New Business #20

COUNTY AGENDA REQUEST

Department:	Information Systems	Presenter(s):	Phil Frieder
Meeting Date:	Thursday, January 23, 2014	Type of Request:	New Business

Wording for the Agenda:

Consideration of Information System's recommendation to fund for a Network Administrator position at an entry-level rate, effective March 1, 2014, in order to facilitate execution of the Strategic Technology Plan and to implement emerging technologies.

Background/History/Details:

A Strategic Technology Plan was formulated in 2012 that identified specific needs for the Information Systems Department, including additional staffing. Adding a Network Administrator position is critical to embracing new technologies that will enhance the effectiveness, efficiency, and productivity of the County's business operations. Staff feels this position should be added now instead of during the FY2015 budget process since time is of the essence in capitalizing on opportunities outlined in the attached backup material.

Information Systems' 2014 budget will need to be increased by $21,621 to cover the following costs of a Network Administrator: Salary/Benefits of $19,121 for March - June, 2014, a one-time cost of $500 for a telephone, and a one-time cost of $2,000 for a computer.

The entry level rate for a Network Administrator is $43,036.44. Salary and benefits totaling $57,363 will be an annual recurring cost.

What action are you seeking from the Board of Commissioners?

Approval of Information System's recommendation to fund for a Network Administrator position at an entry-level rate, effective March 1, 2014, in order to facilitate execution of the Strategic Technology Plan and to implement emerging technologies and approval of a budget amendment to increase Information System's expenditure budget by $21,621 and decrease General Governmental expenditure budget by the same amount.

If this item requires funding, please describe:

Increase Information Systems' budget and decrease General Governmental budget by $21,621, no impact to the bottom line.

Has this request been considered within the past two years?	No	If so, when?	
Is Audio-Visual Equipment Required for this Request?*	No	Backup Provided with Request?	Yes

**** All audio-visual material must be submitted to the County Clerk's Office no later than 48 hours prior to the meeting. It is also your department's responsibility to ensure all third-party audio-visual material is submitted at least 48 hours in advance.***

Approved by Finance	Yes	Reviewed by Legal	
Approved by Purchasing	Not Applicable	County Clerk's Approval	Yes
Administrator's Approval			

Staff Notes:

20130114-2

The Information Systems Department requires an experienced Network Administrator with the skill and competency at managing a network infrastructure to facilitate execution of the [STP] Strategic Technology Plan and implementation of emerging technologies.

The new hire will assist the IS department capitalize on opportunities. Opportunities typically include emerging trends, technologies, and practices that possess the potential of enhancing effectiveness, efficiency, and productivity within the County's business operations.

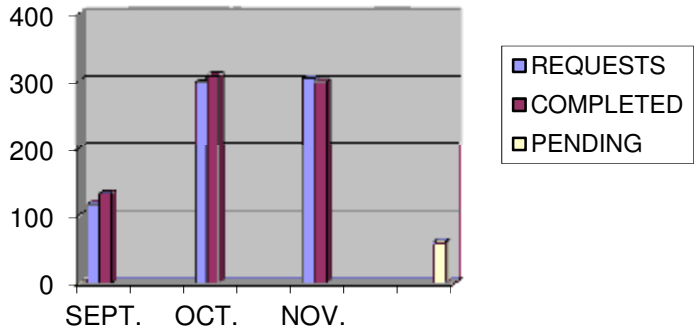
Listed below are some of the more significant examples:

- [STP]Deployment of the technology refresh cycle for IT assets
- [STP]Transition to Microsoft hosted Exchange 2013 with Office 365 from end of life on premise Microsoft Exchange 2003 server
- [STP]Upgrading remaining (40%) computer systems to currently supported Microsoft Windows operating systems from end of life (April 2014)Microsoft Windows XP operating system
- [STP] Continue implementation of desktop virtualization
- [STP]Better use of e-government tools for public access including applications and issue tracking
- [STP]Resolve pending Energov application issues
- [STP]Developing a mobility strategy, implementing end-to-end cloud and hand held computing technology
- Installation of video surveillance systems at parks and recreation centers
- [STP]Increasing IS service through IS department restructuring – placing network field technicians at strategic locations (Justice Center, Sheriff, Jail etc..) to align delivery of service with departmental needs

