

CUMBERLAND COUNTY FINANCE COMMITTEE  
COURTHOUSE, 117 DICK STREET, 5TH FLOOR, ROOM 564  
MAY 4, 2017 – 9:30 AM  
REGULAR MEETING MINUTES

MEMBERS PRESENT: Commissioner Marshall Faircloth, Chairman  
Commissioner Jeannette Council  
Commissioner Jimmy Keefe

OTHER COMMISSIONERS

PRESENT: Commissioner Larry Lancaster

OTHERS:

Amy Cannon, County Manager  
Melissa Cardinali, Assistant County Manager  
Sally Shutt, Assistant County Manager  
Rick Moorefield, County Attorney  
Vicki Evans, Finance Director  
Keith Todd, Information Services Director  
Sabrina Patterson, IS Enterprise Solutions Analyst  
Kim Honan, IS Enterprise Solutions Analyst  
Geneve Mankel, Communications and Outreach Coordinator  
Brenda Jackson, Social Services Director  
Dr. John Lauby, Animal Control Director  
Candice H. White, Clerk to the Board  
Press

Commissioner Faircloth called the meeting to order.

1. APPROVAL OF MINUTES – APRIL 6, 2017 FINANCE COMMITTEE REGULAR MEETING

MOTION: Commissioner Keefe moved to approve the April 6, 2017 regular meeting minutes.

SECOND: Commissioner Council

VOTE: UNANIMOUS (3-0)

2. PRESENTATION ON BUSINESS INTELLIGENCE PROCESS REVIEW FOR ANIMAL CONTROL

BACKGROUND:

As a part of the Board of Commissioners approved Business Intelligence initiative, the Enterprise Solutions Division within Information Services recently conducted a comprehensive business process review of Animal Control. Through the business process review, several opportunities for business process improvements were discovered.

A presentation will be provided to review the recommendations set forth to improve these business processes.

**RECOMMENDATION/PROPOSED ACTION:**

Report will be for informational purposes only. No further action required.

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Sabrina Patterson, IS Enterprise Solutions Analyst, stated her presentation on the business process review of Animal Control will cover the following categories:

- Fact Findings
- Discovered Problem Areas
- Recommendations and Value Added Summary
- Recommendations Cost
- Rollout Phases

Ms. Patterson presented highlights of the report as follows:

**Fact Findings**

- FY2014 to January 18, 2017 - 43,152 animals resided at the shelter
- FY2014 to January 18, 2017 - 21,085 euthanized with 10,643 being adoptable
- FY2015 to February 2017 - \$494,031 revenue
  - \$47,392 for injured animals
  - \$446,639 for spay/neuter fees
- FY2015 to February 2017 - \$384,324 expenses
  - \$17,971 for injured animals
  - \$366,353 for spay/neuter fees
- 20 Veterinarians participate in the county rabies vaccination voucher program
- FY2014 to January 18, 2017 - 43,152 animals resided at the shelter
- FY2014 to January 18, 2017 - 21,085 euthanized with 10,643 being adoptable
- FY2015 to February 2017 - \$494,031 revenue
  - \$47,392 for injured animals
  - \$446,639 for spay/neuter fees
- FY2015 to February 2017 - \$384,324 expenses
  - \$17,971 for injured animals
  - \$366,353 for spay/neuter fees
- 20 Veterinarians participate in the county rabies vaccination voucher program

**Discovered Problem Areas**

- Administrative/Office Support
  - Uncompleted work assignments
  - Unable to contact staff
  - Inability to communicate electronically
- Shelter Attendants
  - Safety concerns with equipment
  - Mental fatigue due to euthanizations

- Volunteer Coordinator
  - Unable to keep accurate time records
  - Multiple email distribution groups on multiple computers
- Call Taker
  - Phone system underutilized
  - Missing important information
  - Adoption operational hours
  - Dealing with irate customers due to impounding fees
- Enforcement/Cruelty Officers; more mobilization while in field
  - Irate animal owners
  - Address history of issues
  - Lack of training for equipment
  - Cruelty cases privacy concerns
  - Large video file transfers
- Pet License Notices
  - High cost to print notices
    - For CY16, approximately 24,088 notices were prepared and mailed out at a cost of \$13,303
- Revenue
  - Conflicting data between Chameleon and the Tax Department import
  - Pet license renewals are declining
    - From FY13 to FY16, there was a revenue loss of \$155,924

