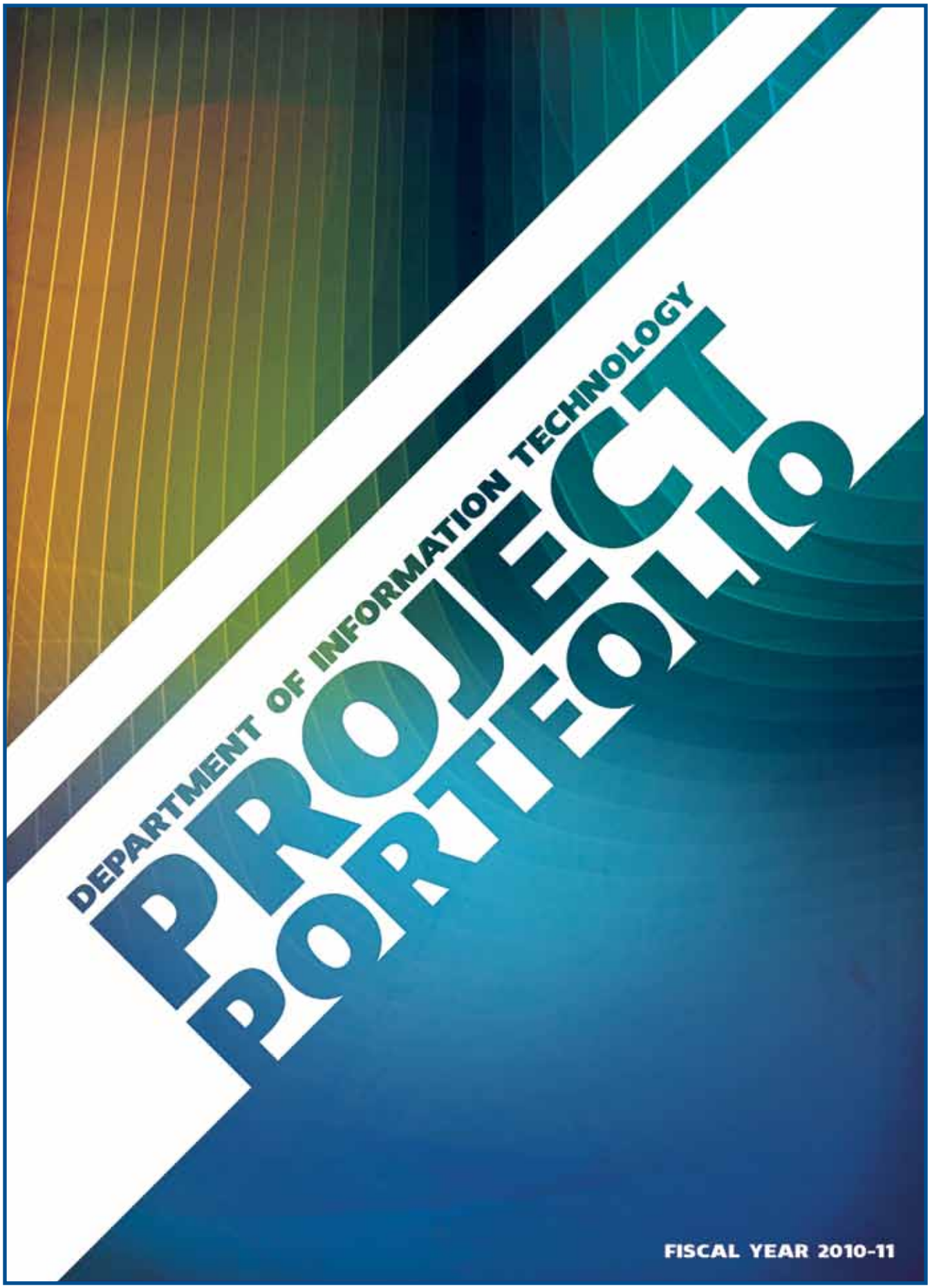
DEPARTMENT OF INFORMATION TECHNOLOGY
PROJECT PORTFOLIO
FISCAL YEAR 2010-11

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INFORMATION OUTREACH

INFORMATION SYSTEMS

GEOGRAPHIC INFORMATION SERVICES (GIS)

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FY 2011 - Information Outreach Project Summary

Project ID	Project Title	Estimated Cost	Start Date	Finish Date	FY2008 Spent	FY2009 Spent	FY2010 Proposed	FY2010 Adopted	Current Annual Maintenance	Annual Maintenance Completed
IO09100-01	E-Government	0	12/1999		0	0	0	0	0	0
IO09100-02	Graphic Design	0	09/2003		0	0	0	0	0	0
IO09100-03	Media Relations & Information Outreach	0	09/2003		0	0	0	0	0	0
IO09100-04	Public Education	0	10/2010		N/A	N/A	N/A	N/A	2,500	0
GRAND TOTAL		**0**			**0**	**0**	**0**	**0**	**0**	**0**

FY 2010 - IS Project Summary

Project ID	Project Title	Estimated Cost	Start Date	Finish Date	FY2009 Adopted	FY2010 Adopted	FY2011 Proposed	FY2011 Adopted	Current Annual Maintenance	Total Spent Through FY2010
CT85120-01	iSCSI Storage Infrastructure	50,000	05/09/07		20,752	4,667	27,330	2,330	2,330	32,074
CT85120-04	Core Switch Replacement	169,000	06/10/09		24,817					26,868
CT85120-05	Edge Switch Replacement	150,000	10/01/09			20,000	41,665	16,000		1,058
CT85120-06	PC Alternatives	60,000	04/28/08		4,543	3,750	20,753	6,753	1,753	11,835
CT85120-08	Employee Portal Expansion	160,000	10/01/06		7,000	12,616	22,826	12,826	12,826	75,105
CT85120-09	Fire Station Application Delivery	30,000	01/20/11							
CT85120-11	Server Virtualization Infrastructure	60,000	01/16/08		18,337	3,910	3,910	3,910	3,910	50,303
CT85120-12	Provisioning Infrastructure	16,000	10/06/08		8,075	4,255	1,505	1,505	1,505	8,075
CT85120-13	Intrusion Detection & Prevention	8,800	01/28/08		5,030	5,030	5,030	5,030	5,030	7,727
CT85120-15	Information Protection & Disaster Recovery	75,000	10/01/10				17,383	7,383	7,383	19,412
CT85120-16	Alternative Options for Remove Connectivity	6,000	10/01/09				3,540	3,540	2,340	1,212
CT85120-17	Move Wireless Management to the Cloud	20,000	10/01/09				405	405	405	2,358
CT85120-18	Branch Office Distribution Servers	2,500	10/01/10							
CT85120-19	SharePoint Enterprise Infrastructure	13,500	10/01/10		7,250	7,250	10,750	7,250	7,250	
CT85120-20	Email Infrastructure - Exchange Upgrade	15,000	10/01/10		8,800	15,800	32,972	29,472	29,472	
CT85120-21	Desktop Productivity & Manageability		10/01/10		101,138	101,138	101,138	101,138	101,138	
CT85120-22	Securing the Desktop		10/01/11		29,400	27,400	20,560	20,560	9,664	
IS85150-01	Subnet the LCBCC Data Network		10/01/09							
IS85150-03	Migration to Active Directory	4,500	08/15/08			410	4,320	820	820	2,012
IS85150-04	Network Access Protection (NAP)		10/01/11							
IS85150-05	Help Desk Improvements		04/17/07							
IS85150-06	LCIS Customer Service Portal		12/24/08							
IS85150-07	Asset Auditing & Software Metering		11/01/08		12,675	12,675	12,675	12,675	12,675	
IS85150-08	Implementation of IT Governance	950	05/06/09		950					950
GRAND TOTAL		**841,250**			**248,767**	**218,901**	**326,762**	**231,597**	**198,501**	**238,989**

FY 2010 - GIS Project Summary

Project ID	Project Title	Estimated Cost	Start Date	Finish Date	FY2009 Adopted	FY2010 Adopted	FY2011 Proposed	FY2011 Adopted	Current Annual Maintenance	Estimated Future Maintenance
GS86100-01	GIS Dashboards		03/01/11	TBD	0	0	0	0	0	0
GS86100-02	GIS Project Management Initiative SharePoint for GIS		02/01/11	07/01/11	0	0	0	0	0	0
GS86100-03	Energy Efficiency & Conservation Block Grant of 2009 Green Energy Sustainability Tracking System		07/01/09	TBD	0	0	0	0	0	0
GS86100-04	Fire Hydrant Location Inventory		07/01/10	TBD	0	0	0	0	0	0
GS86100-05	Fire Rescue Response Boundaries		10/01/09	TBD	0	0	0	0	0	0
GS86100-06	GIS & Cartegraph Integration		05/01/09	02/01/11	0	0	0	0	0	0
GS86100-07	Viewscape Protection		TBD	TBD	0	0	0	0	0	0
GS86100-08	Street Network		08/01/10	08/01/11	0	0	0	0	0	0
GS86100-09	Building Permits Map Book		10/01/10	12/01/10	0	0	0	0	0	0
GS86100-10	Fire Rescue Run Card Project		03/01/09	TBD	0	0	0	0	0	0
GS86100-11	Sheriff's Office GIS Support For Spillman CAD System		12/01/10	05/01/11	0	0	0	0	0	0
GS86100-12	Parcel/Property Appraiser Match of Alternate Keys		07/01/10	06/01/11	0	0	0	0	0	0
GS86100-13	Parcel/Property Appraiser Match of Subdivisions		06/01/09	03/01/12	0	0	0	0	0	0
GS86100-14	Creation of Permits Map for Property Appraiser		09/01/10	01/01/11	0	0	0	0	0	0
GS86100-15	Streamline and Automate Certain Mass-Appraisal Functions for the Property Appraiser		TBD	TBD	0	0	0	0	0	0
GRAND TOTAL		**0**			**0**	**0**	**0**	**0**	**0**	**0**

FY 2011 - Telecommunications Systems Project Summary

Project ID	Project Title	Estimated Cost	Start Date	Finish Date	FY2009 Adopted	FY2010 Adopted	FY2011 Proposed	FY2011 Adopted	Current Annual Maintenance	Annual Maintenance Completed
TS87130-01	Telecommunications Modernizations	120,000	01/01/09		0	0	0	0	0	0
TS87130-02	Telecommunications Common Platform	50,000	01/01/09		0	0	0	0	0	0
TS87130-03	Telecommunications Cable Plant	2,000	01/01/07		0	0	0	0	0	0
GRAND TOTAL		**172,000**			**0**	**0**	**0**	**0**	**0**	**0**

FY 2010 - PASS Project Summary

Project ID	Project Title	Estimated Cost	Start Date	Finish Date	FY2009 Adopted	FY2010 Adopted	FY2011 Proposed	FY2011 Adopted	Current Annual Maintenance	Estimated Future Annual Maintenance
PA2061	Online Permitting	0	1/1/2011	N/A	0	0	0	0	0	0
PA2062	GIS Interactive Web Map	0	11/1/2008	N/A	0	0	0	0	0	0
PA2063	Upgrade GIS Software	0	2/1/2011	N/A	0	0	0	0	0	0
PA2064	Procurement RFQ – Add Tabulation of Bids	0	6/1/2011	N/A	0	0	0	0	0	0
PA2065	Email Archiving – Evault	0		N/A	0	0	0	0	0	0
PA2066	Document Storage in DataOne	0	4/1/2005	N/A	0	0	0	0	28,601	30,032
PA2067	Remodel of GIS layers		10/1/2009	N/A	0	0	0	0	0	0
PA2068	Failover Database Server	0	9/1/2009	N/A	10,751	0	0	0	0	0
PA2069	Rabies Vaccination Online System	0	12/15/2010	N/A	0	0	0	0	0	0
GRAND TOTAL					**10,751**				**28,601**	**30,032**

INFORMATION OUTREACH

I009100-01
E-Government

PROJECT DESCRIPTION
Ongoing maintenance and development of County hosted websites. This includes planning and implementation of new Web content and applications and maintaining existing Web infrastructure.

PROJECT GOALS
- Continue offering assistance to County departments and outside agencies that rely on the Department of Information Technology for maintenance and development of their online Web presence.
- Develop a new Web site for the Supervisor of Elections and Tourism that features an updated streamlined appearance and better back-end code for functionality.

PROGRESS TO DATE
To date, the County currently maintains 12 individual Web sites, which includes:
- Blueways Website (paddlelake.com)
- Board of County Commissioners (integrated with Tourism)
- Intranet (Employee only)
- Lake County Library System
- Economic Growth & Redevelopment
- LakeXpress
- Lake-Sumter MPO
- Lake-Sumter Joint Information Group
- Procurement Officials of Lake (POOL)
- Property Appraiser
- Supervisor of Elections
- Lake County EOC Whiteboard

MILESTONES

- December 1999 — Lake County Board of County Commissioner Web site launched
- January 2001 — Lake County Intranet Web site launched
- December 2001 — Supervisor of Elections Web site design and maintenance responsibilities assigned to Information Technology.
- May 2002 — Lake County Board of County Commissioner Web site refreshed look
- July 2003 — Create Property Appraiser Web site. Design and maintenance responsibilities assigned to Information Technology.
- March 2004 — Information Outreach Division created. E-government responsibilities assigned to division. Tourism Web site transitioned in-house
- March 2004 — Internet Applications Developer hired
- July 2004 — Webmaster brought on board. Oversight of Library Web site assigned to Information Outreach Division
- Aug.-Sept. 2004 — Hurricanes Charley, Frances & Jeanne threatened Lake County. EOC activated with Emergency Staff Function 14 (PIO) responsibilities delegated to Information Outreach office. Web site converted to public information outlet for emergency information.
- October 2004 — New Lake County Board of County Commissioner Web site launched. Combined Tourism and BCC.
- February 2005 — New Library Web site launched
- January 2007 — Lake-Sumter MPO Web site launched. Design and maintenance responsibilities assigned to Information Outreach
- August 2007 — New Property Appraiser Web site launched
- April 2009 — Economic Growth & Redevelopment Web site created and launched
- July 2009 — Library System Web site refreshed look
- January 2010 — Lake County Census website launches
- January 2010 — Kick-off meeting for Clerk Web site redesign
- October 2010 — New Clerk of Courts website launches
- December 2010 — New Blueways website launches (paddlelake.com)

PROJECT BUDGET

There are no additional costs beyond inherent staff costs.

RETURN ON INVESTMENT

Allows citizens around-the-clock access to County Government information and services.

I009100-02
Graphic Design

PROJECT DESCRIPTION
Provide ongoing professional design and artistic services to County departments. This includes developing printed and electronic documents, camera-ready artwork for commercial printing, forms, and advertisements, and maintaining the County's Graphic Standards.

PROJECT GOALS
- Continue offering assistance to County departments and select outside agencies that rely on professional marketing and informational materials through the Department of Information Technology. This includes Tourism & Business Relations as well as the County's public transportation provider, LakeXpress.

PROGRESS TO DATE
Several professionally designed marketing materials have been developed including the 52-page Vacation Guide, Boating & Waterways Guide, Bird watching Guide, VIP Discount Brochure/Card, LakeXpress Bus marketing package (bus decal design, printed schedules, etc.), Wedding Guide, Board of County Commissioners' Annual Reports, Parks Annual Events Guide and County stationary & forms.

MILESTONES
- September 2003 — Information Outreach section created within Department of Information Technology.
- March 2004 — Section moved under the direction of the County Manager's Office. Graphic Designer position created. Graphic design responsibilities assigned to section, including Tourism marketing materials.
- October 2004 — First professionally designed annual report and presentation developed
- September 2005 — First edition of Bird watching Guide developed for Tourism
- February 2006 — First edition of Boating & Waterways Guide developed for Tourism
- October 2006 — Quarterly Special Events Guide responsibilities transferred to Information Outreach from Cramer Krasselt Marketing Agency for Tourism
- March 2007 — First Library Festival of Reading branding & marketing materials developed
- May 2007 — Development of LakeXpress Brand and marketing materials
- February 2008 — First edition of Vacation Guide developed for Tourism
- November 2008 — First annual Green Fair brand developed
- December 2008 — First edition of VIP Vacation Card & Brochure developed for Tourism

- April 2009 — First edition of Weddings & Celebration Guide developed for Tourism
- September 2009 — Lake County Census Committee branding developed
- November 2009 — Second edition of VIP Vacation Card & Brochure developed for Tourism
- January 2010 — First Parks Annual events Guide developed for Parks & Trails Division
- January 2010 — First edition of monthly Tourism events brochure created
- April 2010 — Developed Economic Development tradeshow display materials
- April 2010 — LakeXpress "Park & Ride" shuttle service branding and materials created
- June 2010 — County Park Map Kiosks created for Parks & Trails Division
- October 2010 — Individual maps/brochures are created for County Blueway trails

PROJECT BUDGET
There are no additional costs beyond inherent staff costs.

RETURN ON INVESTMENT
Professionally designed materials that showcase Lake County programs and services.

I009100-03
Media Relations & Information Outreach

PROJECT DESCRIPTION
Provide ongoing outreach efforts to the community and media. This includes developing news releases, organizing media interviews and news conferences, developing content for written materials, organizing County events and outreach campaigns and offering assistance during Emergency Operations Center (EOC) activations.

