

# CLARK COUNTY STAFF REPORT



**DEPARTMENT:** Infrastructure Services

**DATE:** October 22, 2014

**REQUEST:** Reorganization of Infrastructure Services to create new roles and working descriptions, create a new classification, and provide new services in a budget neutral manner.

**CHECK ONE:**                      X   Consent                           CAO

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## BACKGROUND

The principle functions of Infrastructure Services are to:

1. Provide desktop support and service desk support for hardware and software used by departments and individual users;
2. Maintain servers and administer the computing system;
3. Maintain the network that links servers, desktop computers, wireless systems, internet and buildings together; and
4. Initiate and implement new technologies requested by internal customers.

The strategic goal of the Infrastructure Services Department is to become an agile, responsive technical support organization. The department wants to provide the technical products and services that help the county excel in the services delivered to the public, and to make the experience more enjoyable for both employees and the public.

The proposed reorganization as explained in the attached Classification Review form:

1. Adds resources for enterprise architecture, security architecture and project management. The purpose of resources is to plan for and implement new technologies, and enhance existing services.
2. Adds an enterprise technical support coordinator to the Customer Service division to serve both Infrastructure Services and Application Services. The coordinator will maintain the hardware and software of both organizations.
3. Adds second level support and mobile computing coordinator to the Customer Service division to support customer needs.

The reorganization requests creation of one new classification and pay range, for the mobile coordinator. All other changes use existing county job classifications, with enhanced working job descriptions.

## COMMUNITY OUTREACH

No community outreach was conducted. The proposed reorganization was discussed with staff and with closely aligned departments such as Application Services and GIS. Appropriate conversations and notices were provided to the IT Guild.

*mgc  
OK  
yix*

# FISCAL IMPACT ATTACHMENT

## Part I: Narrative Explanation

I. A ~ Explanation of what the request does that has fiscal impact and the assumptions for developing revenue and costing information

This reorganization is budget neutral.

Funding for the reorganization does not rely upon one time changes or savings. It relies on currently vacant budgeted positions and competitive recruitments. We expect, over time, retirements and voluntary attrition will assist both the reorganization and staff opportunities for advancement and promotion.

Based on current information, we believe county resources will be available in the future to sustain the Infrastructure Services budget at the level of the re-organization, a level that is smaller than the existing budget. The reorganization, per se, does not increase TERR labor costs or the need for TERR funding across the county. Other technology driven criteria may influence the TERR rate but the reorganization will not impact the TERR rate.

The reorganization does not increase the labor cost burden on General Fund.

## Part II: Estimated Revenues

Fund #/Title	Current Biennium		Next Biennium		Second Biennium	
	GF	Total	GF	Total	GF	Total
<b>Total</b>						

II. A – Describe the type of revenue (grant, fees, etc.)

No impact on revenues

## Part III: Estimated Expenditures

III. A – Expenditures summed up

Fund #/Title	FTE's	Current Biennium		Next Biennium		Second Biennium	
		GF	Total	GF	Total	GF	Total
0001/305- General Fund Information Services	4 to 3	0	0	-250,401	-250,401	-250,401	-250,401
5092/390-Infrastructure Services TER&R Fund	5 to 6	0	0	0	-1,028	0	-1,028
<b>Total</b>		0	0	-250,401	-251,429	-250,401	-251,429

III. B – Expenditure by object category

Fund #/Title	Current Biennium		Next Biennium		Second Biennium	
	GF	Total	GF	Total	GF	Total
Salary/Benefits	0	0	-250,401	-251,429	-250,401	-251,429
Contractual						
Supplies						
Travel						
Other controllables						
Capital Outlays						
Inter-fund Transfers						
Debt Service						
<b>Total</b>	0	0	-250,401	-251,429	-250,401	-251,429

**BUDGET AND POLICY IMPLICATIONS**

See fiscal impact attachment, narrative section.

