, and Microsoft Reporting Services	Yes, in Zim and Visual Basic Development Environments
Hosted Services Deployment	Yes, 1 Application	Yes, 1 Application	No	Yes
Application or Desktop Virtualization	No	Yes	Yes	Yes
Process to Select and Prioritize IT Projects	Nothing formalized	Mix of ROI and Political Factors	State/Federal Requirements, ROI, Resource Availability	Nothing Formalized
Individuals who Select and Prioritize IT Projects	- County Board - Elected Officials - IT Department	- IT Department - County Administrator - Capital Committee	- IT Director - 2 Board liaisons - Sub-committees	- IT Director - IT Department - County Administrator - Board
Current IT Projects Underway	- Email Retention - Website Updates - New Switches and Routers	- Justice System Replacement - Expansion of VMware - Infrastructure upgrades	- Social Services database - VoIP system - Offsite Disaster Recovery location - Permit/ Inspection System	- Strategic Technology Planning Project - Infrastructure Upgrades

Appendix C: Benchmarking Research Contact Information

This section of the report contains the contact information for the three County IT Directors that responded to the benchmarking research questions.

County	Sangamon County, IL	Peoria County, IL	Johnson County, IA
Name	Wayne Rovey	Russell Haupert	Jean Schultz
Telephone	(217) 535-3175	(309) 495-4913	(319) 356-6080
Email	wayner@co.sangamon.il.us	rhaupert@peioriacounty.org	jschultz@co.johnson.ia.us

Appendix D: Technology Assessment Worksheet

This section of the report contains the worksheet that BDMP used during the fact-finding meetings to gather information related to the Technology Assessment.

Reference Area	Definition	As-Is	Findings/Research Results	Recommendations
A). Enterprise Application Architecture	This column provides a definition of the reference area.	This column will describe the as-is for the reference area at the County.	This column will document BDMP findings related to the reference area.	This column will provide recommendations related the reference area being assessed.
1. Resource Planning	How are internal resources (IT, facilities, HR etc.) planned for and used? Could the County benefit from an ERP system? Is a work order system in place that can assist with tracking where IT resources are used?			
2. Cost Allocation	How are costs allocated across departments in regards to internal resources and could chargeback's be used?			
3. Business Process Workflow	Are any workflow products currently being used? How are tasks routed between different employees and/or departments? Are there any opportunities make the workflow process more efficient? Identify some of the major workflows and areas for improvement related to the overall efficiency.			
4. Document Management	How does the County store documents and other data? Is a document management system currently in use? What are the retention requirements for the various records and documents maintained by the County? What are the overall document management needs of the departments? Currently using Canon Imageware for document storage.			
5. Areas for Improvement	Summarized areas for improvement related to Enterprise Architecture.			
B). Internet Access/Development				
1. Public Records Data Set	What data is being shared with the public? How is access to that data being controlled and verified? Identify other data sets that should be provided to the public. How are the departments being empowered to publish data?			
2. Web Collaboration (XML, Web Services)	Is there any web collaboration currently being done? Where might some efficiencies be gained by using web collaboration in other areas? Could data sharing with the State and other local governments be improved?			
3. Credit Card Processing	Is a single system/vendor in use for CC processing? Is a consistent fee model use across all departments? Is the ability to pay for services over the web using a CC available?			

Reference Area	Definition	As-Is	Findings/Research Results	Recommendations
C). LAN/WAN Network				
1. Backup Methods (disk-to-disk, deduplication)	Length of time to complete a full backup? Are backups centralized or being performed at multiple locations? How big is the data set that is being backed up? Failure rate of backups? Provide a macro overview of the current environment and provide suggestions for improvement.			
2. Server Virtualization	What systems are currently virtualized? What virtualization product is currently being used and how is it configured? County is currently using VMWare.			
3. Application Virtualization/Thin Computing	Where is application virtualization and thin computing currently being used? Where else might it make sense to utilize application virtualization and thin computing? County believes this needs to be a focus area and that the County is not as established in this area as it could be. Would like to look at Riverbed type technologies as an option. Is VDI or Citrix an option?			
4. LAN Network Design	What is the current LAN topology? What services are being run on the LAN? What type of switching infrastructure is being used?			
5. WAN Network Design	What is the current WAN topology? What bandwidth and latencies are associated with each WAN/VPN circuits? What services are being run across the WAN? Is there any redundancy/failover built-in? Six locations are currently connected via T1 lines. Only one location has a dedicated fiber connection to the main County building.			
6. WAN Optimization	What type of WAN optimization is currently being done? What services most need to be optimized? How much has been spent on WAN optimization technologies?			