Recommendations and Value Added

Process Improvement	Value Added
<ul style="list-style-type: none"> <li>• Incorporate the County’s Print Shop for pet license notices</li> </ul>	<ul style="list-style-type: none"> <li>• Cost savings \$6,265 (black/ white) - \$6,073 (color)</li> </ul>
<ul style="list-style-type: none"> <li>• Incorporate Chameleon PostMaster</li> </ul>	<ul style="list-style-type: none"> <li>• Email cost savings \$3,477 (black/ white) - \$3,572 (color)</li> <li>• Enhances electronic communication</li> <li>• Central distribution email location</li> </ul>
<ul style="list-style-type: none"> <li>• Publicize and educate citizens on pet license fees</li> </ul>	<ul style="list-style-type: none"> <li>• Citizens become aware of County’s Ordinance</li> </ul>
<ul style="list-style-type: none"> <li>• Revamp the Phone System menu</li> </ul>	<ul style="list-style-type: none"> <li>• Improves customer service</li> <li>• Supervisor visibility</li> <li>• Keeps customers informed about upcoming events</li> </ul>
<ul style="list-style-type: none"> <li>• Add additional phones in the Adoption area and the Cruelty Officer’s office</li> </ul>	<ul style="list-style-type: none"> <li>• Increases communication</li> <li>• Enables cross trained staff to assist with citizens</li> </ul>
<ul style="list-style-type: none"> <li>• Utilize available resources for employees (EAP)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces stress levels and mental fatigue</li> </ul>

Process Improvement	Value Added
<ul style="list-style-type: none"> <li>Implement a computer kiosk for volunteers</li> <li>Purchase a multiple USB data transfer cable</li> <li>Add printing codes to the Adoption Ricoh printer</li> <li>Implement Laserfiche</li> <li>Incorporate safety training for officers</li> <li>Purchase/upgrade technology equipment and software</li> </ul>	<ul style="list-style-type: none"> <li>Provides better tracking</li> <li>Central location to transfer large video files</li> <li>Protects privacy</li> <li>Reduces paper storage</li> <li>Increase searching capabilities</li> <li>Enhances officers' safety</li> <li>Address and alert history</li> <li>Standardization for mobile devices</li> <li>Less equipment breakage and connection failures</li> </ul>

Process Improvement	Value Added
<ul style="list-style-type: none"> <li>Implement WebChameleon on mobile devices (iPads or iPhones)</li> <li>Consider placing Animal Control Officers underneath the Law Enforcement Center (LEC)</li> </ul>	<ul style="list-style-type: none"> <li>Anytime, anywhere access</li> <li>Off-site adoptions and medical tasks</li> <li>Eliminates annual software cost of \$3,907</li> <li>Eliminates digital cameras (\$250) and AVLs (\$896)</li> <li>Reduces processing time and downtime for officers</li> <li>Ability to charge citizens on scene</li> <li>Access to vital information systems</li> <li>Better training (BLET) and equipment</li> <li>Access to LEC officers for additional protection</li> <li>Communication with County Dispatch</li> </ul>

Ms. Patterson highlighted the following recommendations and associated costs:

Current Equipment	Quantity	Individual Cost	One-Time Cost	Annual Cost
One-Time Cost: Laptop (\$1,300), AVLs (\$896), Digital Camera (\$250)	21	\$ 2,446	\$ 51,366	
Monthly Cost: Verizon Wireless Service Charge (\$1106 for 30)		\$ 42		\$ 13,272
Annual Cost: NetMotion (\$1,027)				\$ 1,027
Annual Cost: Chameleon License for Field Officers (\$240)	12	\$ 240		\$ 2,880
		<b>\$ 2,728</b>	<b>\$ 51,366</b>	<b>\$ 17,179</b>

Recommendation	Quantity	Individual Cost	One-Time Cost	Annual Cost
One-Time Cost: iPad Pro 9.7 (\$630), Protective Case (\$53)	21	\$ 683	\$ 14,343	
One-Time Cost: Truck Mount (\$75)	21	\$ 75	\$ 1,575	
One-Time Cost: iPhone 6s (\$99), Protective Case (\$35)	1	\$ 134	\$ 134	
Monthly Cost: Verizon Wireless Service Charge (\$40)	22	\$ 40		\$ 10,560
Annual Cost: AirWatch (\$51)	22	\$ 51		\$ 1,122
Annual Cost: WebChameleon for Field Officers (\$960)	10	\$ 960		\$ 9,600
Windows Server 2016 License	8	\$ 73	\$ 584	
WebChameleon Server License	1		\$ 2,880	\$ 2,880
		<b>\$ 2,016</b>	<b>\$ 19,516</b>	<b>\$ 24,162</b>