PROJECT GOALS
- Offer assistance to County departments and occasionally other constitutional offices with outreach efforts.
- Establish and maintain a positive dialog with the media in an effort to disseminate the County's message.
- Assist departments with coordination of County events that target outreach of programs to citizens.
- Develop content for both printed publications and web sites for the County.

PROGRESS TO DATE
In July 2004, the County hired a full-time Public Information Coordinator position within the Division. Afterwards, the outreach to the community drastically increased. The development of outreach efforts, such as the printed Citizens Handbook and Emergency Management brochures, and coordination of public information resources, like the development of the Joint Information Group, all played key roles in expanding the outreach to the public. The division averaged over 20 news releases per month, and during EOC activations, news releases and media alerts allowed critical life-saving information to be disseminated and used by the media and citizens. In October, 2010, the position was vacated and remains unfilled. The Division Director has since assumed the responsibilities until such time that the position becomes filled.

I009100-03
Media Relations & Information Outreach (continued)

MILESTONES

• September 2003	Information Outreach section created within Department of Information Technology.
• March 2004	Section moved under the direction of the County Manager's Office. Web, media relations and graphic design responsibilities assigned to section, including Tourism marketing materials.
• July 2004	Public Information Coordinator position filled. First news release distributed from Information Outreach Division.
• Aug.-Sept. 2004	Hurricanes Charley, Frances & Jeanne threatened Lake County. EOC activated with Emergency Staff Function 14 (PIO) responsibilities delegated to Information Outreach Division. Web site converted to public information outlet for emergency information.
• October 2004	First professionally designed annual report and presentation developed.
• September 2005	First edition of Bird watching Guide developed for Tourism
• February 2006	First edition of Boating & Waterways Guide developed for Tourism
• February 2007	Deadly tornadoes struck Lake County garnering national media attention. EOC activated.
• March 2007	Weekly e-newsletter developed informing subscribers of news and events
• May 2007	LakeXpress marketing materials developed for Lake County's first public mass transit system.
• February 2008	First edition of Vacation Guide developed for Tourism
• November 2008	Played key role in developing first annual Green Fair.
• April 2009	First edition of Weddings & Celebration Guide developed for Tourism
• October 2010	Public Information Officer position becomes vacant

PROJECT BUDGET

There are no additional costs beyond inherent staff costs.

RETURN ON INVESTMENT

Keeps Lake County citizens and potential visitors informed about County programs, services and amenities.

I009100-04
Public Education (Recycling, Soil & Water Conservation)

PROJECT DESCRIPTION
Provide education outreach to Lake County residents on the topics of recycling, and conservation of soil and water.

PROJECT GOALS
- Educate residents (school-aged and adult) about the importance of recycling in Lake County through speaking engagements.
- Educate residents (school-aged and adult) about the importance of soil conservation in Lake County through speaking engagements.
- Educate residents (school-aged and adult) about the importance of water conservation in Lake County through speaking engagements.

PROGRESS TO DATE
In August 2010, the Resource Conservationist position within the Lake Soil & Water Conservation District was transferred into the Information Outreach Division during a re-organization of the County. The Public Education Specialist position within the Environmental Utilities Department, which was responsible for recycling education, was eliminated and the responsibilities for recycling education were transferred to the Division. In October 2010, the position was renamed "Public Education Coordinator".

MILESTONES
- August 2010 — Resource Conservationist position transferred from Lake Soil & Water to Information Outreach Division.
- August 2010 — Responsibilities for recycling education transferred from Environmental Utilities to Information Outreach.

PROJECT BUDGET
No funds were transferred with this position, although roughly 2,500 is needed to support the fuel and printing costs of this project.

RETURN ON INVESTMENT
Keeps Lake County residents informed about Lake County's recycling program, as well as the importance of conserving and preserving Lake's soil and water resources.

INFORMATION SYSTEMS

CT85120-01
iSCSI Storage Infrastructure

PROJECT DESCRIPTION
iSCSI storage is a rapidly growing technology that allows storage area networks (SANs) to be built using standard networking devices. This allows SANs to be constructed at a much more affordable price range compared to fiber channel SANs. LCIS has decided to build a large part of our storage infrastructure on the iSCSI standard. Our strategy is very low cost due to our 'build your own' implementation. This strategy consists of building our own iSCSI SANs using HP Proliant servers and iSCSI software. See figure TC85120-01-1 for the system architecture.

PROJECT GOALS
- To supply the necessary storage to fulfill the needs of our application hosting and application delivery systems.
- To improve performance and scalability by dedicating a single SAN device to a pool of server and by configuring the network devices to provide optimum throughput for each cluster.
- Manageability will be achieved by dedicating storage groups to specific servers which consolidates all of a server's storage in one specific location making it easy to configure and monitor.
- Reliability will be achieved by adding layers of SAN devices. Layer two will be identified as the replication pool. All data that exists on layer one will be replicated to layer two which will provide an exact duplicate copy of the information on a separate physical device.

PROGRESS TO DATE
We currently have four Starwind SANs and one Open-E SAN in production. At this time our SANs are mainly used for our virtual server infrastructure but we will be expanding the functionality in FY2011. We have converted a portion of our EMC SAN which is no longer supported by maintenance into an iSCSI SAN that will be used for replication.

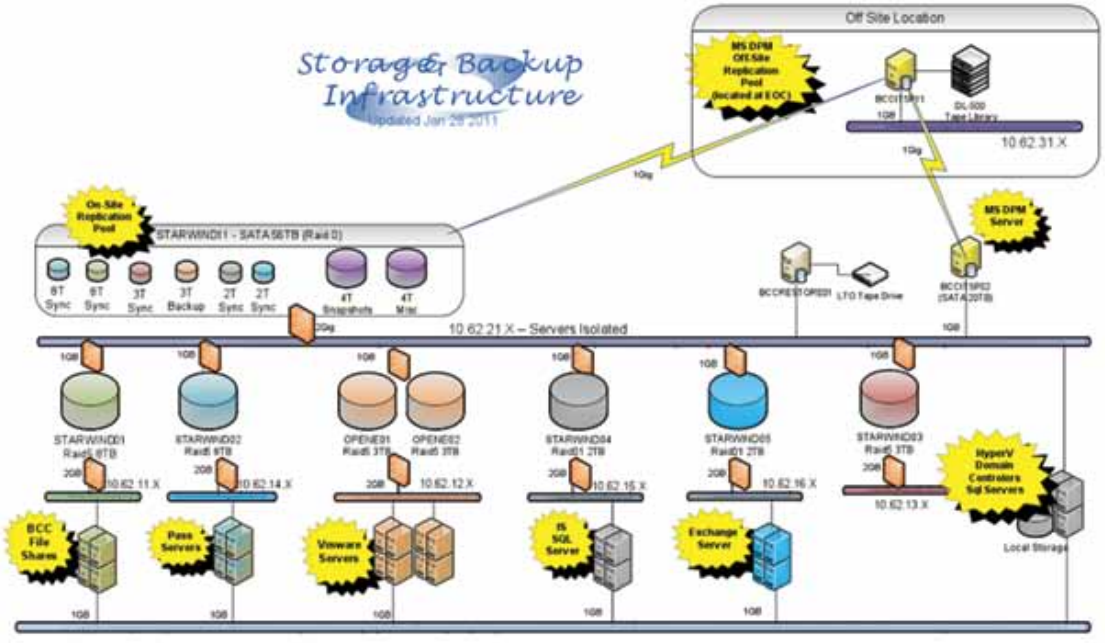
MILESTONES
- 2nd Quarter 2009 STARWIND01 brought online for VMware environment
- 4th Quarter 2009 STARWIND02 brought online for HyperV environment
- 3rd Quarter 2010 STARWIND03 brought online for HyperV Admin servers.
- 3rd Quarter 2010 OPENE01 brought online and replaced STARWIND01 for VMware

PROJECT BUDGET

•	50,000	Estimated Infrastructure Cost
•	2,800	Estimated Annual Maintenance
•	0	FY2011 Budget New Infrastructure
•	2,330	FY2011 Budget Maintenance
• Spent FY2009	20,752	
• Spent FY2010	11,322	

RETURN ON INVESTMENT

As time goes on storage needs continue to increase even when no new projects are being initiated. The iSCSI design will provide the county with the absolute most inexpensive SAN storage possible while providing maximum flexibility. This strategy also saves money by centralizing storage into pools where it can be utilized by multiple servers as opposed to purchasing each server with its own independent storage that may not be 100% utilized. Lastly, the resilience of this design should minimize downtime, which will keep productivity loss due to drive failures to a minimum.



CT85120-04
Core Switch Replacement

PROJECT DESCRIPTION
A core backbone switch is similar to an interchange on a massive highway, only a certain number of cars can get through in a fixed amount of time. When more cars try to get through than the interchange will handle then backups occur causing traffic jams. The same thing happens with network switches. Most of the county switches are over ten years old and were not designed for today's network traffic. The backbone core is a major concern because it is the device where every switch in the counties network converges. Currently, we have approximately 30 gigabyte network data connecting into our two core switches. This is a problem since each switch maxes out at about 18 gigabyte. Also because of the age of the switches, they do not provide the kind of density that you can get with newer technology. Thus, in order to handle all of the connections, we currently require two core switches. This causes a huge problem for half of the connections in the county since they have to traverse through a trunk connection that links the two core switches together. This project will replace the two current core switches with a new single core switch providing plenty of growth for years to come. The second phase of this project will be to upgrade the chassis to a more enterprise chassis for resilience. Additionally we will replace the current 1gigabyte data links with 10 gigabyte data links increasing overall throughput and capacity of the network

PROJECT GOALS
- To provide a true single core switch that will handle all of the inputs throughout all of the county buildings.
- The newer switching technology will allow us to support a greater flow of traffic to our data center which houses all of the counties servers.
- To support future upgrades of all of the edge switches in the county to higher throughputs providing better performance for all users.
- Lastly, sine the entire counties infrastructure relies on the core switches for connectivity; we would like to design a system that will last ten years or more and will be resilient enough to handle failures without bringing the entire network down.

PROGRESS TO DATE
We have consulted with Cisco on several occasions to design a core that would meet the project goals. One hundred and sixty thousand dollars was budgeted for this project in FY2009. However, due to the economy, all but twenty five thousand was turned back into the general fund. In order to meet some of our goals of this project we have installed a 5400zl switch from HP. This is the bare minimum system that could be configured to support the project goals.

MILESTONES

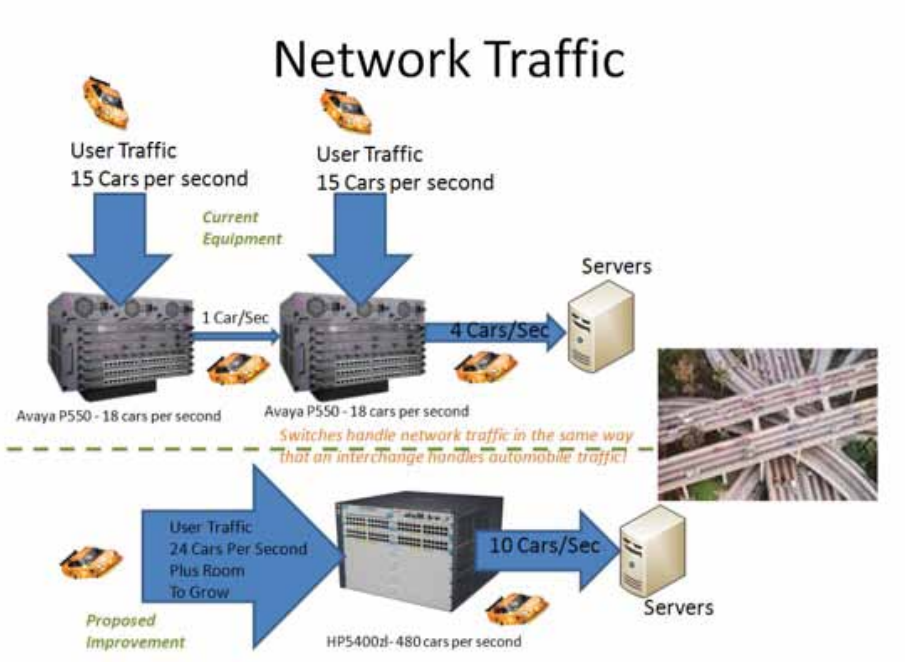
- 3rd Quarter 2008 capital improvement plan for switches approved and 160K budgeted
- 1st Quarter 2009 135K budgeted for project returned to general fund
- 4th Quarter 2009 Replaced core switches with HP 5400zl
- 4th Quarter 2009 10GB connectivity to the server room

PROJECT BUDGET

•	169,000	Estimated Infrastructure Cost
•	5,000	Estimated Annual Maintenance
•	0	FY2011 Budget New Infrastructure
•	0	FY2011 Budget Maintenance
• Spent FY2009	26,868	

RETURN ON INVESTMENT

Upgrading the core switch to newer technology will provide several returns on our investment. Our systems will be safer and more reliable since the manufacturer is currently supporting the product and providing software upgrades. We will be able to take advantage of newer network standards that our old switches do not support. Overall network performance and reliability should improve substantially. One benefit of the HP switches is that they come with a lifetime warranty. We will be able to cancel our current service contract with Avaya which will bring the annual maintenance costs for network switches down from 20,000 to 5000 per year.



CT85120-05
Edge Switch Replacement

PROJECT DESCRIPTION
An edge switch is a switch that provides connectivity to the users. Edge switches all converge into the core switch in collapsed backbone architecture. With a new core switch in place we can provide greater performance and reliability to our users. Most of our current edge switches are approaching ten years in age and are no longer supported by the manufacturer. Nor do they support current trends in network technology. Troubleshooting has become difficult because we have spares that are questionable and even when we get replacements under maintenance they are refurbished devices. Performance on floors that contain more than 48 users is inadequate because of the slow connectivity back to the core device. Edge switches with newer technology can support 10 times the network traffic. HP switches offer a very versatile line that can be configured anywhere from 24 ports to 288 ports making them ideal to handle just about any location in the county.

PROJECT GOALS
- To provide adequate network bandwidth to all edge locations connected to the LCBCC core switch. All network links connecting to the core switch will be upgraded by a factor of 10.
- To replace stackable switches with chassis based switches providing better reliability and expandability.
- To fix several areas that have been prone to connectivity issues in the past.
- By using the HP switches we will avoid annual maintenance charges.

PROGRESS TO DATE
We have experimented, on a very small scale, with the HP switches so that we could make sure they integrate with our current infrastructure and so that we could familiarize ourselves with the differences in configuration and management. HP switches have proven to be reliable and easy to manage and are currently being implemented for connectivity needs.

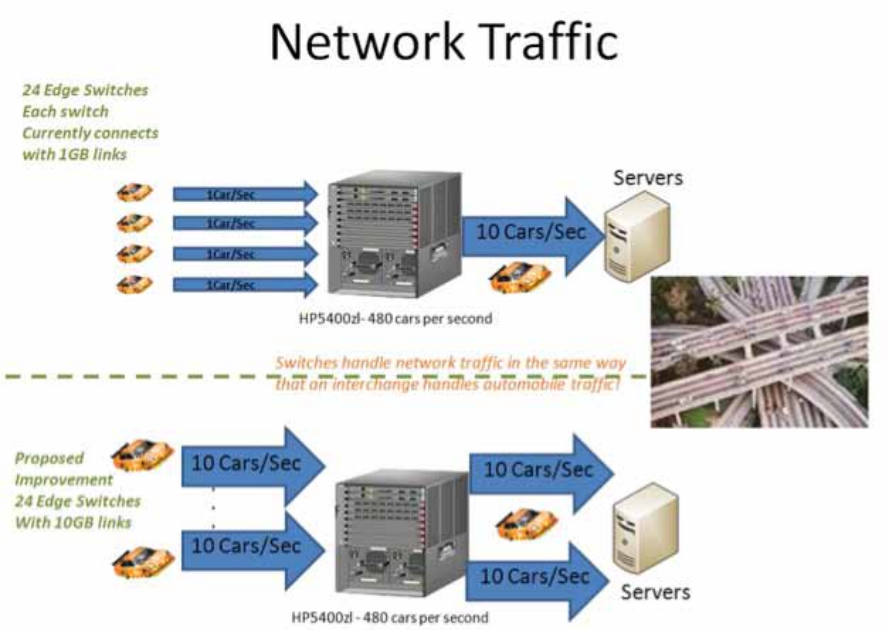
MILESTONES
- 1st Quarter 2010 canceled service contract with Avaya saving 20,000 / year
- 1st Quarter 2010 standardized on HP 2610 switches for branch offices

PROJECT BUDGET

•	150,000	Estimated Infrastructure Cost
•	5,000	Estimated Annual Maintenance
•	16,000	FY2011 Budget New Infrastructure
•	0	FY2011 Budget Maintenance
• Spent FY2010	1,058	

RETURN ON INVESTMENT

Most of the counties edge switches are in need of replacement because of age and lack of support for current network technology. Once our core Avaya switches have been replaced we will be dropping the Avaya maintenance contract and the funds allocated for the maintenance will be allocated to replacing the edge switches with new HP switches as they fail. Most all of the switches throughout the county are 10 years of age and should be replaced. If funds can be allocated to accomplish this project all at once or in phase we see a benefit of doing so since we will be reducing the amount of troubleshooting and reducing the amount of downtime due to failures of old equipment. We will also see a benefit in overall network security and manageability due to the implementation of new technology. If we cannot get the funds allocated for this project then we will slowly replace the edge switches using reallocated funds from the canceled Avaya contract.