Reference Area	Definition	As-Is	Findings/Research Results	Recommendations
D). Organization Structure				
1. Technology Staffing Needs	What is the typical number of work orders opened and closed per month? What is the average time it takes for a work order to be closed? Are projects being completed in a timely fashion? Are issues being handled in a proactive or reactive manner?			
2. Hosted/Contracted Service Opportunities	What IT functions are underserved or being served in house that may be cost effectively outsourced to a 3rd party?			
3. Technology Training Needs for IT and Entire Organization	Is there a training budget? How available is training to both IT staff and county employees? How is training typically performed? Assess training and determine if departments could support themselves more. New agreement between neighboring localities related to joint communications center is going to require Scott County IT to support an additional 50 employees. Two additional IT resources have been requested in addition to an additional IT resource to support a new phone system.			
E). Technology Project Management				
1. Project Tracking	What tools are used to track and report on project status? In addition to the Technology Oversight Board, should there be a PMO type organization? Need to assess how projects are selected and tracked.			
2. Project Reporting	How is project status reported on IT projects? What metrics (cost, scope, schedule) are tracked and reported on?			
3. Project Prioritization	What is the planning process for prioritizing IT projects?			

Appendix E: Application Inventory

This section of the report contains an inventory of all the Applications currently in use in the County as well as a separate list of those existing in the Zim development platform.

No	Application	Department	Product	Provider
	Application Inventory			
No	**Application**	**Department**	**Product**	**Provider**
1	Budget Reporting	Administration	FRX	Best Software
2	General Ledger Accounting	Administration	Platinum	Best Software
3	Land Appraisal	Assessor	Appraisal	Vanguard
4	Land Appraisal Archival	Assessor	Report Archival	Vanguard
5	Criminal Law Reference	Attorney	Criminal Law Handbook	Iowa Bar Assoc.
6	Juvenile Law Reference	Attorney	Juvenile Law Manual	Iowa Bar Assoc.
7	Legal Case Management	Attorney	Prosecutor Dialog	Judicial Dialog
8	Election Returns	Auditor	Election Returns	State of Iowa
9	Time Keeping	Auditor	NovaTime	Longley Time Systems
10	Voter Registration	Auditor	Voter Registration	State of Iowa
11	Client Check Writing System	Community Services	RPM	Quilogy
12	Golf Reservation Tracking	Conservation	Golftrac	Vermont Systems
13	Maintenance Tracking	Conservation	Maintrac	Vermont Systems
14	Recreation Tracking	Conservation	Rectrac	Vermont Systems
15	Enterprise Thin Client Environment	Enterprise Wide	Metaframe	Citrix
16	Enterprise Wide Anti-Virus	Enterprise Wide	Anti-Virus	Symantec
17	Enterprise Wide Backup Restore	Enterprise Wide	Galaxy	CommVault
18	Enterprise Wide CAD	Enterprise Wide	AutoCAD	AutoDesk
19	Enterprise Wide Document Imaging	Enterprise Wide	Imageware	Cannon