<b>Phone Equipment Recommendation</b>	<b>Quantity</b>	<b>Individual Cost</b>	<b>One-Time Cost</b>	<b>Annual Cost</b>
Cisco Phone for Cruelty Officer	1		\$ 549	
Cisco Phone for Adoption Area	1		\$ 494	
			<b>\$ 1,043</b>	
<b>Laserfiche Recommendation</b>	<b>Quantity</b>	<b>Individual Cost</b>	<b>One-Time Cost</b>	<b>Annual Cost</b>
Solution License Software	3	\$ 528.00	\$ 1,584	
Annual Support & Warranties	3	\$ 105.60		\$ 316.80
		<b>\$ 633.60</b>	<b>\$ 1,584</b>	<b>\$ 316.80</b>

<b>Data Transfer Recommendation</b>	<b>Quantity</b>	<b>Individual Cost</b>	<b>One-Time Cost</b>	<b>Annual Cost</b>
Multiple USB data transfer cable	1		\$ 10	
		<b>\$ -</b>	<b>\$ 10</b>	

<b>Safety Equipment Recommendation</b>	<b>Quantity</b>	<b>Individual Cost</b>	<b>One-Time Cost</b>	<b>Annual Cost</b>
Dual Release Catch Poles	Varies	\$92 - \$100		
Cat Tongs	Varies	\$56 - \$62		
Conveyor Belt for Shelter Attendants	1		\$ 637	
		<b>\$ -</b>	<b>\$ 637</b>	

Commissioner Keefe asked how the law enforcement recommendation dovetailed with the budget recommendation to eliminate the Animal Control 7 p.m. to 7 a.m. shift. Amy Cannon, County Manager, stated when looking at ways to reduce costs and looking at the volume of calls that come in overnight, whether to continue to have an Animal Control officer for the evening shift seemed like an area to explore. Ms. Cannon stated other counties do not have evening coverage and even though it is a benefit, there is a cost to it. Ms. Cannon stated as part of the budget process, staff have been looking at the cost benefit.

Commissioner Lancaster inquired regarding civil versus criminal enforcement and stated he thought unpaid citations should be pursued. Rick Moorefield, County Attorney, stated he advised the use criminal enforcement in all ordinances because in the past it has been more effective. Mr. Moorefield stated he thought Animal Control was handling matters in Environmental Court. Dr. John Lauby, Animal Control Director, stated animal cruelty cases are primarily handled in Environmental Court. Mr. Moorefield stated his office can file civil actions but in most cases, to pursue in civil court will cost more than can be recouped. Dr. Lauby stated it also takes two to three months to get an irresponsible dog owner through the process and get the Sheriff’s Office to serve a warrant. Mr. Moorefield advised there is a bill pending in the legislature to remove the criminal enforcement aspect from all local ordinances and if that happens, the County’s ordinances will have to be revamped. Commissioner Council asked that Management and Animal Control come back with recommendations.

Commissioner Faircloth asked whether discriminating against or banning breeds was legal. Mr. Moorefield stated a ban against breeds is legal but there are other measures that are more successful, such as requiring insurance in order to get a license. Dr. Lauby stated the Breed Specific Limitation (BSL) organization has attorneys and lots of funding to sue counties who try to limit specific breeds. Commissioner Keefe stated privilege licensing for pets needs to be looked at again and put in an ordinance for irresponsible pet owners. Commissioner Keefe stated the only way to combat that is with funding for officers and education. Commissioner Keefe stated he would like for Business Intelligence to look at a better way to collect and come back

with recommendations. Ms. Cannon stated the PIO developed a campaign and recommendations will be brought back to educate and increase the number of pet registrations.

### 3. PRESENTATION OF THE INFORMATION SERVICES COST SAVINGS REPORT

#### BACKGROUND:

Cumberland County Information Services has provided a Cost Savings Report as recorded below as an update on cost saving measures enacted and/or considered by the Information Services Department. Besides meeting the expectations of County Management, this report also serves to showcase three important principles:

1. Effective management of department resources by following a disciplined approach to budgeting;
2. Prioritizing activities and allocating resources accordingly, to ensure the best possible outcomes, and
3. Documenting previous efforts to reduce expenditures and streamline processes.

#### RECOMMENDATION/PROPOSED ACTION:

Report will be for informational purposes only. No further action required.