CT85120-06
PC Alternatives

PROJECT DESCRIPTION
LCIS would like to explore the possibilities of providing alternative devices instead of our standard desktop and laptop computers that we have deployed in the past. To do this the necessary server infrastructure needs to be built. We are looking at two different alternatives to PCs. The first alternative is to replace PCs with thin client devices, which run applications on a Citrix server or Microsoft Terminal Server located in the datacenter. The second alternative is to replace PCs with a Pano cube device, which connects to a virtual computer that runs on a VMware server in the datacenter. Both of these alternatives are low cost, low power 'green' devices.

PROJECT GOALS
- To lower our per user PC cost
- To reduce our per user PC power consumption
- To double our life expectancy of our users workstations. Currently we replace desktop and laptop computers every six years. Alternative devices would increase our lifecycle to twelve years.
- To make users workstations interchangeable reducing the complexity normally associated with deploying and servicing desktop computers.
- This project is proof of concept and would build the infrastructure necessary to support alternative devices for approximately fifty users.
- Our end goal would not be to replace every computer in the county, but to come up with a policy that would specify the type of device different classes of users would receive based on their workloads.

PROGRESS TO DATE
Both of these alternative devices have been tested and proved viable. We currently have four thin client devices deployed as public Internet access machines in the lobby and break room of the administration building. We are looking at deploying three additional thin client devices this year. Currently the thin client devices are supported using the server that provides the Employee Portal. The Pano Cube device has been tested using our existing VMware server infrastructure. In FY2010 we used on old DL360 server and expanded the RAM in order to provide a dedicated server for our seven Pano Cubes. The Pano environment now supports Windows 7 and deployment of applications using AppV. Various other thin client devices have been utilized throughout the county.

MILESTONES
- 1st Quarter 2008 — new Employee Portal brought online
- 4th Quarter 2008 — Acquired the Microsoft Desktop Optimization Pack with our MS EA
- 4th Quarter 2008 — setup four thin client devices for public Internet access
- 1st Quarter 2009 — tested Pano cube on the test VMware server
- 3rd Quarter 2010 — dedicated an old DL360 Server for VDI
- 4th Quarter 2010 — Pano automatically generates Windows 7 desktops and uses AppV

PROJECT BUDGET

•	60,000	Estimated Infrastructure Cost
•	6,700	Estimated Annual Maintenance
• 5,000	FY2011 Budget New Infrastructure	
• 1,753	FY2011 Budget Maintenance	
• Spent FY2008	2,751	
• Spent FY2009	4,543	
• Spent FY2010	4,541	

RETURN ON INVESTMENT

In order to see a return on investment we need to keep the per user cost of alternative devices equivalent to the cost that we currently pay for PCs. Because these devices draw less power, the county will see a savings to operate these devices compared to typical PCs. Because there is less heat and no moving parts on these devices we will see a much longer life cycle for alternative devices. Lastly, since these devices depend on resources that are centralized in the data center they will be much easier to support and will cut down on service work orders that require visiting remote user sites.

These solutions require the necessary behind the scenes infrastructure!

This is a picture of an alternative to standard PCs. It only draws 2 watts of power and has no moving parts.

CT85120-08
Employee Portal Expansion

PROJECT DESCRIPTION
In the 1st quarter of 2008 LCIS brought the new employee portal online giving remote users the ability to connect with their county files and run applications such as Microsoft Office, Munis and CD Plus. Currently, the employee portal is based on Citrix technology alone. We plan to expand the portal to include access to applications published in Microsoft Terminal Server 2008 and applications published through our Cisco SSL VPN. Using a combination of all our available resources we hope to expand the application offering to include most all of the applications run by BCC employees. To enhance our security we are using secure SSL connections and we will be deploying a central login based on biometric authentication. Our current user capacity for the employee portal is about 25 users. We would like to expand the capacity by a factor of 10 over the next five years. During an epidemic such as the swine flu the employee portal may become our only option to provide county workers with the ability to function, and as such it is an important part of our continuity of operations. Providing the infrastructure to work remotely helps us to provide services to areas of the county where workers exist in locations with limited network connectivity.

PROJECT GOALS
- To provide secure, remote access to every application that is used by BCC employees. Not only do we need to provide access, but we need
- To provide a level of performance that is acceptable to make the applications truly usable from a remote location.
- To support the needs of some areas in the county have severely limited network connectivity.
- To keep our expenses down. We will look to other technologies in addition to the Citrix infrastructure that we currently have.

PROGRESS TO DATE
During the 1st quarter of 2008, the new employee portal was brought online featuring published applications. This greatly improved the abilities of the code enforcement division to function in the field using sprint air cards. Since the GIS infrastructure was built on Citrix technology, we were able to integrate GIS into the employee portal and offer access to all GIS applications remotely. In April of 2009, we replaced our Cisco firewall with a new Cisco ASA5520 device that does firewall and also supports ssl vpn remote access. This device will become an integral part of our remote access strategy and was tested at the county fair this year to provide access for the supervisor of elections to access their voter application. Windows 2008 R2 has brought about new capabilities to Terminal Services which could be used in some situations instead of Citrix. Another alternative from Go-Global was experimented with in FY2010 and looks promising.

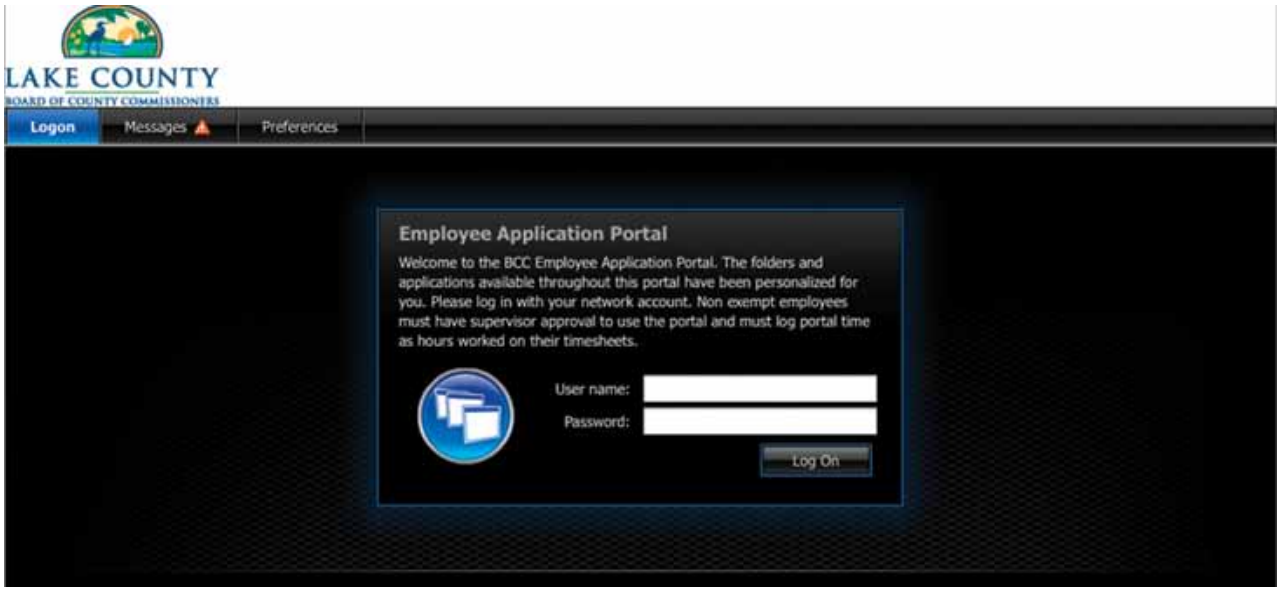
MILESTONES
- 1st Quarter 2008 — new Employee Portal brought online
- 2nd Quarter 2009 — Deployed Cisco ASA5520 with ssl vpn capabilities
- 2nd Quarter 2009 — tested ssl vpn capabilities with SOE voter application from the county fair
- 2nd Quarter 2010 — Created virtual Citrix servers for employee portal
- 2nd Quarter 2010 — Created a Terminal Services machine to run firehouse software
- 3rd Quarter 2010 — Experimented with Go-Global software for remote applications

PROJECT BUDGET

- 160,000 Estimated Infrastructure Cost
- 22,000 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 12,826 FY2011 Budget Maintenance
- Spent FY2006 34,600
- Spent FY2007 27,807
- Spent FY2008 2,450
- Spent FY2009 8,014
- Spent FY2010 2,234

RETURN ON INVESTMENT

The obvious return on investment for the project is the ability to maintain operations during an epidemic or a disaster where employees would have to work from a remote location. Additional benefits or this infrastructure are the ability to deliver applications to employees who have limited connectivity throughout the county, and the ability for county employees to work from home or while away from the office. The employee portal is used to provide access to systems that would not be possible without it such as; all county GIS applications, the supervisor of elections voter application, the Honeywell energy management system and the reverse 911 system.



CT85120-09
Fire Station Application Delivery

PROJECT DESCRIPTION
Fire stations have very limited connectivity and performance suffers greatly. This is something that we are forced to deal with because of the locations throughout the county. The poor connectivity makes it difficult for applications to be run and it also makes supporting the applications almost unbearable. Simple updates that we perform for computers attached to the BCC backbone become complex operations for fire house PCs. This project will alleviate some of the issues by centralizing the fire house applications in the data center and delivering them through the employee portal. In effect we will treat fire houses just like we do employees working from home.

PROJECT GOALS
- To alleviate some of the performance problems that users face at the fire stations
- To make support of these systems more manageable.
- To change our connectivity strategy from leased T1s to cheaper DSL lines or using the radio communications microwave when possible.

PROGRESS TO DATE
Currently we have the ability to run Telestaff and firehouse web through the employee portal, we just need the terminal server licenses to be able to deploy it to the stations. Fire Station 13 was brought online in the 3rd quarter of 2010 using the radio network and it was a complete success. We recently setup DSL at station 71 and it is working satisfactorily.

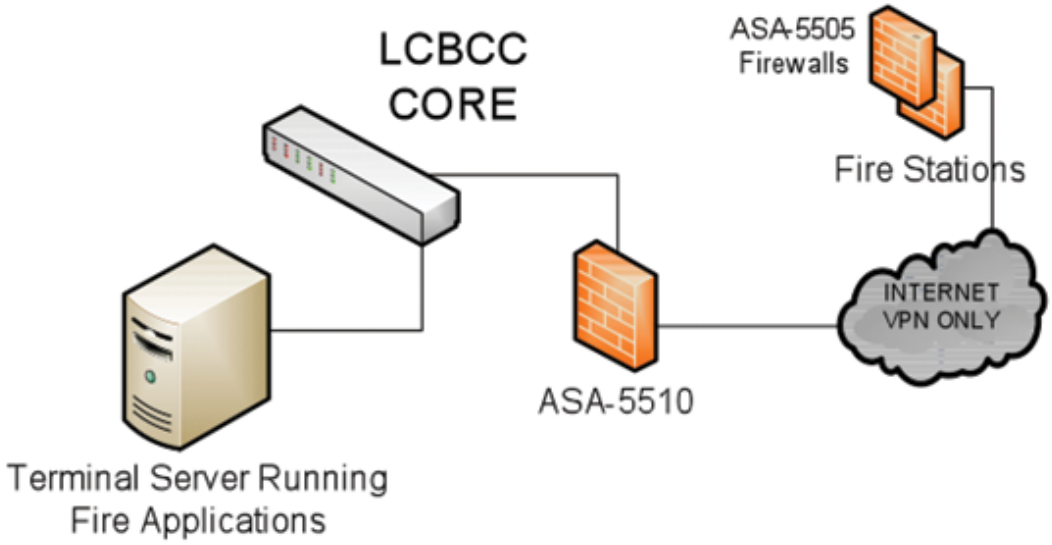
MILESTONES
- 1st Quarter 2009 — Configured Telestaff and fire house web to run on the portal
- 2nd Quarter 2010 — Configured Firehouse to run over Terminal Services
- 3rd Quarter 2010 — Station 13 was brought online using the County's radio network
- 3rd Quarter 2010 — Experimented with Go-Global software for firehouse application

PROJECT BUDGET

- 30,000 Estimated Infrastructure Cost
- 30,000 Estimated Annual Maintenance (typical 65/month/location)
- 0 FY2011 Budget New Infrastructure
- 0 FY2011 Budget Maintenance

RETURN ON INVESTMENT

Monthly charges for T1 line MAN connections may be replaced with less expensive DSL lines. Performance will be much better for the users at fire stations and LCIS will be able to support the computers much easier.



CT85120-11
Server Virtualization Infrastructure

PROJECT DESCRIPTION
Server virtualization is a technology that allows multiple servers to run simultaneously on one physical piece of hardware. This technology brings several advantages such as being able to fully utilize the hardware to its maximum potential, reduced energy costs due to the reduction of physical devices and easier server recovery. Our initial infrastructure will consist of two VMware host servers and two Microsoft HyperV host server each host should be configured to host approximately 12-15 virtual servers.

PROJECT GOALS
- Server consolidation. As older server's age and are disposed most will be moved over to the virtual infrastructure instead of purchasing new hardware.
- Over the next six years we should be able to reduce our number of physical servers by half.
- A lower the number of physical devices should reduce our carbon footprint and save the county expenses on power consumption.
- We expect that servers on the virtual infrastructure will be much easier to recover making disaster planning easier and more achievable.

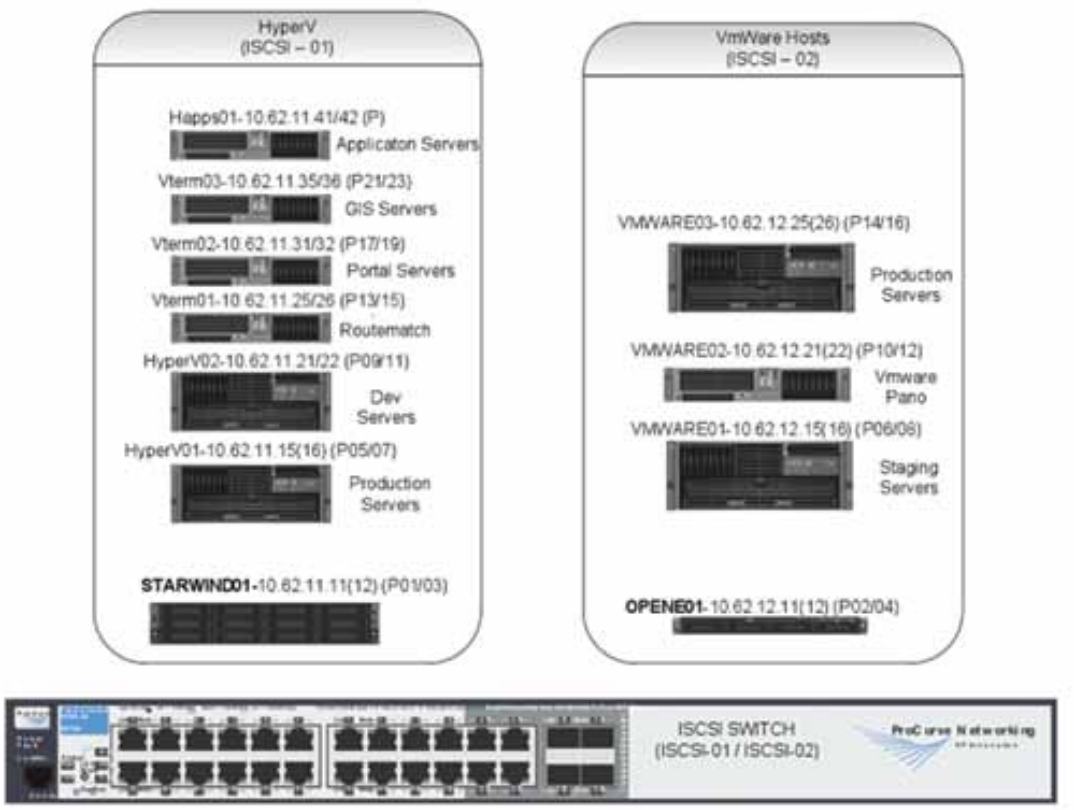
PROGRESS TO DATE
The virtual infrastructure has been successful and has become an important part of our strategic plan. The success has spawned other projects such as the project to convert all administrative servers over to HyperV. Additionally, the project has enlightened Information Systems with new ways of protecting our data and planning for disaster recovery.

MILESTONES
- 1st Quarter 2008 — First VMware virtual servers brought online
- 1st Quarter 2010 — First HyperV servers brought online

PROJECT BUDGET
•	60,000	Estimated Infrastructure Cost
•	5,600	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 3,910	FY2011 Budget Maintenance	
• Spent FY2008	19,748	
• Spent FY2009	29,726	
• Spent FY2010	829	

RETURN ON INVESTMENT

This project is all about getting the most value out of our server assets. For the investment of 50,000 we feel that we can efficiently run at least 60 servers using this infrastructure which comes out to a cost of 830 per server. This is a savings of at least 100,200 if we assume the average cost of a typical server to be 2500 which is probably a very low estimation. Additional savings from this project should be seen in energy savings especially once many of our older servers are moved to the virtual environment and the hardware is disposed of.