No	Application	Department	Product	Provider
20	Enterprise Email	Enterprise Wide	Exchange	Microsoft
21	Enterprise Wide Internet	Enterprise Wide	ISA	Microsoft
22	Enterprise Wide Network Printing	Enterprise Wide	Server	Microsoft
23	Enterprise Wide Network Services	Enterprise Wide	Active Directory	Microsoft
24	Enterprise Wide Network Access	Enterprise Wide	Cisco VPN	Cisco
25	Enterprise Wide Windows Updating	Enterprise Wide	Windows SUS	Microsoft
26	Access Key Management	Facility and Support Services	Keystone 600N	Best Access Solutions
27	Asset Tracking	Facility and Support Services	Fixed Asset System	Best Software
28	Workorder Management	Facility and Support Services	Workorderama	Facility Wizards
29	GIS System	Geographic Info Systems	Arc GIS	ESRI
30	Epidemic Tracking System	Health Department	Eppi	Federal CDC
31	Health Lead Tracking	Health Department	Stellar	Federal CDC
32	Immunization Tracking	Health Department	IRIS	Iowa Dept. of Public Health
33	Restaurant Inspections System	Health Department	DIA Inspections	State of Iowa
34	Employee Appraisal System	Human Resources	Employee Appraiser	Success Factors
35	Workmans Trackability	Human Resources	Trackability	Recordables Inc.
36	Workmans Comp Tracking	Human Resources	Trackcmp	Recordables Inc.
37	Network Performance Monitor	Information Technology	Orion NPM	Solarwinds
38	Workorder Management	Information Technology	Track-IT	Intuit
39	General Records System	Recorder	Resolution	COTT System

Application Inventory				
No	**Application**	**Department**	**Product**	**Provider**
40	Jail Inmate Probation	Sheriff	Probation System	DSI
41	Jail Inmate Telephone	Sheriff	Inmate Telephone System	DSI
42	Jail Inmate Tracking	Sheriff	Offender Mgnt. System	DSI
43	Jail Report Creation	Sheriff	Crystal Reports	Segate
44	Law Enforcement Civil Records	Sheriff	Civil	Cody Systems
45	Law Enforcement Criminal Records Access	Sheriff	ConnectCIC	Comsys
46	Law Enforcement Dispatching	Sheriff	Computer Aided Dispatch	Cody Systems
47	Law Enforcement Evidence Tracking	Sheriff	Beast	Porter-Lee
48	Law Enforcement Incident Records	Sheriff	Record Mgmt System	Cody Systems
49	Law Enforcement Vehicle Location	Sheriff	LTA	Location Technologies
50	Mainframe Access	Sheriff	Tiny Term	Century Software
51	Taxation System	Treasurer	Tax Incode	CMS Invasion
52	VIN Tracking	Treasurer	VIN Assist	National Insurance Crime Bureau
53	Client Tracking	Veterans Affairs	VIMS	Sterling

Applications Currently in Zim Development Platform	
Permit Tracking	Position Control
Rural Addressing	Purchase Order
Meeting Agenda	Personnel Applicant Tracking
Office Supplies	Account Receipt
Payroll	Security
Accounts Payable	Sheriff Civil
Auditor Plat Book	

Appendix F: Historic IT Spending Levels

This section of the report contains table of the historic planned and actual IT related expenditures.

Description	FY2008		FY2009		FY2010
	Planned	Actual	Planned	Actual	Planned
Operational					
IT Personnel Services	-	902,943	-	973,809	1,043,714
Equipment	-	3,007	-	552	1,500
Expenses	-	300,804	-	322,845	376,050
Supplies	-	3,323	-	2,038	15,700
Combined Operational Expenses	1,290,336	-	1,396,658	-	-
Maintenance from Capital Budget	260,000	218,504	200,000	309,508	200,000
Total Operational	**1,550,336**	**1,428,581**	**1,596,658**	**1,608,752**	**1,636,964**
Capital					
EE Atty - Prosecutor Dialog System	-	-	150,000	37,952	-
EE ComServ-MH/DD Software	-	3,068	-	-	-
EE FSS-Campus Fiber Optic Ring	45,000	-	-	-	-
EE FSS-Video Teleconference (ICN Parole)	20,000	-	-	-	-
EE Hum Res-Software Upgrades/Purchases	-	10,500	-	2,500	-
EE IT-Phone System Upgrades/Replacement	300,000	3,189	25,000	2,460	225,000
EE IT-PC LAN Desktop Replacements	-	-	160,000	157,173	200,000
EE IT-PC LAN: PC's/Printers	50,000	55,856	50,000	52,806	60,000
EE IT-PC LAN: Wiring	5,000	15,058	5,000	600	5,000
EE IT-PC LAN: Windows Software	35,000	24,006	35,000	45,351	35,000
EE IT-PC LAN: Internet	-	2,438	-	-	-
EE IT-PC LAN: File Servers	30,000	25,228	30,000	13,447	-
EE IT-PC LAN: Imaging Systems	30,000	19,113	30,000	-	-
EE IT-PC LAN: Additional Memory	-	268	-	-	-
EE IT-PC LAN: Remote Sites WANS	20,000	-	20,000	-	20,000
EE IT-PC LAN: LAN Edge Devices	150,000	46,149	170,000	61,795	170,000
EE IT-PC LAN Maintenance	-	210	-	-	-
EE IT-Web Site Development	-	14,268	-	2,029	-
EE IT-Network Review Study	12,500	-	-	-	150,000
EE IT-Tape Backup Equipment	20,000	22,545	10,000	1,669	-
EE IT-Server Software Licenses	15,000	4,774	15,000	-	15,000