### **Information Services Cost Savings Report – April 2017**

#### **Background**

Cumberland County Information Services has been requested to provide a compilation of agency efforts and initiatives to generate efficiencies and cost savings for the County. This report is being provided to County Management as an update of cost saving measures considered and/or enacted by the Information Services Department.

Besides meeting the expectations of County Management, this report will also serve to showcase three important principles:

1. Effective management of department resources by following a disciplined approach to budgeting;
2. Prioritizing activities and allocating resources accordingly, to ensure the best possible outcomes; and
3. Documenting previous efforts to reduce expenditures and streamline processes.

#### **FY 2015 - 2017**

##### **Enterprise Solutions**

In fiscal year 2015, the County Information Services Department embarked on a mission to increase efficiencies and enhance services to the County while maintaining minimal overhead and ensuring fiscal responsibility. This endeavor began by reorganizing the department to create a new division within the existing budget to focus on enterprise-wide solutions, business intelligence, and IT policy. The purpose of the new Enterprise Solutions Division is to:

- Identify opportunities for improvement throughout the County

- Research and recommend business process improvements to maximize operational efficiencies and eliminate wastes of time and resources
- Explore and propose technology providing enterprise-wide solutions that can be shared by multiple departments for the greatest benefit
- Maintain the County Enterprise Resource Planning (ERP) systems
- Review, revise and maintain County IT policies to streamline and standardize processes and procedures

In addition to the new division, FY 2015 began a continuous improvement methodology that was adopted by all areas of the Information Services Department.

### **Infrastructure Division**

The Infrastructure Division provides support for and maintains County computers, telephones, server systems, network security, and disaster recovery. They also maintain Wi-Fi networks and manage County internet access. In FY 2015, a technology refresh cycle was developed which involves replacing outdated servers, network switches, and other related hardware to improve reliability, enable new and anticipated capabilities, and save money in the long term. There were many other projects implemented to strengthen and support County infrastructure. Several of these included core network, server environment and Exchange email upgrades, a new data backup system, a new enterprise document management system, a new help desk system, an upgrade of the applications used by the County Fire Departments, and free Wi-Fi throughout the Courthouse.

### **Applications Division**

The Applications Division is responsible for sustaining the legacy mainframe system while developing and maintaining internal web applications. In FY 2015, efforts began to develop an application modernization strategy in concert with County departments. This strategy involves retiring legacy applications that are no longer cost-justified or risk-acceptable. One of the many projects implemented in FY 2015 to support long-term efficiencies and cost savings for the County included an upgrade of the mainframe processor, tape drives and storage to ensure continuity of the legacy system while newer options are in consideration or development. Others included the purchase of new Jury software, a rebuild of all Intranet applications, a website feedback system, database server upgrades and consolidation, expansion of GIS applications and services, and development of new work order systems for Central Maintenance and Solid Waste to remove them from the legacy mainframe system.



Through fiscal years 2016 and 2017, the County Information Services Department has maintained the continuous improvement strategies by routinely assessing needs of County departments. Assessments are conducted by all 3 divisions of Information Services. The Infrastructure team completes assessments resulting from hardware, software and/or network requests submitted through the help desk. The Applications team assesses department needs for internal application development. The Enterprise Solutions team proactively conducts assessments through comprehensive business process reviews. Many of the projects completed by Information Services through fiscal years 2016 and 2017 are listed below. In FY 2017, efforts

also began to develop project prioritization and governance standards to ensure initiatives are selected based on priority, impact, and alignment to the County strategic goals and objectives.

- Business process reviews on multiple departments – Planning, Environmental Health, Veterans Services, Legal, Mail Room, Print Shop, DSS – Food and Nutrition Services, Commissioners Agenda, etc.
- VoIP upgrade for the Sheriff’s Office and other County departments
- Emergency Services Initiatives - EOCC upgrade, Dispatch computers and infrastructure upgrade, and Disaster Recovery site
- County Fire MCT expansion/review
- Security monitoring/mitigation update
- Enterprise Web content management system
- Phase 2 of CMF Work Order System & Inventory and Solid Waste Work Order System & Inventory
- Website Redesign and Development
- Phase 2 of the Child Support Laserfiche project
- Conference Bridge to host conference calls
- Internet upgrade
- Implementation of an Enterprise Resource Planning (ERP) system including County core functions – Finance, Payroll, Human Resources, Benefits and Risk Management, and Utility Billing

Though this list is extensive, it is not a full account of all projects and initiatives completed by the Information Services Division during fiscal years 2015 – 2017. With each initiative, primary goals and objectives include maximizing efficiencies, eliminating waste of resources, increasing productivity, and providing cost savings for long term financial sustainability. The information below provides the cost savings and efficiency gains for many of these efforts.