CT85120-12
Provisioning Infrastructure

PROJECT DESCRIPTION
Citrix Provisioning server is an infrastructure that allows computers to boot up off of remote storage instead of local hard drives. Once in place this infrastructure can be used for both servers and desktop computers. Our plans are to use this technology for our Citrix servers that deliver the GIS applications. Using provisioning server will allow us to clone one of our existing Citrix servers and share that image with all the other Citrix servers. This is ideal for the Citrix environment, because all of the servers are identical and configured the same. When we need to upgrade a server, the provisioning infrastructure will provide us with better risk management. We will be able to configure a new image with all of the desired changes, test it and get it working 100%. Once we have a new working image, we can configure all of the Citrix servers to use it, reboot them and they will all be upgraded instantly. Additionally, if we find that things do not work out the way we had hoped we can very simply roll back to the previous image by simply rebooting the server. We also plan to use this infrastructure for virtual desktop computers. Instead of creating multiple independent virtual computers, we will configure one image using provisioning server and have multiple virtual computers boot from that single image. This will make managing virtual desktops as simple as possible. Instead of managing fifty separate images we will only need to manage one image.

PROJECT GOALS
- To get an infrastructure in place were we can take advantage of the benefits provided by provisioning.
- To start by provisioning our Citrix server environment.
- To use this technology in conjunction with our alternative PCs project to simplify the management of virtual computers
- To allow us to turn some of our old computers into usable devices that can be reliable and easily managed.

PROGRESS TO DATE
We have tested provisioning server in the test environment. We were originally looking at the technology as a possible solution for the EOC computers. We were able to create an EOC image on our provisioning server and boot the EOC laptops from the image. We have since abandoned the provisioning solution for EOC because we believe better solutions exist. Our next step is to create a standard Citrix server image on our provisioning server.

MILESTONES
- 1st Quarter 2009 Tested provisioning server with EOC image

PROJECT BUDGET

•	16,000	Estimated Infrastructure Cost
•	2,755	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 1,505	FY2011 Budget Maintenance	
• Spent FY2010	8,075	

RETURN ON INVESTMENT

The biggest return on investment for this project is that we greatly reduce the risk associated with upgrading our GIS infrastructure. Managing desktop computers from the datacenter instead of individually at the user's site is a good idea except that it moves some burden from the network technicians and places it on the network administrators who are already overloaded. The provisioning infrastructure will greatly reduce the burden on the network administrators allowing us to improve our overall infrastructure without increasing our workload. As a final benefit, we will be able to re-provision servers on the fly to handle other tasks if the need arises. This strengthens our business continuity plan and makes it easier to recover critical systems.

CT85120-13
Intrusion Detection & Prevention

PROJECT DESCRIPTION

In March of 2009 LCIS replaced our aging firewall with a new firewall. We are now able to use the older device to firewall our backbone. Currently, all county entities attach to our core switch on our fiber backbone without a BCC controlled firewall device protecting our network. Most of the county entities have their own firewalls, but BCC does not have one that we configure and control. The consequences of this are that we do not have the ability to see what security measures exist between other networks and ours or what vulnerabilities exist. LCIS would feel more comfortable if we place our own firewall, which we configure, separating our network from the other county entities. Now that our older device is free, we will use it to accomplish this goal adding another layer of security to our network and providing LCIS the ability to analyze the potential risks that exist from external networks.

PROJECT GOALS

- To use our older device to firewall the BCC network from other county entities connecting into our fiber backbone.
- To have greater control over network traffic that is allowed to pass between networks
- To provide the ability for LCIS to accurately analyze the security risks from external networks

PROGRESS TO DATE

In March of 2009 we freed up our old device by replacing it with a new firewall. The new firewall has performed as expected and we are ready to reallocate the Pix device to its new role. Implementation will be tricky because we guaranteed to cause network issues when we place device between networks. We will need to work this out individually with the other county entities to come up with a plan.

CT85120-13
Intrusion Detection & Prevention (continued)

MILESTONES

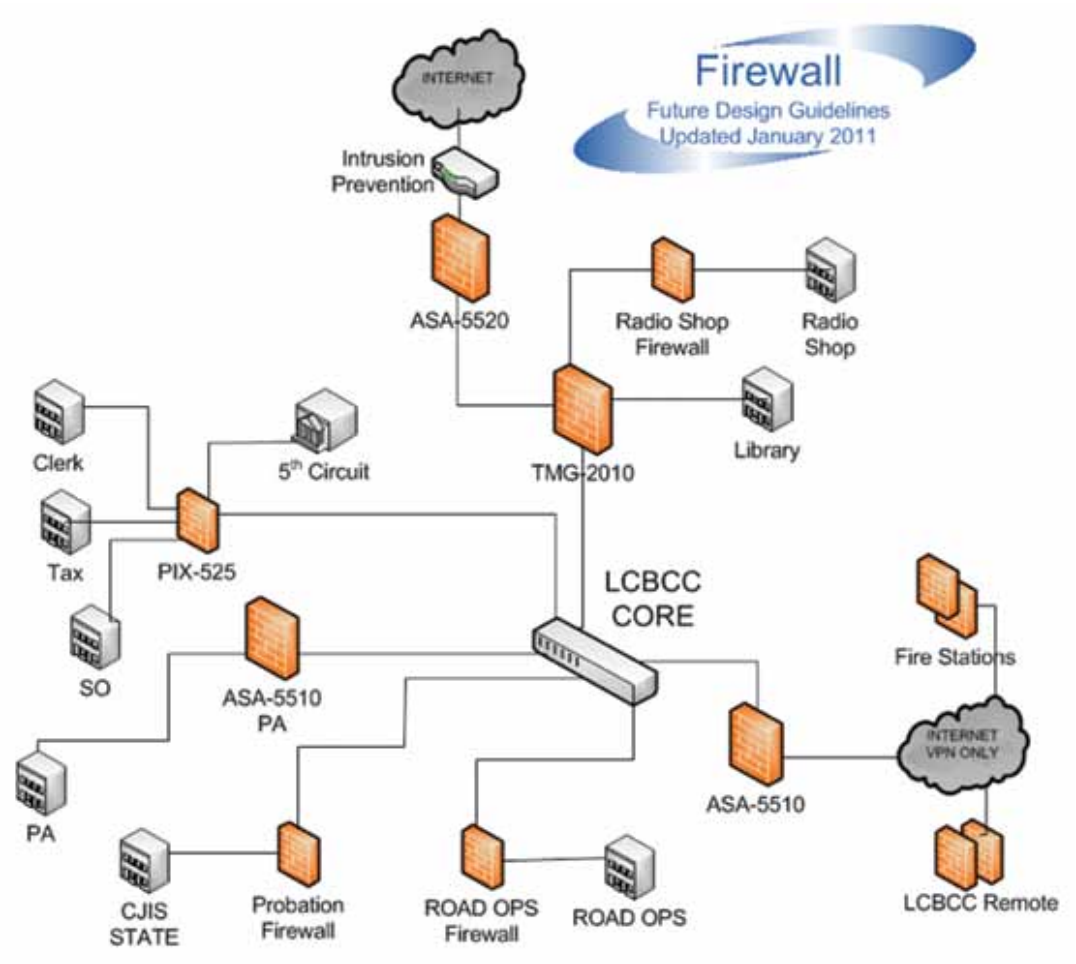
- 2nd Quarter 2009 Deployed new firewall and freed up old PIX device
- 3rd Quarter 2010 Deployed new TMG-2010 into network
- 3rd Quarter 2010 Deployed PIX back into network

PROJECT BUDGET

- 8,800 Estimated Infrastructure Cost
- 5,030 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 5,030 FY2011 Budget Maintenance
- Spent FY2008 5,020
- Spent FY2009 1,347
- Spent FY2010 1,360

RETURN ON INVESTMENT

Better insight into our security risks from external networks and the ability to reduce them, making our network more secure.



CT85120-15
Information Protection & Disaster Recovery

PROJECT DESCRIPTION

In the past, Lake County has used NetBackup software to protect its servers and data. NetBackup works in a distributed fashion by installing an agent on each server that is to be backed up. Lake County is changing its protection strategy to one of consolidation verse the old distributed method. With the virtualization of servers, it is natural to consolidate the data onto SANs. This consolidation of information changes the way many system designers will look at disaster recovery. Instead of paying for agents on multiple servers, protection becomes a simple solution of backing up the entire SAN on which the consolidated data resides. Because of these trends, I would expect that many backup software companies will change their pricing from a per device structure to a per terra byte of data structure. By consolidating data onto SANs that natively support replication, we can inexpensively maintain multiple copies of data and archive that data to tape using a much simpler process. Over time, I would like to see 75% of the County's information consolidated to SANs. The other 25% of the County's information will be backed up using Microsoft Data Protection Servers. In lieu of spending 30,000 per year to maintain our old EMC SAN, we will gradually move production data off of this device and onto inexpensive iSCSI SANs that we will build ourselves. The EMC SAN will then become an ideal device to allow for the replication of data providing us with inherent data protection. Future replication to an offsite location will fulfill our needs for off-site tape archival which has typically been provided by Iron Mountain. Our goals for this project are NOT to prevent failures and outages, but rather to minimize the downtime by making recover as quick as possible. In fact, consolidation of data onto a single device generally increases vulnerability and risk.

PROJECT GOALS

- To protect all enterprise servers that have local hard drive storage and all enterprise servers that attach to the iSCSI infrastructure. All servers that use the iSCSI storage system will be protected by the resilience of the iSCSI architecture itself. With both the iSCSI architecture and the data protection services, all servers in our environment will be protected adequately. By adequately, I mean that all servers will have two layers of recoverability
- To minimize down time. Our first layer of recoverability will be to recover from the online replicated copy of the failed server. If the online replicated copy is unavailable then we will result to our second layer of recoverability.
- To negate the reliance on tapes as a recovery media. Tapes will only be used for offsite archival.

PROGRESS TO DATE

We have discontinued our service contract on our EMC SAN and have converted three trays of storage to an iSCSI SAN which now replicates data from our production SANs. Two DPM servers were upgraded in FY2010 and have become a crucial part of our backup strategy. Our NetBackup maintenance was discontinued in FY2010, but we continue to use the product without support as it remains our primary method of backup and recovery for now. We no longer store tapes off-site at the Iron Mountain facility. Instead we are utilizing the old bank vault in the Clerks record center building.

CT85120-15
Information Protection & Disaster Recovery (continued)

MILESTONES

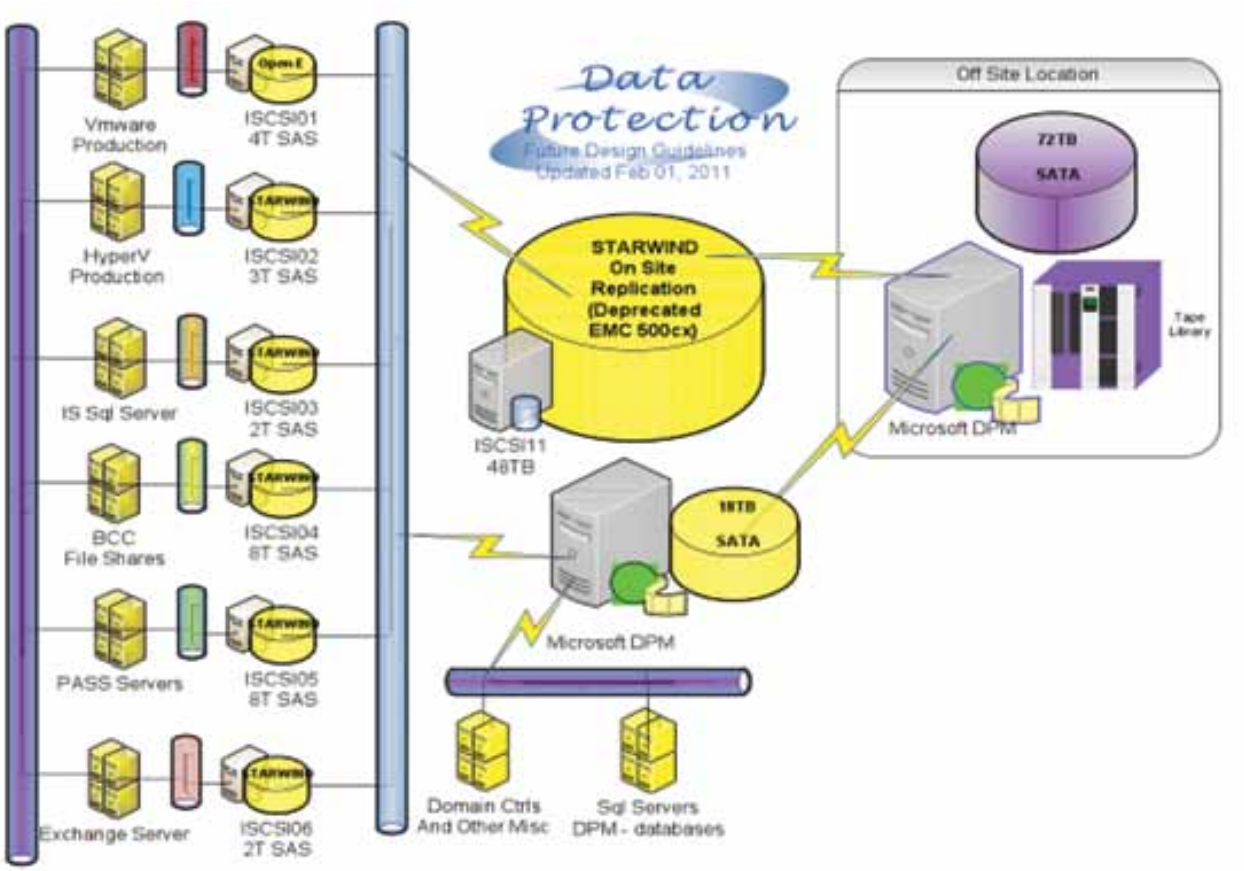
- 1st Quarter 2010 — 8TB from the EMC SAN allocated for onsite iSCSI replication.
- 3rd Quarter 2010 — 16TB from the EMC SAN allocated for onsite iSCSI replication.
- 3rd Quarter 2010 — discontinued our 22,000 / year maintenance on NetBackup
- 3rd Quarter 2010 — Installed dedicated QNAP iSCSI for Sql Server backups
- 3rd Quarter 2010 — Upgraded DPM Server to DPM2010
- 4th Quarter 2010 — discontinued our 7,000 / year contract with Iron Mountain
- 4th Quarter 2010 — discontinued our 30,000 / year contract with DELL on the EMC SAN
- 4th Quarter 2010 — Increased Open-E license to 8TB so that we could replicate VMware data
- 4th Quarter 2010 — added 18TB of storage to both DPM Servers
- 4th Quarter 2010 — added 18TB of storage to tape backup environment

PROJECT BUDGET

- 75,000 — Estimated Infrastructure Cost
- 13,500 — Estimated Annual Maintenance
- 0 — FY2011 Budget New Infrastructure
- 7,383 — FY2011 Budget Maintenance
- Spent FY2010 — 19,412

RETURN ON INVESTMENT

We have already experienced some real monetary return on investment because of the data protection server that we have deployed. When data is lost we used to have only one choice which was recovered from tape backup. Many times the tapes containing the data are off site at Iron Mountain and need to be retrieved at a cost for special delivery. Since the deployment of the data protection server, the majority of incidents of lost data have been resolved with a simple one click recovery. Recover of user and departmental documents no longer require retrieval from tape. This solution has provided us with the confidence to discontinue our offsite storage of tapes at Iron Mountain, discontinue our EMC SAN maintenance and discontinue our NetBackup maintenance for a total annual savings of approximately 60,000 per year. The implementation of iSCSI replication has provided a crucial role in our virtual infrastructure by providing assurance that our virtual images can easily be recovered.



CT85120-16

Alternative Options for Remote Connectivity

PROJECT DESCRIPTION

For years the county has relied on Metropolitan Area Networks from Sprint to provide reliable connectivity for remote offices. Over time DSL technology has matured and in our opinion has become a less expensive but viable option for connectivity. Other technologies that use the Internet as their transport network have also become viable. This project will replace all low speed MAN circuits with either DSL or Power One wireless connectivity. Implementing this project will increase our exposure to the risks of external hackers and will increase our risk of downtime since we are relying on Internet availability for connectivity. The gains we should see are reduced costs and overall increased connectivity speed. It should be noted that the County currently has an existing microwave backbone on the Radio system that could be utilized for remote connectivity and in fact has been used successfully at Fire Station 13. Connectivity provided through the Radio system would actually provide the best long term solution for remote connectivity because of the independence from the Internet, the high speed 10Mbps connectivity and the elimination of reoccurring fees. The disadvantage of using the County's Radio system is that wireless transmission equipment would need to be purchased at each site incurring a large investment in infrastructure.