Current IT Spending Levels					
Description	**FY2008**		**FY2009**		**FY2010**
	Planned	**Actual**	**Planned**	**Actual**	**Planned**
EE IT-Replace Monitors	15,000	10,337	15,000	8,471	15,000
EE IT-Thin Client Network	60,000	-	60,000	-	-
EE IT-Basic NSA Training	10,000	13,771	10,000	7,190	15,000
EE IT-Technology Partner Support	25,000	19,335	25,000	12,819	25,000
EE IT-Time & Attendance System	25,000	-	-	-	-
EE Rec-Mgt Fund Projects	40,000	38,358	40,000	37,854	40,000
Total Capital	**907,500**	**328,471**	**850,000**	**444,116**	**975,000**
Total IT Department Spending	**2,457,836**	**1,757,052**	**2,446,658**	**2,052,868**	**2,611,964**
County Budget	**70,816,565**	**68,147,865**	**72,852,147**	**72,005,615**	**72,628,952**
Percent of Total County Budget	**3.4707%**	**2.5783%**	**3.3584%**	**2.8510%**	**3.5963%**

Appendix G: Glossary of Terms and Abbreviations

This section of the report contains a glossary of the common terms and abbreviations used throughout the Strategic Technology Planning Project, and this Plan.

Term or Abbreviation	Definition
AP	Accounts Payable
Best of Breed	An application environment where systems are selected based on their ability to meet the requirements of an organization as opposed to a single integrated system that offers multiple applications which may meet a lower number of organizational requirements.
BDMP	Berry, Dunn, McNeil & Parker
Business Process	An action taken in the course of conducting business. Whether manual or automated, all processes require input and generate output. Depending on the level of viewing and modeling, a process can be a single task or a complicated procedure such as building a product.
CIP	Capital Improvement Project
COTS	Commercial off the Shelf System
ERP	Enterprise Resource Planning System
Fixed Asset	A long-term tangible piece of property that a county owns and uses in the production of its income and is not expected to be consumed or converted into cash any sooner than at least one year's time.
FTE	Full Time Equivalent
GASB-34	Governmental Accounting Standards Board Statement #34. The new requirements now require governments to report infrastructure and depreciate their capital assets. Preexisting "major" infrastructure assets purchased, constructed, or donated in fiscal years ending after June 30, 1980, or that received major renovations, restorations, or improvements during that period and not already reported on your financial statements will have to be reported at historical cost.
General Ledger	The general ledger is a summary of all of the accounting transactions that occur in the County.
GIS	Geographic Information System
HR	Human Resources
ICMA	International City County Managers Association
In-Progress Initiative	A project or initiative that the County has secured funding for.
ISO	International Organization for Standardization
Interface	The languages, codes and messages that programs use to communicate to each other and to the hardware.

LAN	Local Area Network
QoS	Quality of Service, a defined measure of performance in a data communications system where a mechanism determines which packets have priority.
PCI	Payment Card Industry, an organization that publishes standards for credit card acceptance.
PMO	Project Management Office
PoE	Power over Ethernet, transmitting DC power to the target device at the end of an Ethernet cable by carrying power in the unused 4/5 and 7/8 wires.
RFP	Request for Proposal
SQL	Structured Query Language, a language used to interrogate and process data in a relational database.
Virtualization	Running applications in separate, isolated partitions within a single server.
VoIP	Voice over IP, a digital telephone service that uses the public Internet and private backbones for call transport.
VPN	Virtual Private Network, a private network that is configured within a public network in order to take advantage of the economies of scale and management facilities of large networks.
WAN	Wide Area Network