At present, the IS network management staff is busy remediating complications with the existing infrastructure:

- Migrating to new Cisco 5525 firewall from end of life Cisco 5520 to improve connectivity and security
- Deploying gateway anti-virus software, blocking threats before reaching network
- Coordinating use of defense in depth security countermeasures by using multi-layered security controls
- Provisioning Trend-Micro content filtering to control internet access
- Redesigning network architecture to eliminate unnecessary proxy servers and multiple single points of failure
- Raising Windows Server Domain and Forest level to Native Server 2008 R2 from Mixed Mode Server 2003
- Redesigning Library wireless LAN/WAN infrastructure simplifying public user experience
- Developing method for patch and upgrade deployment consistent with best practices
- Deploying DHCP consistent with best practices to replace random use of static IP addressing
- Provisioning of new Comcast circuits at remote locations to expedite completion of UTG phone project

Redesigning the network infrastructure increases the workload above the routine. The IS staff spends 40% of their time reacting to service requests, 50% of their time revitalizing the network, leaving only 10% to focus on implementation of new technology. The chart below validates the significant increase in the work order activity.



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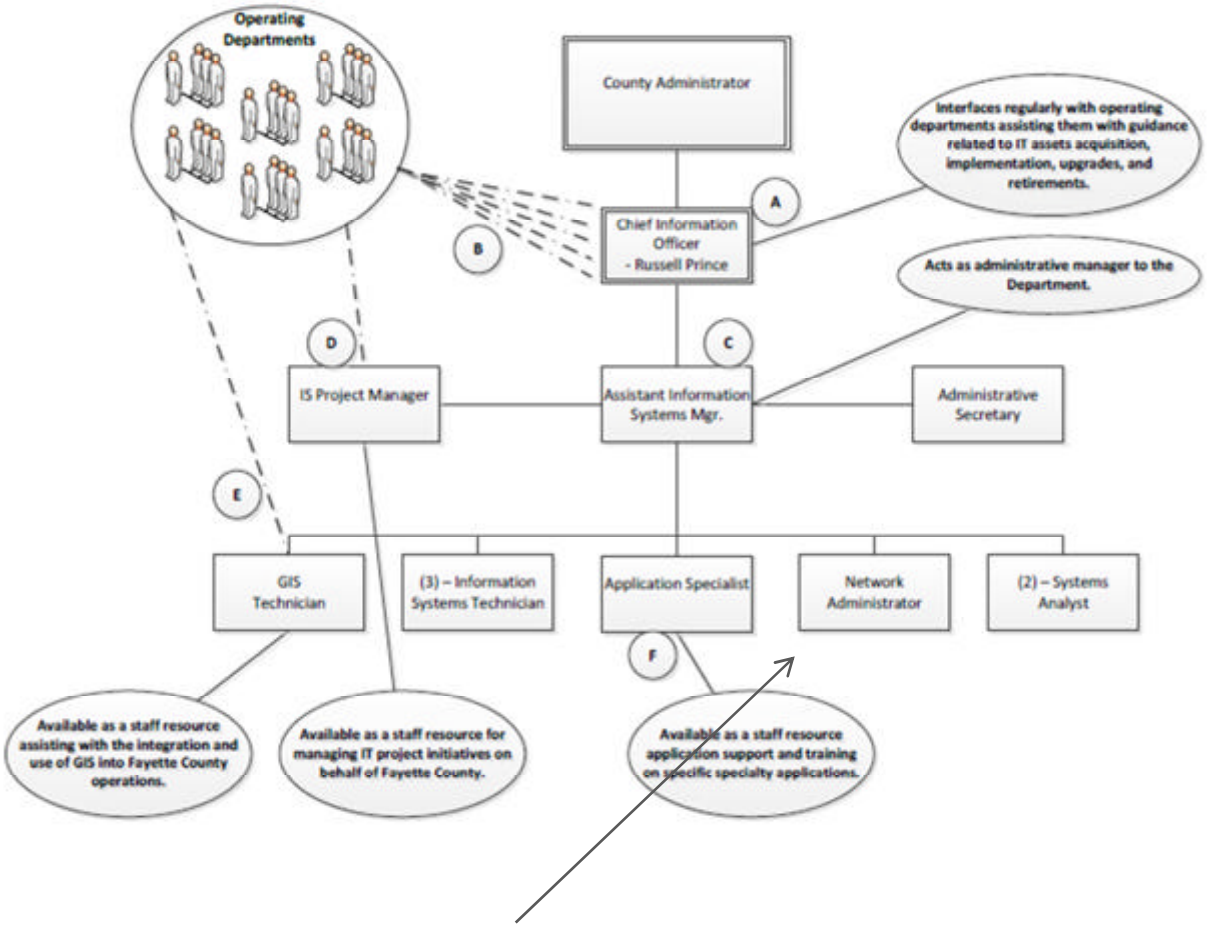
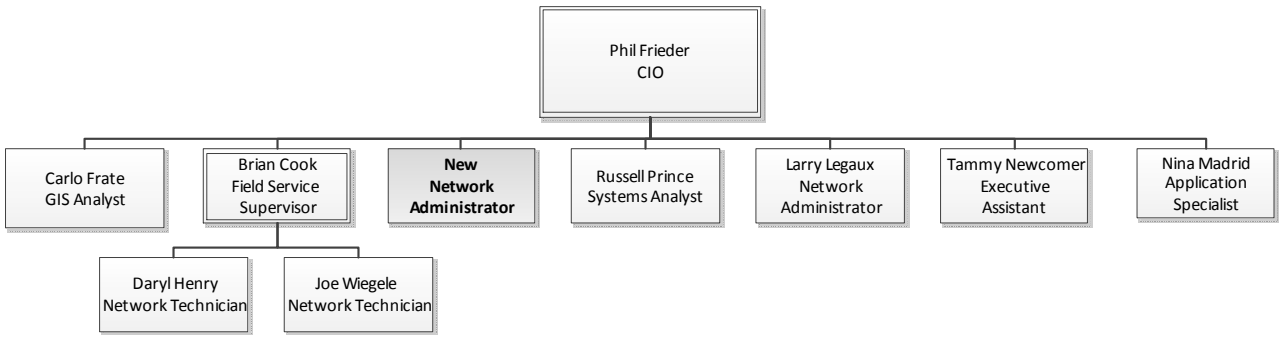
The Strategic Technology Plan suggests altering the County IS Department organization structure as follows (13 personnel).