CT85120-16
Alternative Options for Remote Connectivity (continued)

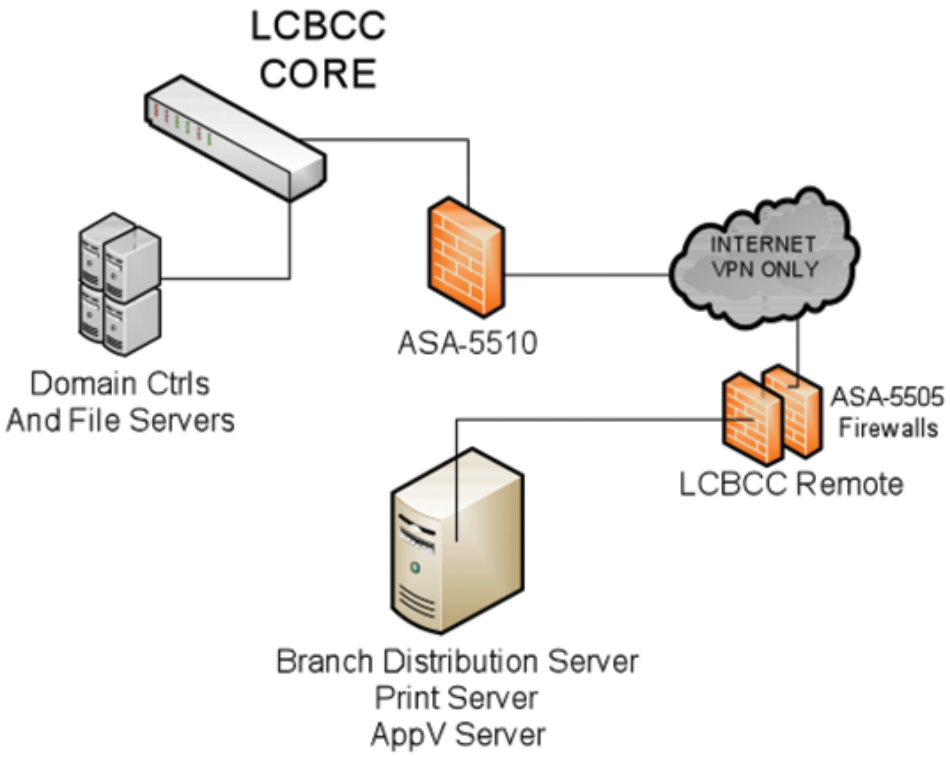
PROJECT GOALS
- To lower the reoccurring expense of remote connectivity
- To provide an alternative connectivity method with no up-front investment in infrastructure
- To increase the performance by increasing available bandwidth for remote connections
- To utilize the availability of the Internet as a transport medium
- To ensure security is maintained by using firewalls to minimize exposure

PROGRESS TO DATE
MPO was the first remote site to move off of the existing MAN network. Connectivity was provided from Power One using point to point wireless. Motor Vehicle Transit was also placed on a Power One point to point wireless connection. The Welcome Center was the first remote site to successfully implement using DSL as the method of connectivity.

MILESTONES
- 4th Quarter 2010 MPO, mvTransit, Welcome Center all moved off MAN

PROJECT BUDGET
- 6,000 Estimated Infrastructure Cost
- 5,400 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 2,340 FY2011 Budget Maintenance
- Spent FY2010 1,212

RETURN ON INVESTMENT
The typical expense for a MAN circuit is in the neighborhood of 400 per month or 4,800 per year. Typical business class DSL expenses are in the neighborhood of 65 per month or 789 per year. It's fairly easy to see the return on investment from a pure expense standpoint. We also expect to see increased speed which will lead to increased performance and higher productivity at remote offices.



CT85120-17

Move Wireless Management to the Cloud

PROJECT DESCRIPTION

Cloud computing is a hot topic in IT these days with the concept being that money can be saved by moving services to the cloud. We are cautious at this time because there is still a lot of hype and the long term viability has yet to be proven. Public wireless connectivity is a case where I really do not see any way to go wrong with the cloud solution from Meraki. Most of the county's wireless access points are managed by a Cisco wireless controller on our network. The controllers are expensive and we are just about at full capacity on the current controller we have. In FY2010 we discovered a company named Meraki, which offers a wireless solution that is so unique and innovative that we had to try it out. The way the system works is that Meraki maintains the wireless controller's in the cloud and we pay a subscription fee for each access point that we connect. Setting up a wireless access point is as simple as purchasing one of the Meraki access points and hooking it up to the Internet. Once connected to the Internet, it goes out and finds the Meraki controller and downloads its settings. We have complete management over all of our access points using a customer portal that Meraki has created which gives administrators access into the wireless controller.

PROJECT GOALS

- To provide public wireless without having to purchase the management devices
- To simplify the setup of wireless access
- To open the option of public wireless access at any location that has Internet connectivity
- To increase control and reporting of our wireless access points
- To reduce bandwidth requirements of our network by removing the wireless traffic

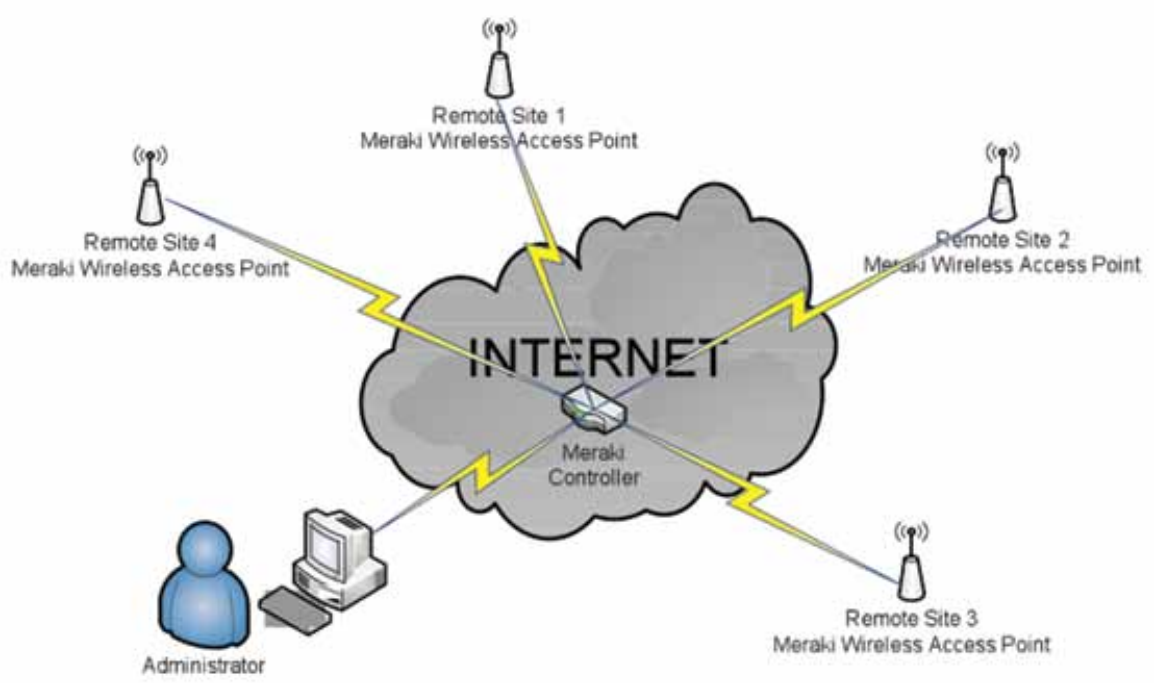
CT85120-17
Move Wireless Management to the Cloud (continued)

PROGRESS TO DATE
Our initial purchase consisted of a starter kit with three access points and a logon for the management portal. We quickly utilized these and determined that the system was very beneficial. Since then we have established access points at Fire Station 13 and MPO.

MILESTONES
- 3rd Quarter 2010 Purchased evaluation starter kit from Meraki
- 3rd Quarter 2010 Installed Meraki at Fire Station 13
- 4th Quarter 2010 Installed Meraki at MPO in Leesburg

PROJECT BUDGET
•	20,000	Estimated Infrastructure Cost
•	5,000	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 405	FY2011 Budget Maintenance	
• Spent FY2010	2,358	

RETURN ON INVESTMENT
Our return on investment will be increased manageability of our wireless infrastructure at a reduced up front cost since we will not need controller hardware. We will be able to scale to an infinite number of sites without having to worry about controller requirements or bandwidth issues since each access point connects directly to the Internet.



CT85120-18
Branch Office Distribution Servers

PROJECT DESCRIPTION
Remote locations have the same computing requirements as sites that are connected on the county's fiber backbone, however low connectivity speeds between the remote site and the administrative building where the data center is housed often impact user's performance. Some areas are impacted more than others such as the ability to reliably update computers, the ability to deploy applications and printing services. Currently printing services are all handled through the county's single print server located in the data center. This project will distribute some of the problem services out to the remote locations so that the impact on the connectivity link will be minimal and thus users should see an increased performance at remote locations. The branch office server will be a low cost SuperMicro server that can be rack mounted and requires little cooling. These servers will not be designed for reliability and will be instead designed to be easily swapped out if an issue occurs. These will be more like a network appliance rather than a true server.

PROJECT GOALS
- To minimize the impact on bandwidth connections between remote locations and Tavares
- To increase reliability of computer updates and application deployment
- To increase performance when printing at remote locations

PROGRESS TO DATE
One server has been installed at MPO in Leesburg as a proof of concept and has been successful.

MILESTONES
- 4th Quarter 2010 Installed server at MPO

PROJECT BUDGET
•	2,500	Estimated Infrastructure Cost
•	875	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 0	FY2011 Budget Maintenance	

RETURN ON INVESTMENT
Our return on investment will be greater scalability. With remote servers we will be able to support more remote locations and more employees at those locations. Additionally, we expect to see higher reliability and increased performance.

CT85120-19
SharePoint Enterprise Infrastructure

PROJECT DESCRIPTION
SharePoint is the key that integrates all of Microsoft's products together and more and more 3rd party solutions are implementing SharePoint capabilities. It's my belief that eventually SharePoint will become the 'portal' application that most users access all of their resources from. Microsoft Office 2010 is already so tightly integrated with SharePoint that you almost have to have it and I would assume that this may be a requirement in the next version of Office. Several divisions within IT are currently using SharePoint sites to manage team projects and this type of functionality needs to be extended to all users in the county. IT needs to build the infrastructure foundation for an Enterprise SharePoint site before users start configuring individual sites without the enterprise knowledge.

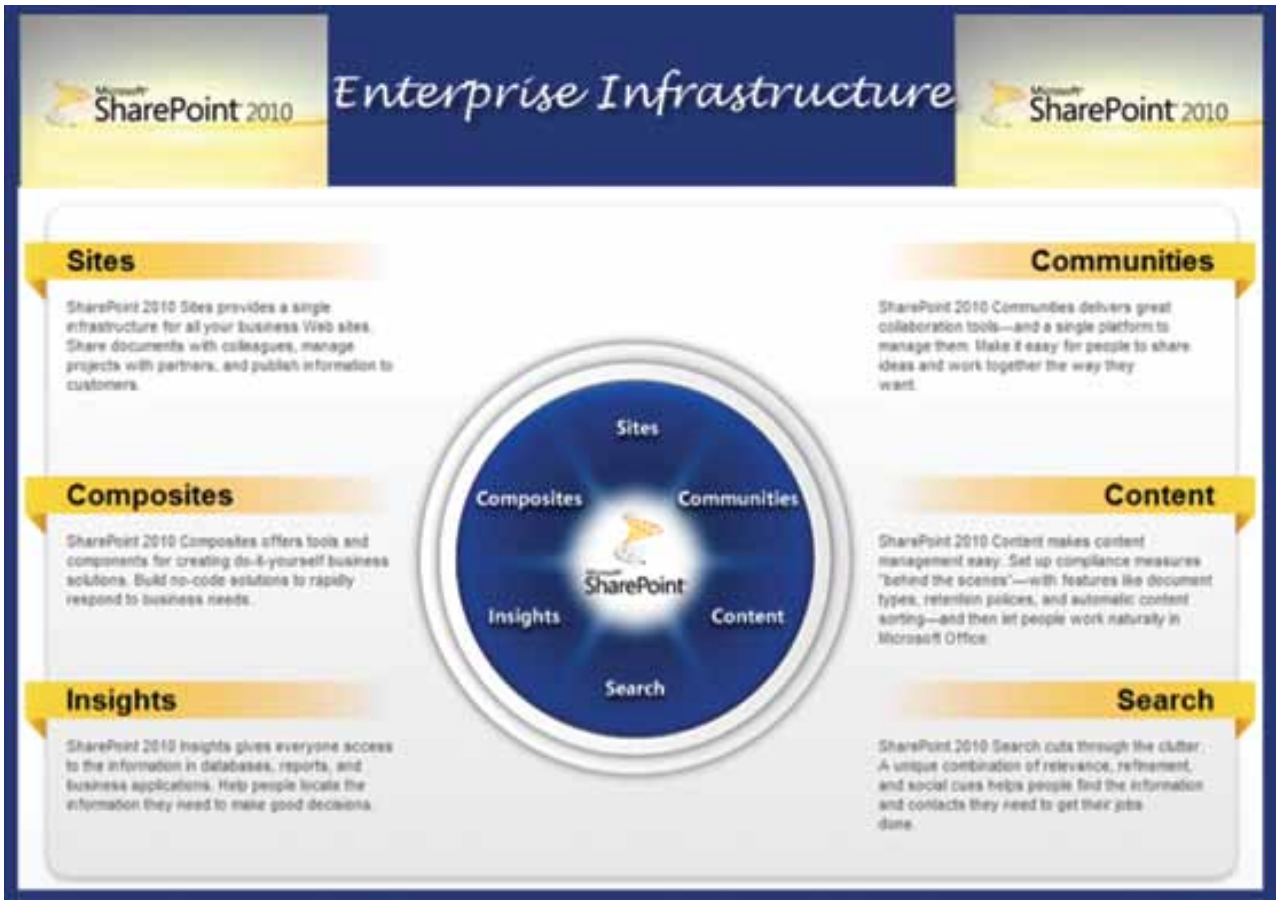
PROJECT GOALS
- To maximize user productivity
- To establish an infrastructure and standards for using SharePoint in an enterprise
- To support applications that rely on SharePoint integration

PROGRESS TO DATE
Information Systems, Information Outreach, PASS and GIS have all implemented SharePoint solutions on an individual basis.

MILESTONES
- 4th Quarter 2008 SharePoint user CALs were added to the MS Enterprise Agreement

PROJECT BUDGET
•	13,500	Estimated Infrastructure Cost
•	7,860	Estimated Annual Maintenance (.90/user/ month)
• 0	FY2011 Budget New Infrastructure	
• 7,250	FY2011 Budget Maintenance	

RETURN ON INVESTMENT
Our return on investment will be scalability. An enterprise infrastructure that is built properly will allow divisions to take advantage of SharePoint productivity without having to worry about the technical aspects such as security, performance and reliability. Once SharePoint is being used county wide it should have a positive impact on users productivity.



CT85120-20
Email Infrastructure – Exchange Upgrade 2010

PROJECT DESCRIPTION

It is our goal and best practice to deploy all Microsoft upgrades as soon as they are reliable and approved through change management procedures. Exchange server 2010 has been available since November of 2009 and service pack 1 has been available since August 2010. We have been prevented from upgrading because it is our policy to always upgrade Exchange using a migration upgrade rather than in-place upgrade. Migration upgrades require the purchase of new hardware, providing the ability to roll back to the existing system if necessary. This project will require the purchase of three new servers to host Exchange 2010 and the supporting infrastructure. The actual software upgrade is covered under the maintenance that we currently pay on our Microsoft Enterprise agreement.

PROJECT GOALS

- To keep the county's Email infrastructure reliable and secure
- To maintain best practices by keeping equipment and software up to date
- Improve the current hardware that is being utilized for our existing email infrastructure
- Enhance our email capabilities with new functionality that is provided in Exchange 2010

CT85120-20
Email Infrastructure – Exchange Upgrade 2010 (continued)

PROGRESS TO DATE
None

MILESTONES
- 4th Quarter 2009 Upgraded to Exchange Server 2007

PROJECT BUDGET
- 15,000 Estimated Infrastructure Cost
- 29,472 Estimated Annual Maintenance (3.07/user/month)
- 0 FY2011 Budget New Infrastructure
- 29,472 FY2011 Budget Maintenance

RETURN ON INVESTMENT
Our return on investment will be reliability achieved by replacement of the infrastructure that is currently hosting our email systems and by keeping the software up to date alleviating any compatibility issues with other applications. Additionally, Exchange 2010 provides enhanced functionality that will benefit all county users of the email system.

CT85120-21
Desktop Productivity and Manageability

PROJECT DESCRIPTION
Technology has advanced to the point where we can actually separate the applications that users need to run from the operating system of the computer itself. In other words, LCIS would like to get to the point where no applications are physically installed on users computers. Instead of installing the application, we would use other techniques of delivering the application to the user when they log into the device. Applications can be delivered using application servers such as Citrix and Terminal services, or they can be virtualized and delivered using Microsoft App-V or Microsoft Med-V. These tools are only available through the Microsoft Desktop Optimization Pack which the county licensed in FY2009 as part of the Microsoft Enterprise Agreement. This strategy makes the goal of using alternative devices easier to achieve since separating the applications helps to remove the dependency on custom configured PCs. We believe that PCs should be standardized and interchangeable like cable TV boxes. PCs should also be high productivity and efficiency tools for the county employee, which is why we have standardized our PC to include Microsoft Office, the #1 productivity application for 25 years straight, and the Windows 7 operating system. Office Professional 2010 was designed with application virtualization in mind and has alleviated most problems that we experienced during initial testing of application virtualization. Office Professional integrates tightly with SharePoint Server and together they will increase productivity and simplify the employees work environment.