**Summary of Efficiencies Implemented**

Maintenance and Operations Efficiencies	Annual Savings
• Telecommunication service provider reduced \$11,600 per month due to the elimination of the PBX which allowed for better insight into the service provider charges. This reduction was accomplished by reviewing charges, terminating unused circuits, eliminating outdated surcharges (mileage, call forwarding, etc.), moving alarm lines to newer technologies, and renegotiating the service contract.	\$139,200
• Computer Room supplies (green bar and ribbons) reduced due to implementing electronic reports instead of printed reports.	\$5,428
• Mainframe backup tapes (3590 and 3592)	\$2,443
• Tyler Munis Upgrade (Annual Cost Reduction due to elimination of CGI)	\$112,085
• Cancelled OSDBA support for Munis – existing IS staff provides same level of support	\$30,000
• Time Warner Cable fiber lines renegotiated. As of January, 2017, we have saved \$1,610 per month by having renegotiated the service contract to a more updated	\$18,800

service type and, in some cases, have negotiated for better services at the same price level.	
<ul style="list-style-type: none"> <li>Virtualization of Servers. Annual cost savings by not replacing physical servers. 95% of our servers have been virtualized reducing the time needed to maintain equipment and allowing us to be much more agile when making choices about hosting, upgrades, re-platforming, etc. Virtualization decreased the number of physical servers by over half.</li> </ul>	\$20,100
<ul style="list-style-type: none"> <li>Centralized computer hardware budget and procurement (75 PCs @ \$100/PC)</li> </ul>	\$7,500
<ul style="list-style-type: none"> <li>New CMF Work Order System (estimated minimum)</li> </ul>	\$2,035
<ul style="list-style-type: none"> <li>New Print Shop Work Order System</li> </ul>	\$1,600
<ul style="list-style-type: none"> <li>New PIO Work Order System and Health Department Work Order System. Many departments conduct similar activities or purchase the same items independently, and have expressed a need for a work order system. By IS upgrading to a new work order system, many departments have been able to leverage this system at no additional costs.</li> </ul>	Savings Vary
<b>TOTAL:</b>	<b>\$339,191</b>

Business Intelligence initiatives result in recommendations that will improve operational efficiencies to ultimately reduce cost to the County. Time savings provides labor hours that will be used for additional work at no additional cost to the County.

Business Intelligence Initiatives Efficiencies	Projected Annual Savings
<ul style="list-style-type: none"> <li>Mail Room – no cost savings with new solution, multiple steps eliminated resulting in time savings, observations due in April 2017 for quarterly evaluation                             <ul style="list-style-type: none"> <li>Discovered unused permits and eliminated cost of \$2500 per year</li> <li>83% reduction in paper usage for reports</li> <li>Reduced steps to create reports</li> <li>Reduced effort/steps of tracking transactions</li> <li>Improved reporting capabilities</li> </ul> </li> </ul>	\$2,500
<ul style="list-style-type: none"> <li>Print Shop – selection and implementation of new printing equipment, business process improvements                             <ul style="list-style-type: none"> <li>Provided print job help desk access to all 5 employees</li> <li>New equipment can eliminate position or replace position with one of lower grade and salary (salary and equipment considerations included in savings range provided)</li> </ul> </li> </ul>	\$35,786 to \$63,000
<ul style="list-style-type: none"> <li>Animal Control – recommended several business process improvements and software and equipment upgrades, etc.                             <ul style="list-style-type: none"> <li>Utilize County Print Shop for pet license notices for savings of \$8,988 - \$10,140</li> <li>Use Chameleon Postmaster to email pet license notices for savings of \$874 - \$1,457</li> <li>Implement WebChameleon on mobile devices                                     <ul style="list-style-type: none"> <li>Eliminates need for NetMotion for savings of \$1,027</li> <li>Eliminates annual cost for field service units for savings of \$2,880</li> <li>Eliminates need to purchase cameras @ \$250 each and AVLs @ \$896</li> </ul> </li> </ul> </li> </ul>	\$14,915 to \$21,234