Hiring a network administrator as stipulated above is a beginning point to achieve the suggested structure.

New County IS department organizational structure after new hire (10 personnel):

Information Systems Organizational Chart



The requirement is for a full-time permanent staff member, since the work involves access to sensitive information, close coordination with all department staff, and managing technology.

General duties and responsibilities of new Network Administrator:

- To support the vision, IT governance, mission and guiding principles of the County
- Responsible for making sure the network infrastructure related to the County's data network is effectively maintained by providing technical expertise in the configuration, performance, tuning, and maintenance of the infrastructure.
- Attend and participate in training opportunities and seminars relevant to this position
- Responsible for assisting with other related tasks and application support as needed
- Excellent oral and written communication skills and ability to work well in a team-oriented environment

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A minimum of 3 years of verifiable work experience:

- In the installation, configuration, operation, and maintenance of a Network infrastructure comprised of core, distribution, and access layer devices, such as routers, switches, firewalls, and network security devices
- Keen attention to detail and proven analytical problem solving ability
- Supporting multiple servers at multiple sites and a wide range of applications
- Administering a wide variety of server, workstation and database software
- Resolving problems with network, computer workstations, and user technical situations
- Collaborating with third party vendors for assistance

Overall, hiring a Network Administrator as suggested in the STP will assist the IS department in achieving its goals and objectives; thereby, supporting the County and its stakeholders in achieving their goals and objectives.