PROJECT GOALS
- To provide an infrastructure where very few applications are installed on user's computers. Instead of customizing each user's computer, users will be assigned applications based on their network account and the applications will automatically be delivered to them when they log in.
- To reduce the time that it takes to setup a PC for a typical user
- To make recovering from a computer failure as simple as swapping it out with another pre configured computer
- Service calls to replace PCs should be reduced to under a half hour for most users.
- Staff reductions in FY2010 were based on the premises that this project would succeed in its goals

PROGRESS TO DATE
The first event that put us on the road to separating applications from the operating system was the implementation of the new GIS system architecture in 2007. All GIS ESRI applications were moved to a Citrix environment which allowed users to access GIS applications without having the application installed on their PC. When the new employee portal was brought online it gave users access to CD Plus, Munis and Microsoft Office. In November of 2008 we renegotiated our enterprise agreement and included the Microsoft Desktop Optimization pack which contains tools to provide application virtualization. We have thoroughly tested these technologies and have recently begun deploying them successfully in production.

MILESTONES
- 2nd Quarter 2007 — brought GIS applications online using Citrix remote application
- 1st Quarter 2008 — new Employee Portal brought online providing published applications
- 2nd Quarter 2009 — Configured and tested App-V and Med-V for EOC applications
- 1st Quarter 2010 — Standardized EOC laptops on application virtualization (App-V)
- 1st Quarter 2010 — Standardized County PCs to include Windows 7, App-V and Office 2010

CT85120-21
Desktop Productivity and Manageability (continued)

PROJECT BUDGET

•	0	Estimated Infrastructure Cost
•	101,138	Estimated Annual Maintenance (11.62/user/ month)
• 0	FY2011 Budget New Infrastructure	
• 101,138	FY2011 Budget Maintenance	

RETURN ON INVESTMENT

The biggest return on investment for this project is productivity and efficiency gains both for the Information Systems division and every PC user in the county. The manageability that we achieve by taking the installation of applications away from the client PCs and centralizing them in the data center will save us countless man hours. Also, by running high performance applications such as GIS in the data center we greatly reduce the costs associated with individual PCs. In the past we purchased high end workstations for GIS users, now GIS applications run on standard PCs and even alternative devices. Using technology we can reduce the requirements and costs associated with desktop PCs while still achieving performance gains due to the design of the back end architecture. As a bonus, we are able to access applications from home and/or remote locations through the employee portal or by using application virtualization which caches the application and manages it locally on the PC automatically allowing the best of both worlds. Microsoft Office Professional and SharePoint work seamlessly together and are the best way to ensure that users are productive in a highly technical environment. The familiarity of these products also ensures that the county can maintain an educated staff with the computer skills that are necessary in today's workforce.

CT85120-22
Securing the Desktop

PROJECT DESCRIPTION
Securing the desktop is an important part of any enterprise security plan. Every PC on the LCBCC network is required to run Trend antivirus/antimalware software. The County also uses web filtering software to maintain strict controls over who has access to what resources on the Internet and to inspect packets from the Internet to ensure that harmful sites are blocked and mischievous attacks are prevented. Windows 7 security improvements provide many opportunities for Information Systems to further enhance desktop security and we will be looking at these closely and implementing those that make sense.

PROJECT GOALS
- Maintain our current security software
- Enable UAC on Windows 7 workstations and forbid all users from running as administrator
- Enable the firewall on Windows 7 workstations and configure appropriate exceptions

PROGRESS TO DATE
All security software is up to date. We have tested Windows 7 and it has worked fine with UAC enabled and we have yet to find a case where a user needs to be an administrator of their PC. Group Policy is being used to enforce users to use the proxy when surfing the web.

MILESTONES
- 1st Quarter 2010 — Upgraded Trend to OfficeScan10
- 1st Quarter 2011 — Changed web filtering from Websense to Forefront Online web protection

PROJECT BUDGET
•	0	Estimated Infrastructure Cost
•	9,664	Estimated Annual Maintenance (1.01/user/ month)
• 0	FY2011 Budget New Infrastructure	
• 9,664	FY2011 Budget Maintenance	

RETURN ON INVESTMENT
This project will provide a greater overall security for our network and creates a higher level of protection against virus and malware outbreaks.

IS85150-01
Subnet the LCBCC Data Network

PROJECT DESCRIPTION
Twelve years ago, Avaya designed our original network as a 'flat network'. This design made sense at the time, however over the years the network has grown and we have experienced performance issues because of this design. We have designed improvements that will add complexity to the network, but should add much more resilience going forward. Our design is based on isolating small parts of the network to predefined subnets within the 10.50.x.x – 10.69.x.x subnet range. Since this project involves actually touching every computer, some of the existing computers will remain on the current subnet to avoid having to reconfigure systems at every remote location. See figure IS85150-01-1.

PROJECT GOALS
- To reduce the amount of broadcast traffic that has a negative impact on network performance.
- To create a network that is more secure than a flat configuration.
- To create an IP numbering scheme that will directly correspond to a specific location.
- To continue to use DHCP, but allow computers to be assigned a unique address based on their MAC address.

PROGRESS TO DATE
All computers within LCIS were the first to be placed on the new subnet scheme. Issues were worked out and then the GIS division was placed on a new subnet. Radio Communications was assigned their subnet when they moved to their new location. Some servers such as the iSCSI pool for VMware have also been placed on their own subnet. We are slowly implementing the structure with all new locations as they come online and as division are shuffled from one building to another.

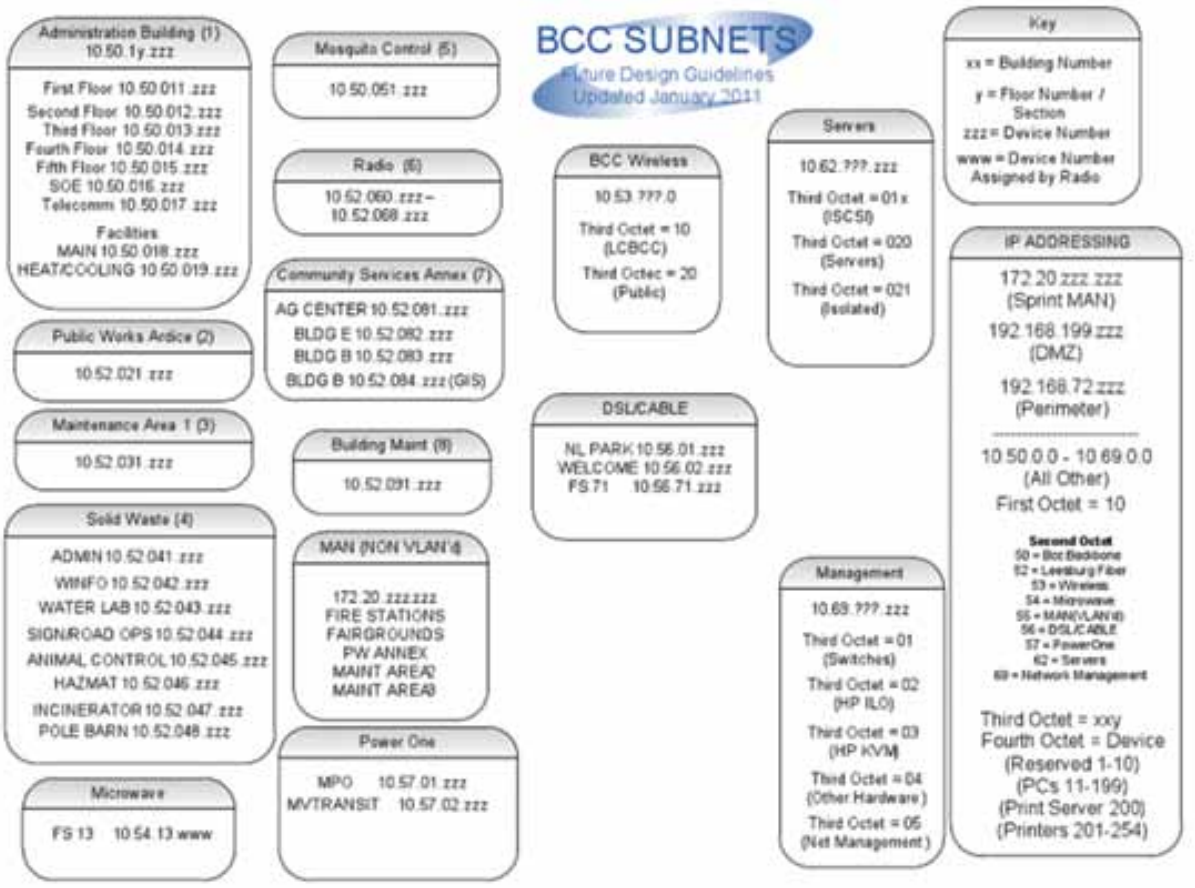
MILESTONES
- 1st Quarter 2009 LCIS division computers configured using new design
- 4th Quarter 2010 configured the fourth and fifth floors of the Administration building

PROJECT BUDGET

- 0 Estimated Infrastructure Cost
- 0 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 0 FY2011 Budget Maintenance

RETURN ON INVESTMENT

Reduced broadcast should help with network performance. Linking a computer to a specific location and address will provide several benefits for us. First, the help desk will be able to identify where a computer is located based on its address. Second, it will prevent people from moving computers to different locations, and lastly it add security to the network since computers will not be able to plug into the network unless they have been configured for an address in DHCP. Overall the new design will provide performance, security, scalability and manageability improvements in our infrastructure.



IS85150-03
Migration to Active Directory 2008

PROJECT DESCRIPTION
Active directory is the most critical service on a windows network and needs to be maintained and kept up to date. Microsoft's newest server operating system, windows 2008, provides many new active directory features that will benefit Lake County. The Lakegov domain will be migrated over to active directory 2008 and domain controllers will be replaced by new hardware.

PROJECT GOALS
- To update our two current windows 2003 domain controllers to windows 2008
- To upgrade the hardware while doing so.
- We may also look into setting up read only domain controllers for some remote locations.

PROGRESS TO DATE
One Windows 2008 domain controller has been setup and the domain forest has been upgraded to 2008 R2 level.

MILESTONES
- 3rd Quarter 2008 purchased the hardware for a new windows 2008 domain controller
- 4th Quarter 2010 Upgraded domain forest level to 2008 R2

PROJECT BUDGET
•	4,500	Estimated Infrastructure Cost
•	1,230	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 820	FY2011 Budget Maintenance	
• Spent FY2008	2,012	

RETURN ON INVESTMENT
Updating the domain controller hardware will make our systems more reliable and will provide greater performance. Moving to windows server 2008 will provide greater performance and allow greater security. Domain controllers are the most crucial part of a windows network, thus keeping them upgraded will provide an optimum operation of all of our systems.

IS85150-04
Network Access Protection (NAP)

PROJECT DESCRIPTION
Network Access Protection (NAP) is a security feature of windows 2008 and it integrates with System Center Configuration Manger. NAP will allow us to create minimum security requirements that a computer must meet before it can connect to our network. We can also create different access rules for computers that meet a certain classification. For instance, with NAP we can prevent computers from accessing the network unless they have Trend antivirus and have all the required Microsoft patches installed. We can also create rules to limit the access that 3rd party vendors have to the network, so that they can only access certain computers for instance. NAP is also supported by 3rd party network vendors such as Cisco and HP so that it will integrate with certain network devices.

PROJECT GOALS
- To restrict network access to computers that do not meet minimum security standards
- To limit network access for 3rd party vendors who need to service certain systems.

PROGRESS TO DATE
Limited testing.

MILESTONES
None

PROJECT BUDGET
•	0	Estimated Infrastructure Cost
•	0	Estimated Annual Maintenance
• 0	FY2011 Budget New Infrastructure	
• 0	FY2011 Budget Maintenance	

RETURN ON INVESTMENT
This project will provide a greater overall security for our network and creates a higher level of protection against virus and malware outbreaks. Additionally, we will be able to more tightly control the access that we give 3rd part vendors.

IS85150-05
Help Desk Improvements

PROJECT DESCRIPTION
In 2007 LCIS stopped the annual maintenance on our Track-IT help desk application and developed our own in-house program. Writing our own application, allows us to tightly integrate the help desk with all the services that we provide. Our initial goal was to get a system in place that would track work orders. That was completed along with several other modules, but we would like to expand the system greatly to provide a better interface, reporting functionality, a module for audit tracking, integration with COBIT, and more specific functionality for tracking problems, projects, and reoccurring tasks. We would also like to build a module that will enable a help desk process improvement that was recommended by one of our network technicians.

PROJECT GOALS
- To continue to expand the functionality of our help desk software allowing us to improve our internal processes, manage our projects and people better, and to help us to provide the greatest customer service possible.
- Implement COBIT and ITIL practices into help desk application

PROGRESS TO DATE
Help Desk application is functional and tracks incidents. The IS Work Order application that runs in the system tray on all PCs and allows users to enter help desk tickets.

MILESTONES
- 2nd Quarter 2007 brought our in-house help desk application online

PROJECT BUDGET
- 0 Estimated Infrastructure Cost
- 0 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 0 FY2011 Budget Maintenance

RETURN ON INVESTMENT
We were paying an annual maintenance fee for our old help desk software which is no longer necessary. Ninety percent of the time spent on this project is spent after normal working hours. Writing our own application gives us much more manageability then we could get with an off the shelf package. An additional benefit of our help desk application is that it has brought about positive changes in our help desk processes and has increased our customer service.

IS85150-06
LCIS Customer Service Portal

PROJECT DESCRIPTION
Currently we have some simple web pages that allow LCIS to communicate the status of work orders, global technical issues and some of our statistics and measurements. LCIS would like to use Microsoft SharePoint technology to convert these simple web pages into a real customer service portal for our users.

PROJECT GOALS
- To create a web portal providing a transparent view into everything that LCIS does on a daily basis.
- To create a technical portal that will be a one stop shop for all IS related issues.
- To increase our internal experience with Microsoft SharePoint technology so that we can design a SharePoint portal that would be beneficial and usable by all departments throughout the county.

PROGRESS TO DATE
LCIS has installed a SharePoint site and has experimented with several of the built in templates to examine the functionality that is provided by each. LCIS is also building an internal SharePoint site to allow greater collaboration between our LCIS staff members essentially becoming an integral part of our help desk application. The next step is to actually come up with a design of what we want the customer service portal to look like and what features we would like to provide to our users.

MILESTONES
- 1st Quarter 2009 LCIS SharePoint site installed

PROJECT BUDGET
- 0 Estimated Infrastructure Cost
- 0 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 0 FY2011 Budget Maintenance

RETURN ON INVESTMENT
The customer service portal will lead to improvements in our internal processes and will allow us to provide greater customer service. Additionally, the portal will provide transparency by allowing a real-time examination of everything done by the LCIS division.

IS85150-07
Asset Auditing and Software Metering

PROJECT DESCRIPTION
LCIS uses Microsoft System Center Configuration Manger (SCCM) to deploy software and patches. SCCM also has extensive asset management and software metering capabilities, along with the necessary reporting to go along with it. We have yet to take full advantage of these capabilities but would like to do so as soon as possible. Part of this project will involve scanning every computer in the county and removing software that should not be installed. We will also configure alerts to notify us when any software is installed by users. With software metering we will be able to instantly compare our number of software licenses with the number of users using the software.

PROJECT GOALS
- To automate the management of our assets and
- To monitor software usage in real-time giving us an accurate assessment of our software licensing needs.
- To satisfy the auditor's requirements that LCIS be the central manager for all software and licenses.

PROGRESS TO DATE
LCIS has started collecting county software and has established a secure storage area. We have been documenting licenses and building an electronic file to show proof of licensing. We installed Microsoft System Center Configuration Manger which allows us to track assets and monitor software usage. We have added the capabilities to our help desk application to record software license purchases. Through SCCM, LCIS as well as the clerks auditors have the capability to scan any computer in the county to inspect the software that is installed. Our next step is to establish procedures to perform asset auditing on an ongoing basis and to create alerts that will notify staff when specific actions need to be taken.

MILESTONES
- 3rd Quarter 2007 — Auditors recommend IT should be central manager of all software
- 4th Quarter 2008 — Microsoft System Center Configuration Manager 2007 R2 installed

PROJECT BUDGET
- 0 — Estimated Infrastructure Cost
- 12,675 — Estimated Annual Maintenance
- 0 — FY2011 Budget New Infrastructure
- 12,675 — FY2011 Budget Maintenance

RETURN ON INVESTMENT
Our return on investment will be better audit results, better control over our assets and the usage of them and less risk regarding software license violations.

IS85150-08
Implementation of IT Governance

PROJECT DESCRIPTION
LCIS has been tasked with adopting the COBIT fundamentals in order to align with requirements from internal auditors. This project requires the entire staff to learn and embrace the principles of IT Governance. All of our procedures and policies will be documented to reflect the conformance to the COBIT standards. Additional documentation will be created where necessary to meet the requirements of COBIT.