<p>each*</p> <p><i>* Multiple of each are purchased continually through the year (used 5 as average)</i></p> <p>○ Other Recommendations:</p> <ul style="list-style-type: none"> <li>▪ Purchase reliable safety equipment – may reduce worker’s comp claims</li> <li>▪ Change adoption hours to reduce overtime, comp and exempt time</li> <li>▪ Implement Laserfiche for document management and redeem office space</li> </ul>	
<ul style="list-style-type: none"> <li>● Jury – cost evened out with new solution <ul style="list-style-type: none"> <li>○ 81% reduction in processing time</li> <li>○ 309 IS annual labor hours reclaimed</li> </ul> <p><i>*Value of labor hours at no additional cost to the County = \$7,259.21</i></p> </li> </ul>	<p>Elimination of labor hour for IS and reduction of labor hour for Jury Coordinator</p>
<ul style="list-style-type: none"> <li>● Veterans Services – implemented Bell Data for intake, business process improvements, currently implementing Laserfiche for document management <ul style="list-style-type: none"> <li>○ 5007 annual labor hours reclaimed</li> <li>○ Value of labor hours reclaimed at no additional cost to the County = \$86,828.56*</li> </ul> <p><i>* This is equivalent to 2 requested FT positions which the Director stated is no longer needed</i></p> <ul style="list-style-type: none"> <li>○ Eliminated the 15% error rate</li> <li>○ Eliminated the 5 to 7-day process to create reports</li> <li>○ Implementing Laserfiche will redeem 297 square feet of office space</li> </ul> </li> </ul>	<p>No additional staff required</p>
<ul style="list-style-type: none"> <li>● DSS Food and Nutrition Services – still in progress, Express Zone team currently being implemented, observations due in April to evaluate improvements <ul style="list-style-type: none"> <li>○ Implementing Laserfiche can eliminate up to 1,007 file cabinets, which equals 7,455 square foot of office space <ul style="list-style-type: none"> <li>▪ Can also reduce Patterson Storage cost, which averages \$14,426/year</li> </ul> </li> <li>○ Phone Interview Team can provide time savings of 15-30 minutes per application, which equals 109 to 219 labor hours</li> </ul> </li> </ul>	<p>To be determined</p>
<p><b>TOTAL (Minimum):</b></p>	<p><b>\$53,201</b></p>

Information Technology capabilities are essential for efficient, productive staff, and to support the County’s strategic goals and objectives requiring a focus in technology, business process improvements, and enhanced services for Cumberland County citizens. A balance must be sustained between maintaining legacy systems and current technology, judiciously implementing new technology, and managing the short and long term cost savings.

The strategic direction for the Information Services Department is to proactively seek opportunities to maximize efficiencies and productivity while remaining fiscally responsible. This involves utilizing an IT cost optimization discipline that will accommodate new opportunities and threats that emerge as business requirements evolve, new technologies mature, IT assets reach the end of their useful life cycles and new service and delivery options develop.

To strengthen and support the financial sustainability of the County, the innovations, initiatives and projects below will be considered or implemented within fiscal years 2018 – 2020.

**FY 2018 - 2020**

**Summary of Future Improvement Considerations**

Improvement Consideration	Benefits	Projected Annual Savings
Replace older Cisco switches with Meraki switches	<ul style="list-style-type: none"> <li>• Lower cost per switch</li> <li>• All-inclusive pricing includes enterprise support</li> </ul>	To be determined
Consolidate GIS systems	<ul style="list-style-type: none"> <li>• Eliminates file conversions and work-around requirements between systems</li> <li>• Allows full utilization of existing County GIS system</li> <li>• Reduces duplicated work, cost and overlapping staff tasks</li> </ul>	\$11,032 and up
Consolidate data centers	<ul style="list-style-type: none"> <li>• Eliminate redundant equipment and support</li> <li>• Reduced cost of disaster recovery solutions – each IS department spends about \$50,000/5yrs, eliminating 3 data center sites can save up to \$150,000 over 5-yr period</li> </ul>	\$30,000 and up (3 sites)
VoIP infrastructure as a service	<ul style="list-style-type: none"> <li>• Increased control and automation over VoIP services provisioning</li> <li>• Better operations management</li> </ul>	To be determined
Session Initiated Protocol (SIP)	<ul style="list-style-type: none"> <li>• More reliable than traditional voice trunks.</li> <li>• Inherit redundancy within the technology</li> </ul>	To be determined
Cloud-based systems	<ul style="list-style-type: none"> <li>• Cloud based systems will continue to be considered part of the initial review of a project request to determine the most cost effective approach to the project</li> </ul>	To be determined
Continue to assess document management needs	<ul style="list-style-type: none"> <li>• Reduce usage and cost of paper and storage</li> <li>• Increase automation or workflows and processes</li> <li>• Share information across departments</li> </ul>	To be determined
Adoption of industry standards such as COBIT, ITIL, and ISO/IEC best practices	<ul style="list-style-type: none"> <li>• Reduces total cost of ownership (TCO) for IT projects</li> <li>• Facilitates proactive approach to manage projects, define IT solutions/services and review aging assets</li> <li>• Effective governance of IT activities and management framework of policies, internal controls, defined practices</li> </ul>	To be determined
Assess opportunities for business restructuring and innovation	<ul style="list-style-type: none"> <li>• Maximize efficiencies and productivity</li> <li>• Strengthens support for business process improvements and re-engineering</li> <li>• Provides opportunities to reorganize for departmental optimization</li> <li>• Discover operational efficiencies</li> <li>• Eliminate wastes in resource usage</li> <li>• Streamline processes for greater productivity</li> </ul>	To be determined