PROJECT GOALS
- To establish IT Governance by adopting the principles of COBIT.
- To train staff on the principles of IT Governance and the fundamentals of COBIT
- IT Governance adoption and participation throughout the entire organization

PROGRESS TO DATE
The IS director has completed the COBIT foundation course. The IS director meets weekly with the IT Director and other division directors to establish our IT Governance framework. LCIS has started working on documentation to support the COBIT processes.

MILESTONES
- 2nd Quarter 2009 IS Director Certified in COBIT foundations
- 1st Quarter 2010 IS Project Portfolio
- 1st Quarter 2010 IS Strategic Plan
- 2nd Quarter 2010 IS Service Catalog

PROJECT BUDGET
- 950 Estimated Infrastructure Cost
- 0 Estimated Annual Maintenance
- 0 FY2011 Budget New Infrastructure
- 0 FY2011 Budget Maintenance
- Spent FY2009 950

RETURN ON INVESTMENT
Our return on investment will be responsibility and accountability to ensure that IT projects are in line with the county goals, costs are kept down, value is maximized and risk is managed. Services will be more reliable, and costs more transparent. IT will become more responsive to the needs of other departments and the board's confidence in IT will increase.

GEOGRAPHIC INFORMATION SERVICES

GS86100-01
GIS Dashboards

PROJECT DESCRIPTION
The GIS Division is exploring the use of some of the ESRI dashboard capabilities available. The first initiative is to create a Capital Improvement Plan (CIP) interactive map called CIP Map.

PROJECT GOALS
This map will be focused around a CIP layer that GIS will create as a visible map layer. This will allow for all the CIP projects to be displayed visually with some general information of the project and may include linking the CIP document pages that correlate to each project. This will give everyone a general overview of each project, the projects spatial location, and an approximate status on each projects progression.
In the long term, it would be most advantageous if we can incorporate using the dashboard platform to monitor/ report key performance indicators (KPI's) of various functions, projects, and initiatives.

PROGRESS TO DATE
Test site and map have been created using another layer for now to show proof of concept to upper management for approval.

MILESTONES
- February, 2011 Create mock up site for management review.
- 2nd Quarter 2011 Roll out Flex GIS Interactive CIP Map to web

PROJECT BUDGET
All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT
Tangible benefits include time and cost savings through visualizing dashboard related data. Visualizing benchmark analysis, trends, and other attribute data presents data that can assist everyone in making better and more informed decisions. These tangible results would have to be quantified at a later date once this initiative delivers results. Intangible benefits may include greater transparency, accountability, and faster understanding of otherwise complex tabular data.

GS86100-02
GIS Project Management Initiative SharePoint for GIS

PROJECT DESCRIPTION
This year we plan to refine our project management best practices using SharePoint for our GIS Division. Having a collaborative platform we all can tap into will provide greater agility, optimize resource allocation, improve project management orchestration, and enhance workflow process improvement.

PROJECT GOALS
Build a GIS Division SharePoint presence that will be a natural extension of the SharePoint structure we anticipate to build within the IT department for enhanced Project and Portfolio management (IT PMO). The next phase of this initiative once the IT Project Management Office (PMO) is established and functioning would be roll this up into a department level initiative to potentially be scaled out for other departments to utilize.

PROGRESS TO DATE
Initial GIS SharePoint site is being designed.

MILESTONES
GIS and IT SharePoint test sites up and running at the end of 1st or beginning of 2nd quarter 2011. .
Both sites tweaked and being utilized by June 1st, 2011.

PROJECT BUDGET
All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT
Tangible benefits include ease of prioritizing projects, reporting project status, better resource allocation, improved communication, standardized documentation, and improved quantification of ROI. Meeting project deadlines while staying within budget.
Intangible benefits include a more knowledgeable staff as it relates to project management best practices and industry standards.

GS86100-03
Energy Efficiency & Conservation Block Grant of 2009 Green Energy Sustainability Tracking System

PROJECT DESCRIPTION
GIS support for a 2.8 million grant to develop a reporting system that will forecast energy sources, energy use, energy rates, GHG emissions and other factors related to energy efficiency and conservation.

PROJECT GOALS
Explore the GIS methodology necessary to create a state of the art county maintained building feature class that will allow managers and staff to have access to digital photos, building floor plans, energy bills, and other useful documents. This can be accessed within one application, with a robust green reporting and analysis capabilities which can track historical changes to enable a professional decision making process.

PROGRESS TO DATE
A county wide BCC building footprint polygon feature class has been created in May 2009, and is currently in the QA/QC phase for buildings, and aggregating buildings that are still missing. Recommend adding traffic lights, radio towers, street lights, and other related assets to this feature class to enable a 1 to 1 match of all energy usage.

MILESTONES
GIS analyzed 14 RFP's for development of an Energy Efficiency and Conservation Strategy. On July 28th, 2009 a committee meeting was held in Procurement, and The Cadmus Group, Inc. was selected as the committee's recommendation to the commissioner's. Also on July 28th, 2009 we received approval from the DOE to use some of our grant to hire a vendor to assist LCBCC in developing a strategy plan.

PROJECT BUDGET
2.8 million onetime award, with the possibility for bidding and winning more competitive grants.

RETURN ON INVESTMENT
200 – 300K annual savings from energy bills by weatherizing, alternative energy additions, and conservation implementation on county infrastructure. 200 – 300K potential savings by eliminating reporting redundancy and man power necessary to track and report our progress to the DOE. Immeasurable savings gained by expediting our strategy plan, which will help create new, sustainable "green" jobs.

GS86100-04
Fire Hydrant Location Inventory

PROJECT DESCRIPTION
GIS staff is coordinating with the county's Fire Rescue staff and municipalities to collect the X/Y coordinates and other associated data of known fire hydrants within Lake County.

PROJECT GOALS
Collect X/Y (Longitude/Latitude) coordinate pairs for all know hydrant locations in the county, plus data describing the type, status, condition, and other attribute data of each hydrant for facility management purposes.

PROGRESS TO DATE
The project began with an existing inventory of approximately 4,000 hydrant locations. Through collaboration with various municipalities, that number has increased to over 12,000 locations. Lake County Fire Rescue is using handheld GPS units to physically collect the data on a station by station effort.

MILESTONES
- 2006 Initial data collection of county hydrant locations completed
- 2008-2010 Receipt of municipal hydrant locations incorporated into county GIS (on-going)
- Mid 2010 Schema design for Hydrant feature class created
- Jan 2011 Data collection for 5 station response zones completed

PROJECT BUDGET
All costs are inherent to county personnel, hardware, and software already provided.
Return on Investment
Visual representation and a tabular inventory of hydrant locations will aide Fire Rescue in determining what type of equipment to respond to calls with, help track inspection/maintenance of the hydrants, and potentially increase the county's ISO insurance rating thus lowering citizens' insurance rates.

GS86100-05
Fire Rescue Response Boundaries

PROJECT DESCRIPTION
GIS staff is coordinating with the county's Fire Rescue staff to create Response Boundaries for each of the county fire stations. Once these boundaries are created, the project will become a "what if" service model to help determine where new stations may be needed, what happens if a station closes, should a station be moved to a new location, or what happens to county response areas as the cities increase their areas through annexation.

PROJECT GOALS
Create polygon feature classes that represents the Fire Rescue response boundaries. Then model the project to be able to change variables (new fire station/increased municipal annexations/etc.) and recalculate the potential response boundaries based on speculative, changing data.

PROGRESS TO DATE
The new response boundaries are completed and approved by Fire Rescue.

MILESTONES

- 2008 — False start using 45mph data as requested
- Sept, 2009 — Recalculation of new boundaries using 35mph per new direction from Fire Rescue based on ISO standards completed
- Sept-Oct, 2009 — QA/QC by Fire Rescue
- Ongoing — Updating these boundaries as needed

PROJECT BUDGET

All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT

Current and accurate response boundaries for all the county fire stations ensure quick response times, avoid overlapping or duplicate responses by multiple stations, and ultimately save lives. Also, by creating a model, staff can plan for the future by evaluating the need for additional stations; determine where to place them; and whether inter-local agreements with municipalities are needed.

GS86100-06
GIS & Cartegraph Integration

PROJECT DESCRIPTION

GIS has initiated data integration with the Cartegraph Public Works Asset Management system. GIS is establishing one-to-many relationships between the GIS Street segments and the Cartegraph Street segments. This integration will allow both entities to use the GIS Streets geometry while sharing data common to both.

PROJECT GOALS

The goal of this project is for Public Works to have access to view the GIS Streets layer while also being able to access their tabular Cartegraph data. While it will not be a full integration utilizing a single streets layer, the data will be fluid, flowing from one interface to the other so that both departments will benefit from all data.

PROGRESS TO DATE

A GIS Analyst is currently working with Public Works and PASS to establish the data connections and to clean up erroneous data.

MILESTONES

- February 20, 2009 — Project Kick-Off
- May 1st-June 15, 2009 — Project on hold due to Proposed FLU Re-engineering Project
- Jan 2011 — Hardware connections are in place and data linking continues

PROJECT BUDGET

All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT

Integrating Public works tabular data with the spatial GIS data will allow both offices to take advantage of increased information for decision making and asset management.

GS86100-07
Viewscape Protection

PROJECT DESCRIPTION
This project will identify and inventory areas of Lake County in and around the Ferndale community considered desirable or picturesque views as a positive reinforcement of the rural and historic character of the area. The project will meet the requirements of Policy 1-2.3.14 of the Lake County Land Development Regulations (LDRs).

PROJECT GOALS
Through the use of ArcGIS Spatial Analyst tools, the project will identify and inventory areas with grade changes large enough to create a view for a minimum number of properties.

PROGRESS TO DATE
This project is currently in the planning stage to determine parameters and specific goals.

MILESTONES
TBD

PROJECT BUDGET
There are no additional costs beyond inherent staff costs. This project cancels out any expenditure that would have been made if an outside consultant had been hired.

RETURN ON INVESTMENT
Completion of this project will allow reasonable development regulations that will reinforce the rural and historic character of portions of Lake County, making it a desirable place for residents to live and work. It also has the potentially to attract new citizens, increase tax revenue, business potential, and community pride.

GS86100-08
Street Network

PROJECT DESCRIPTION
This project will result in a county-wide Street Network Dataset that is compatible with ESRI's Network Analyst Extension, providing analysis functionality for Routing, Service Area Definition, Shortest Path Analysis, Optimum Route Analysis, Closest Facility Analysis, Origin-Destination Analysis, and Location-Allocation solutions.

PROJECT GOALS
This project will allow the county to create best routes, service areas, maximum coverage, and other time/distance analysis to maximize efficiency and minimize costs permitting decisions based on objective data with sound and repeatable methodologies.

PROGRESS TO DATE
Clean-up on the streets feature class is nearing completion, the initial schema design is completed, and initial design of restriction modules and impedances is completed.

MILESTONES

- August, 2010 — Project Kick-off
- Sept, 2010 — Schema design, and sample network created for testing
- Oct, 2010 — Ancillary data collection complete

PROJECT BUDGET

There are no additional costs beyond inherent staff costs. This project cancels out any expenditure that would have been made if an outside consultant had been hired.

RETURN ON INVESTMENT

Completion of this project will allow efficient and accurate time/distance analysis saving field time, transportation expenses, and facilitating the fair and equitable creation of services areas and allocation of resources.

GS86100-09
Building Permits Map Book

PROJECT DESCRIPTION

This project will create a feature class representing the location of building permits issued that require inspection by the Lake County Property Appraiser, and display them in a map book that they can view, query, and print as needed.

PROJECT GOALS

Create a feature class showing the location of building permits; automate its update based on data supplied by the Property Appraiser's office, and design and ArcGIS map document for use within their office.

PROGRESS TO DATE

Complete

MILESTONES

- Sept, 2010 — Project Kick-off
- Oct. 2010 — Map book designed and approved
- Nov, 2010 — PA data delivered, loaded into SDE and automated process created for updates
- Dec. 2010 — Access to PA's office and training

PROJECT BUDGET

There are no additional costs beyond inherent staff costs. This project cancels out any expenditure that would have been made if an outside consultant had been hired.

RETURN ON INVESTMENT

This project will save the Property Appraiser's field inspectors prep time each morning by eliminating the current manual method of researching permits, and locating them on copies of paper maps with colored pens, and it will allow them to track the progress of inspections to ensure that all permits are visited in a timely manner.

GS86100-10
Fire Rescue Run Card Project

PROJECT DESCRIPTION
This project will create a polygon layer to indicate specific dispatch criteria when emergency calls are taken. The location of the call will indicate the type of run card to use based on its spatial relationship to the polygon layer. Station 112 is to be used as a pilot project to work out all issues. The methodologies will then be duplicated for all other stations

PROJECT GOALS
Create a polygon layer to indicate response zones

PROGRESS TO DATE
Polygon layer for pilot created, awaiting meeting with Fire Rescue for approval

MILESTONES
- January, 2011 Pilot area polygon layer created

PROJECT BUDGET
There are no additional costs beyond inherent staff costs. This project cancels out any expenditure that would have been made if an outside consultant had been hired.

RETURN ON INVESTMENT
Timely and efficient dispatch of emergency vehicles will save lives and property for Lake County and its citizens

GS86100-11
Sheriff's Office GIS Support For Spillman CAD System

PROJECT DESCRIPTION
GIS is working with the Lake County Sheriff's Office by supplying existing GIS data and creating new data per their specifications that will be incorporated into their new CAD dispatching system.

PROJECT GOALS
Create layers identifying response zones, jurisdictions, and address locations with subdivision names, and provide updates on a periodic basis

PROGRESS TO DATE
The layers for Jurisdictions, LawZones, and Addresses have been created, along with automating models where appropriate so that updates can be done with the minimum of manual manipulation. Requests for additional data may be forthcoming as they build their system.

MILESTONES

- Dec. 2010 Kick-off meeting
- Jan. 2011 Initial datasets created and models built

PROJECT BUDGET

There are no additional costs beyond inherent staff costs. This project cancels out any expenditure that would have been made if an outside consultant had been hired.

RETURN ON INVESTMENT

This project is collaboration between Lake County GIS and the Lake County Sheriff's Office in support of a new CAD system being installed by the Sheriff. Lake County GIS will supply the data and LCSO will implement the CAD. Automation of most of the data creation will allow the Sheriff access to the most current data on a schedule that meets their needs. GIS's contributions will enhance the dispatch systems functionality.

GS86100-12

Parcel/Property Appraiser Match of Alternate Keys

PROJECT DESCRIPTION

The maximizing of the accuracy of the Tax Parcel base-layer as defined by the correlation of records in the Property Appraiser's data and the Tax Parcel base-layer.

PROJECT GOALS

To have a matching polygon in the GIS Tax Parcel base-layer for each record in the Property Appraiser's real property database, to the extent possible. We also want to confirm the validity of each polygon in the tax parcel base-layer with no matching record in the Property Appraiser's data.

PROGRESS TO DATE

As of January, 2011, we have 176 records in the Property Appraiser's database that have no corresponding record in the parcel base layer. This in near the practical limit of matches that can be attained as the rest are primarily caused by the time it takes for the Property Appraiser to send us notification of changes to their database and for us to make the corrections to ours.

MILESTONES

We have, since July 2010, reduced by 50% the records in the parcel layer that don't correspond to the Appraiser's data. We continue to work to reduce this miss-match and hope to reduce it by an additional 30% this year.

PROJECT BUDGET

All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT

Increase the usefulness of the data to the management and staff of Lake County government and the citizens at large.

GS86100-13
Parcel/Property Appraiser Match of Subdivisions

PROJECT DESCRIPTION
Maximize the accuracy of the subdivision component of the Parcel base-layer; accuracy to include geometry, attributes and a 1 to 1 match with the Property Appraiser's list of subdivisions.

PROJECT GOALS
To the extent possible, achieve and maintain a 1:1 correlation between records in the Property Appraiser's subdivision database and our parcel base-layer. Attributes related to subdivisions to reflect accurately source information, including recorded documents.

PROGRESS TO DATE
Elimination of null matches between the parcel layer and Property Appraisers data is substantially complete. The detailed review of all attributes and geometry is about 57% complete as of January, 2011.

MILESTONES
Eliminate null and duplicate records
Milestones for detailed review and correction of data are based on a percentage of completion.

PROJECT BUDGET
All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT
Increased usefulness of parcel base-layer to all users.

GS86100-14
Creation of Permits Map for Property Appraiser

PROJECT DESCRIPTION
The field appraisers working for the Property Appraiser's office perform field appraisals every year to help them determine the values for the coming tax year calculations. We created an automated mapping system that allows them to quickly print out maps custom designed for them. The maps will show all necessary parcel detail as well as current building permits. In addition, 2009 and 2010 sales will also be shown.

PROJECT GOALS
Maximize the field appraiser's efficiency when planning for and performing the field appraisals.

PROGRESS TO DATE
The digital maps have been finalized and delivered to the Appraiser's staff. The final step is for them to test the product in the field and see if there are any changes they need.

MILESTONES

- January 4, 2011 Final digital version of map system delivered to Property Appraiser

PROJECT BUDGET

All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT

Increase efficiency of field appraisers.

GS86100-15

Streamline and Automate Certain Mass-Appraisal Functions for the Property Appraiser

PROJECT DESCRIPTION

Mass appraisal is one of the two ways county property appraisers determine fair value of taxable property. Currently, the Lake County Property Appraiser does not have an automated mass appraisal system; most of these tasks are performed manually. We propose to develop an automated process that will perform those appraisal tasks as identified by senior Appraiser staff as being most useful to them.