	<ul style="list-style-type: none"> <li>• Strengthen BI analytics</li> <li>• Provide more extensive baselines</li> <li>• Allow insight into what has happened</li> <li>• Better projections of what is likely to happen</li> <li>• Enables future planning and decision-making</li> </ul>	
Elimination of IBM mainframe, software and backup services  <i>(see cost breakdown below)</i>	<ul style="list-style-type: none"> <li>• Ability to operate on a newer platform, more reliable</li> <li>• More aligned technology with internal and external support staff</li> <li>• Reduction of Operational responsibilities</li> <li>• Reduction in print services and special paper stock</li> <li>• Eliminates mainframe hardware maintenance and supplies</li> <li>• Elimination of burster for mainframe print jobs</li> </ul>	\$318,264.10
<b>TOTAL (Minimum):</b>		<b>\$348,264.10</b>

**The Big Picture of Retiring the Legacy Mainframe System**

In coordination with our strategic efforts to deploy an integrated ERP system, we are partnering with our client departments in an applications modernization endeavor to migrate their applications from the IBM mainframe to a more modern computing and user-accessible environment. This will provide a roadmap to allow us to retire the mainframe system and its dependent systems, which will eliminate the associated costs below. The removal of last application on the mainframe is projected to begin in 2018.

Vendor	Product (or description)	Annual Costs
<b>HARDWARE</b>		
IBM	Hardware (zBC12) - Initial Purchase and Installation \$249,752.05	\$49,950.41
IBM	Hardware Maintenance	\$10,480.00
PSR	Storage (DS8870) - Initial Purchase and Installation \$83,066.00	\$16,613.20
PSR	3592 Tape Cartridges (QTY: 25 + 2)	\$1,651.00
PSR	Printronix Printer (P7210) - Initial Purchase \$12,345.00	\$2,469.00
PSR	Printronix Printer (P7210) - Maintenance [2/21/2016 - 2/20/2019]	\$2,902.00
IntegraServ	Printronix Printer (P7220) - Initial Purchase \$8,788.00	\$1,757.60
IntegraServ	Printronix Printer (P7220) - Maintenance (initial)	\$1,261.00
IntegraServ	Printronix Printer (P7220) - Maintenance [7/1/2016 - 6/30/2017]	\$1,278.26
Computer Plus	Tape drive maintenance - 3590	\$3,136.00
Computer Plus	Tape drive maintenance - 3592	\$829.00
Kodak Alaris	Burster maintenance	\$3,308.00
<b>SOFTWARE</b>		
IBM	Software Maintenance	\$46,830.00

PSR	z/VSE Central Functions	\$27,952.00
PSR	Support Services	\$25,000.00
T. Farlow & Associates	Disaster Recovery Services	\$32,448.00
Data 21	IP Bridge, IP Server	\$1,538.00
Sync Sort	Sort software	\$6,329.00
CSI	BIM editor and related software	\$11,343.00
CA Technologies	Software	\$3,955.00
Barnard Software	Opti-Audit & TCP/IP Tools	\$4,243.63
Thigpen	VSE2PDF	\$1,500.00
Tyler Technologies	OASIS (TAX) software maintenance	\$61,490.00
<b>TOTAL</b>		<b>\$ 318,264.10</b>

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Keith Todd, Information Services Director, referenced the Cost Savings Report recorded above and provided the following presentation to highlight measures taken to increase cost savings.

#### IT Cost Saving Principles

- Effective management of department resources by following a disciplined approach to budgeting.
- Prioritizing activities and allocating resources accordingly, to ensure the best possible outcomes.
- Documenting previous efforts to reduce expenditures and streamline processes.

#### FY2015-2017 / IS Implementation of New Strategies

- Maintained continuous improvement strategies by routinely assessing the needs of County departments.
- Implemented Enterprise Solutions Division to identify opportunities to increase efficiencies enterprise-wide versus individually or in silos.
- Established a technology refresh cycle and completed multiple projects to improve reliability, enhance infrastructure and provide long term cost savings.
- Began application modernization strategy to retire the mainframe system and migrate dependent systems to modern environment to improve sustainability.

#### Annual Cost Savings Implemented

##### FY 2015 – 2017 Maintenance and Operational Efficiencies

- Telecommunications services - \$139,200/year.
- Reduced computer room operations - \$7,871/year.
- Tyler Munis Upgrade - \$112,085/year.
- OSDBA support - \$30,000/year (Tyler Munis support).
- TWC fiber - \$18,800/year via renegotiated contract.
- Virtualized servers - \$20,100/year.
- Centralized computer procurement - \$7,500/year via bulk purchasing.
- In-house work order systems - \$3,635/year.

Total Savings for Maintenance and Operational Efficiencies = \$339,191 per year over past three years.

#### Business Intelligence Initiatives

FY 2015 – 2017

- Mail Room –83% reduction in paper usage for reports, eliminated unused permits \$2,500/year.
- Print Shop –new printing equipment \$35,786 plus/year.
- Animal Control – \$14,915 or more/year.
- Jury – processing reduction 81%, 309 labor hours reclaimed.
- Veterans Services –5,007 labor hours reclaimed (equivalent to 2 FT positions), eliminated report errors, and streamlined reports.
- Initiatives in Progress: DSS, Planning, Environmental Health, Gun Permits, Fire Inspections, Commissioner’s Agenda process, etc.

#### Annual Cost Savings

FY 2018 – 2020 Future Improvement Considerations

- GIS systems consolidation - \$11,032 or more/year.
- Data Center Consolidation - \$30,000 or more/year.
- IBM mainframe elimination - \$318,264/year.
- Other considerations with cost savings to be determined include:
  - VoIP infrastructure as a Service
  - Increase of cloud-based systems
  - Continued assessment of document management needs
  - Assessment of opportunities for business restructuring and innovation

Total Savings for Future Improvement Considerations = \$348,264

Mr. Todd concluded his presentation and responded to questions about enhancing the level of customer service at the same time money is saved; initiatives in central permitting, inspections and code enforcement; and digital records storage/document management according to retention schedules. Commissioner Faircloth inquired regarding backup and the use of cloud storage. Mr. Todd stated intranet storage is handled internally and there are service level agreements that support security with the cloud.

#### 4. OTHER ITEMS OF BUSINESS

Ms. Cannon recognized Brenda Jackson, Social Services Director, who provided an overview and update on Senate Bill 594-Family/Child Protection and Accountability Act. Ms. Jackson stated this bill is a large complex piece of legislation being presented by Senator Tamara Barringer as a child welfare bill and has about eight components. Ms. Jackson stated components two through eight contain good things about ways to improve child welfare services; however, there are concerns associated with part one which calls for regionalizing the 100 county departments of social services into 30 regions by 2022. Ms. Jackson stated the bill calls for the creation of a work group to develop an implementation plan for the 30 region structure which will change the governing structure, but the legislation does not address who will govern the 30 region structure. Ms. Jackson stated she is bringing this bill forward for informational

purposes as the legislation has been introduced in one committee in the Senate but not yet introduced in the House.

Ms. Jackson stated the DSS Directors' Association met with Senator Barringer and shared concerns about the loss of local administration of social services, transitioning to a regionalized model of service delivery in light of the issues the agency has witnessed following the mental health shift to privatization/regionalization, and unknowns in the proposed legislation related to how funding will be managed under a regionalized social services system. Ms. Jackson stated DSS receives 71 percent of its budget from federal/state funding and explained how there could be a significant fiscal impact to the County's cost allocation and indirect cost plans with a loss in revenue. Ms. Jackson stated counties currently have the flexibility to work with community partners to customize effective service delivery and safety and the legislation includes complex provisions that would change the local administration of social services.

Ms. Jackson stated Senator Barringer has expressed interest in engaging the DSS Director's Association in discussions about how to improve the legislation and address specific concerns about regionalization. Ms. Jackson stated the hope is that legislators will look at this proposed legislation as a study or pilot because of the complexities therein, and then go back to the General Assembly before making any permanent legislation to force or mandate regionalization.

Questions and comments followed. Ms. Cannon stated staff will keep the Board updated.

There being no further business, the meeting adjourned at 10:40 a.m.