PROJECT GOALS

Identify those tasks which GIS functionality can be applied to enhance the appraisal operations of the Lake County Property Appraiser.

PROGRESS TO DATE

Had several significant meetings to begin identifying those tasks which GIS functionality can be applied and create an informal working group to address the issues.

MILESTONES

Tasked the Senior Supervisor (Real Estate-AG) from the Appraiser's office to identify those types of analyses most important so that GIS/IT staff can try to automate them.

PROJECT BUDGET

All costs are inherent to county personnel, hardware, and software already provided.

RETURN ON INVESTMENT

Enhance the efficiency and effectiveness of appraisal functions (specifically those that can utilize GIS tools).

TELECOMMUNICATION SYSTEMS

TS87130-01
Telecommunications Modernization

PROJECT DESCRIPTION
Telecommunications works daily to find ways of improving the technology provided today. The status quo just will not work in a environment full of technology and growth. The heart of all communications starts with the voice or telephone and then migrates into data and beyond. By modernizing the voice network to work in a converged environment, Telecommunications is the starting point to get this convergence working. Giving the ability for employees to work from home, access voice mails via the web, listening to emails read to you over the phone, setting up voice over IP to reach the remote locations, and having a strong voice server is the key to making all this work.

In a time of constant change, PBX manufacturers are no different. Lake County is faced with a large NEC PBX platform with many NEC PBX's tied together. NEC has announced the "sunsetting" of all PBX's that we have and maintain. As a result of this "sunsetting" Lake County will be working to upgrade all PBX's to the newest available on the market today. NEC has many upgrade steps to move into the new PBX platforms with minimal down time. This project is part of the overall modernization and allows us to continue to expand and get the support that is needed in a dynamically changing world.

PROJECT GOALS
- Optimize the life cycle of the voice services platform by upgrading to the most recent release of PBX
- Work closely with all county Information Technology departments to provide the best technology solution including VoIP from the PBXs and unified messaging from the voice servers such as voicemail.

PROGRESS TO DATE
In 2006 Lake County started the upgrades to the latest processors and software revisions available on the market. In 2009 all NEC PBXs are at the same level of software with the most recent processor. NEC announced in the spring of 2009 that every platform Lake County has will no longer be supported or sold. Going forward all plans with be to upgrade one PBX at a time to the new SV 8300 and the SV 8500 NEC PBX's. In the Fall of 2009 Telecommunications started working with a different phone system that was totally VoIP and much less expenses to expand. Once the technicians were trained and certified the first system was installed in the Administration building. This system allowed Telecom to expand and reach areas of the county that could not be done using the existing data network that was in place. The first location to reach out to was the Tax Collector Clermont Office with 12 phones and now all county employees can call that office with only 4 digit dialing.

All of 2010 was spent investing in education and expansion of the new phone system network and by the end of 2010 Telecom had installed 5 Tax Collector locations and worked to install 2 Unified Communications platforms one for the Tax Collector and one for the rest of the county.

MILESTONES
- By the spring of 2007 both of the 2400's were a complete match of software and processors. The end of 2007 marked the completion of all NEC 2000's to the 2000 IPS with match software revisions.
- May of 2008 Lake County installed a new voice server platform to handle the new AVST voice system. This was a huge milestone to get everyone on a single platform with the latest in voice technology.
- Fall of 2009 saw the first VoIP phone system installed and working on the counties 4 digit dial network. This enabled the county to reach areas with 4 digit dial and to reduce the expense of phone lines in some of the remote offices.
- In 2010 saw the continuation of the VoIP growth by adding locations and going one step further to include a Unified Communications platform that will allow the county to grow and offer more services with less resources and also provide a fax server for employees.

PROJECT BUDGET
At this time Lake County has not budgeted for the next phase which will take into the SV 8300 and the SV 8500 platforms. The cost will vary between each location based on licensing and the size of the PBX. Cost will be anywhere from 8,000 - 15,000 per NEC 2000 IPS and over 100,000 per NEC 2400 IPX.

RETURN ON INVESTMENT
This investment will allow for always on phone service, with keeping the processors within their life cycle we are guaranteed to have working phones. The money spent today will return 10 fold with better customer service, better availability with county employees, and the ability to keep up with technology.

TS87130-02
Telecommunications Common Platform

PROJECT DESCRIPTION
The development of a common voice platform is key to the enterprise network solution. Historically, the county has implemented independent solutions that have resulted in overlapping and duplicating voice services. By creating or consolidating to one common voice network, the county will optimize its total investment for voice services.

One major benefit of creating the common platform is the ability for a converged technology, which allows voice and data to travel across a single infrastructure. This convergence provides VoIP (Voice over Internet Protocol) service. As the VoIP technology progress the county will be ready for implementation. This VoIP technology allow the county to reach smaller offices and buildings and with a typical or traditional phone system the cost is just to great. This equips the county employees to have the tools they will need to reach the citizens better and the end result is a lower cost of doing business and providing better customer service at the same time.

The single platform allows for the reduction of phone company phone lines, reduced long distance charges, better communications between office, and the result of that is better customer service. The single platform also allows for voice routing between phone systems and in the event of a failure or just the need for more services, calls can be routed to different phone systems and utilize all the resources available.

PROJECT GOALS
- Provide significant cost-savings for the county
- Enhance and expand voice services
- Streamline operational functions

PROGRESS TO DATE
Currently the county has 38 phone systems with many locations not large enough to have a phone system and those locations have analog phone lines from the local phone company. The analog phone lines are safe and reliable, but do come with a cost monthly and higher long distance rates. Out of the 38 phone systems 15 have been put together onto a single common voice infrastructure using the NEC phone equipment. NEC offers one of the most reliable voice platforms on the market today. Several years ago when the county purchased the first NEC system, they started down a great path using a platform that is very reliable.

TS87130-02
Telecommunications Common Platform (continued)

MILESTONES

• 2006	Added the Code Enforcement office to the NEC voice network
• 2007	Allowed the addition of the county's Environmental Utilities office
• 2007	Brought the upgrade of the Judical Center's NEC 2400 to match the core 2400
• 2007	Added the Public Road Ops office to the NEC voice network
• 2008	Upgraded the single voice mail server on the voice network
• 2008	Added the county's Radio Communications office to the NEC voice network
• 2009	Added the Animal Services office to the NEC voice network
• 2009	Added the new Constitutional Officers building to the NEC county network
• 2009	Added the Agricultural Center to the NEC voice network
• 2009	Added Tax Collector Clermont office to the Adtran voice network
• 2010	Added ALL Tax Collector locations to the Adtran voice network
• 2010	Added a Unified Communications server to the voice network

PROJECT BUDGET

At this time Lake County has not budgeted for any new projects, but will work closely with all offices to determine to next need and funding. The cost will vary on the locations based on the size of the PBX.

RETURN ON INVESTMENT

Moving in the direction of a single platform allows for consolidation of expenses in the local phone lines per location, reduced long distance rates, less need for phone lines as employees from other offices can talk on the internal network and leave the outside phone lines open for citizens.

The up-front cost of a PBX is recovered quickly in the savings of phone lines and long distance. Most recently, with the addition of the Animal Services location, the investment was 6,000 with a monthly savings of 575. This savings will pay for itself in less than 12 months. This is an automatic savings or return on investment of 6,000 a year.

TS87130-03
Telecommunications Cable Plant

PROJECT DESCRIPTION
Telecommunications has been working since 2008 to build a good strong cable plant, which is the connecting of buildings together using telephone cabling. The key to a good cable plant are good records and since the growth of the cable plant records were not kept well. Telecommunications is working to identify all cables, document them and build a database of all phone locations on the cable plant.

The Cable Plant project is project is 90% labor and 10% updating cable. As this project has started the labor hours are large, but the end result is a database of clean records and the ability to reduce labor on day to day implantation of telephone instruments.

PROJECT GOALS
Identify all cables and connections within the downtown Tavares area

PROGRESS TO DATE
The cabling that is in place has been installed for years and most of it has been poorly labeled. The first step was to identify each cable and what building it went to, that has now been done. The next step is a bit slower, but the goal is to identify each phone on the cabling for each building and which floor of that building the cabling is located. We have completed the main Administration building to date with all five floors being identified. Each building can have 1000 – 2000 cable pairs and each cable pair represents a phone instrument. Not all cable pairs are used, but all of them must be identified.
By the end of 2010 about 55% of all cable had been identified across the campus.

MILESTONES
- 2008 — Telecommunications worked with the Programming and Applications Support division to create an online database that works hand in hand with the work order application. Once this was create Telecommunications has been able to input each pair one at a time to the database.
- 2010 — Telecommunications still progressing on the identification of all telephone cabling campus wide

PROJECT BUDGET
This project does not require funding at this time, just the labor hours of the in-house Telecommunications technicians.

RETURN ON INVESTMENT
In the end as this project progresses the return on investment is the time saved by the county technicians installing or moving phones. What used to take up to 2 hours to identify and move a phone can now be done in 30 minutes. The labor recovered from spending less time hunting for phone wire is a savings to all involved.

PROGRAMMING & APPLICATION SUPPORT SERVICES

PA2061
Online Permitting

PROJECT DESCRIPTION
For several years Lake County has accepted building permits and zoning clearances through the web. About two years ago the ability to pay for those permits was added as well. The county would like to expand on this by offering additional services online.

PROJECT GOALS
- Expand the online permitting process.
- Increase customer service by offering these services online so the public does not have to come to our office.

PROGRESS TO DATE
We are currently in the development phase of this project.

MILESTONES
- 1st Quarter 2011 Formulate plan to be executed over the next year.
- 1st Quarter 2011 Launch Site Plans Online.

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
This project will be most beneficial to the public. Instead of having to come to the Admin building they will be able to do more things online.

PA2062
GIS Interactive Web Map

PROJECT DESCRIPTION
During fiscal year 2009, PASS developed the new GIS Interactive Map web site. During fiscal year 2010, PASS continued to make changes to the map including the addition of 2009 aerials. During fiscal year 2011 PASS will continue to make modifications to the site.

PROJECT GOALS
- Implement new features throughout the year.

PROGRESS TO DATE
We are consistently adding new features and layers to the interactive map.

MILESTONES
- 1st Quarter 2011 Add the Letter of Map Adjustment and Letter of Map Revision layer to the map.
- 3rd Quarter 2011 Add 2010 aerials (if we are able to obtain).

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
Continuing to improve our GIS site is beneficial to our internal employees and to the public. The new site has already cut down the amount of time it took users to find the data they need. Feedback on the new site has been mostly positive and we want to continue to build on that momentum by offering features that will make the site even easier to use.

PA2063
Upgrade GIS Software

PROJECT DESCRIPTION
ESRI, the company that provides our GIS software, recently released a new version of their software. This update includes security and performance enhancements. Upgrading the counties GIS software is quite involved and includes upgrading about 10 different servers.

PROJECT GOALS
- Upgrade ArcGIS Server to 10.0 SP1.
- Upgrade Citrix Environment to 10.0 SP1.
- Upgrade ArcSDE to 10.0 SP1.
- Upgrade ArcIMS to 10.0 SP1.
- Perform all upgrades so they have the least amount of impact on productivity as possible.

PROGRESS TO DATE
Have begun researching what will be involved in the upgrade.

MILESTONES
- 1st Quarter 2011 — Test environment setup.
- 1st Quarter 2011 — Install software updates in test environment.
- 2nd Quarter 2011 — Upgrade GISARC01 to 10.0 SP1. Ensure that all mapping web sites are functioning properly.
- 2nd Quarter 2011 — Upgrade BCCITSQ05 to 10.0 SP1.
- 2nd Quarter 2011 — Upgrade Citrix environment to 10.0 SP1.
- 2nd Quarter 2011 — Upgrade GISIMS01 to 10.0 SP1.

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
The upgrade does not cost the county any additional money. We pay maintenance every year and this software upgrade is included in that maintenance. The new software will mostly benefit internal employees as several new features have been added that should make our employees more productive.
There are also new features which will improve our GIS web sites.
The update also includes important security enhancements to make our systems more secure.

PA2064
Procurement RFQ Process – Add Tabulation of Bids

PROJECT DESCRIPTION
During fiscal year 2009, PASS worked with Procurement Services to launch a new automated Request for Quote (RFQ) process. This new process allows departments to do their own requests for quotes for projects under 25,000. Currently department users are able to post their own RFQs to our public web site where vendors can view the RFQ from. Registered vendors are also automatically notified via email of the RFQ. Currently vendors would need to email, fax or mail their response to the RFQ. Department users then manually collect each response.

During fiscal year 2010, PASS added several new features to the RFQ system that were requested by end users and the Procurement Division. One request that has been mentioned several times is the ability to post a tabulation of bids document to the web site after the RFQ has closed.

PROJECT GOALS
- Add a tabulation of bids document to the web site after an RFQ has closed.

PROGRESS TO DATE
None.

MILESTONES
- 3nd Quarter 2011 Develop and launch.

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
Adding the tabulation of bids will save our employees time as they currently have to either talk to vendors or email them to let them know who was chosen for the RFQ. This will also benefit vendors as they will be able to go to our web site and view this information directly.

PA2065
Email Archiving/Public Records Requests

PROJECT DESCRIPTION
During fiscal year 2009, IT invested in a new email archiving system from Symantec called Evault. Evault is a vast improvement over our old email archiving system. The one downside to the new system is that for public records requests, searches have to be done in both the old and new systems. For fiscal year 2011 PASS will continue to process public records requests and look at ways of improving the process.

PROJECT GOALS
- Continue processing public records requests
- Find ways of improving the search capabilities of the old email archiving system.

PROGRESS TO DATE
PASS is currently processing public record requests as they come in.

PROJECT BUDGET
This project is not budgeted.

PA2066
Electronic Document Storage

PROJECT DESCRIPTION
PASS will continue to store paper records within our electronic document storage system known as DataOne. For fiscal year 2011 PASS will continue to look at areas within the county that need to store their records electronically.

PROJECT GOALS
- Decrease the amount of paper records and increase the number of electronic documents.
- Decrease reliance on paper records.

PROJECT BUDGET
This project is not budgeted. The county does pay licensing fees for our electronic document storage system.

RETURN ON INVESTMENT
Storing records electronically saves money on the cost of storing paper records. It also cuts down on the amount of overall paper the county has to purchase each year. Other benefits include being able to search through the records based on keywords or dates which can require a huge amount of manual labor if the documents are not electronic.

PA2067
Remodel of GIS layers

PROJECT DESCRIPTION
During fiscal years 2009 and 2010, PASS and GIS made huge improvements to the enterprise Geodatabase by remodeling several of the most used data layers. During fiscal year 2011 PASS will continue to remodel layers and bring them into the Geodatabase.

PROJECT GOALS
- Remodel layers as needed to bring them into the enterprise Geodatabase.

PROGRESS TO DATE
Many of the most used layers have already been remodeled.

MILESTONES
This is a project that will go on throughout the year as new layers are added or existing ones are remodeled.

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
Ensuring the data that goes into our Geodatabase is accurate and modeled well is important to the performance and security of our GIS system. It is also important for GIS users as they rely on the data within the Geodatabase to make informed business decisions.

PA2068
Failover Database Server

PROJECT DESCRIPTION
Our primary database server (BCCITSQ08) currently runs over 50 databases. These databases support the following applications: All of the county web sites and intranet, Firehouse, Scales system, Animal Shelter, Aspen, Evault email archive, Express Maintenance and Cartegraph.

If this server were to fail it could take several hours to days in order to fully restore it. This would affect almost every department within the county along with our public web presences.

Providing a failover for this server will allow us to significantly reduce the downtime involved with a hardware or software failure.

PROJECT GOALS
- Be able to provide a failover for BCCITSQ08 in the event of a hardware or software failure.
- Restore all database services from BCCITSQ08 within 1 hour of a failure.

PROGRESS TO DATE
Currently in the planning phase.

MILESTONES
- 4th Quarter 2010 Setup new server and migrate database systems over.
- 2nd Quarter 2011 Setup current database server as a failover.

PROJECT BUDGET
10,751 was spent on a new server in fiscal year 2009.

RETURN ON INVESTMENT
Having a backup to our primary database server will allow us to minimize the downtime in case of a hardware or software failure. If this server were to fail it could take several hours to days in order to fully restore it. This would affect almost every department within the county along with our public web presences. The failover will reduce our downtime to less than 1 hour.

PA2069
Rabies Vaccination Online System

PROJECT DESCRIPTION
Animal Services would like to setup a new electronic rabies vaccination form that would be filled out by Veterinarian's every time they complete a rabies vaccination certificate. This new electronic form will need to integrate with their current software package.

PROJECT GOALS
- Allow Veterinarian's to fill out the rabies vaccination form online.

PROGRESS TO DATE
Have met with Animal Services and come up with an initial plan.

MILESTONES
- 1st Quarter 2011 Meet with Animal Services and come up with initial plan.
- 2nd Quarter 2011 Begin development.
- 4th Quarter 2011 Complete development and launch.

PROJECT BUDGET
This project is not budgeted.

RETURN ON INVESTMENT
Having an electronic system in place for rabies vaccination forms will save our Animal Control Division hours of manual paper work and will also make it very easy of Veterinarian's to report all rabies vaccination to the county.

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