**FISCAL IMPACTS**

Yes (see attached form)

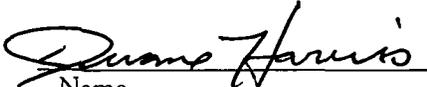
No

**ACTION REQUESTED**

1. Approval of reorganization as proposed by Infrastructure Services.
2. Waiver of need to comply with the vacancy review process for positions directly impacted by this reorganization proposal.

**DISTRIBUTION**

Duane Harris, Infrastructure Service  
Michelle Schuster, Finance Manager, IS  
Robert Stevens, Budget Manager  
Francine Reis, Human Resources

  
Name  
Title **DIRECTOR**

Approved:

  
CLARK COUNTY  
BOARD OF COMMISSIONERS  
OCT 28, 2014  
SR 236-14

**Management Request for Position or Organizational Review**  
**October 21, 2014**

<b>Department</b>	<b>Infrastructure Services Department</b>
<b>Division/Work Unit</b>	<b>Desktop Support and Systems and Network Administration</b>
<b>Principle Mandated Functions</b>	Provide desktop support and service desk support for hardware and software used by departments and individual users. Maintain the servers and administer the computing system. Maintain the network that links servers, desktop computers, wireless systems, internet and buildings together. Initiate and implement new technologies requested by internal customers.
<b>Date Initiated</b>	<b>October 21, 2014</b>
<b>Initiated by</b>	<b>Duane Harris</b>

**A. Reason for Request**

What event(s) prompted this request?

- Reorganization or consolidation
- Service delivery changes or enhancements
- Opportunity to increase efficiency
- New Position

One of the strategic goals of the Infrastructure Services Department is to become an agile, responsive technical support organization. The department wants to provide the technical products and services that help the county excel in the services delivered to the public, and to make the experience more enjoyable for both employees and the public. This pro-active IS team will:

1. Integrate on-site, cloud and hosted services;
2. Follow a disciplined approach for projects;
3. Offer a range of customer service options;
4. Support a secure, robust enterprise infrastructure;
5. Maintain relevant technologies and end user services; and
6. Anticipate and prepare for customer needs and provide solutions to problems.

Technology changes quickly. Organizational structures in county government do not. The department finds the current organization inhibits the ability to provide the agile services desired by both the customers and the staff and managers of the department. We have tried to work within the existing structure for several years, but find it increasingly difficult to perform under its limitations.

We propose an organizational change to allow Infrastructure Services, as an internal service department, to serve customers more effectively. With this reorganization, we will have the resources to look to the future and plan for new technologies. We will be able to manage projects more effectively. We will be able to use our desktop support specialists in new roles that challenge them and respond to our customers. We will be able to maintain our existing systems.

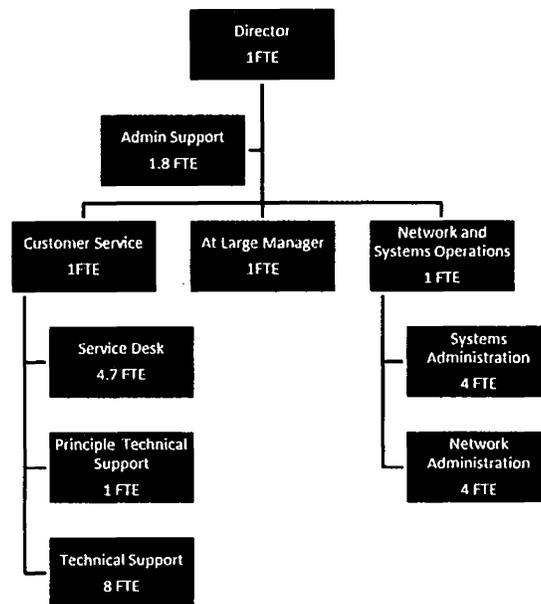
We will make changes in a way that, over time, is budget neutral. We hope to make the changes in a way that result in minimal employee turnover.

We also know reorganizations are difficult and must be followed by changes in daily operations, assignment and reassignment of duties, training and other change management. We are committed to these follow-up actions so the reorganization is as effective as possible.

## B. Overview

### Current Structure

The IS organization is composed of the groups shown below. The IS Director reports to the County Administrator. Infrastructure Services is part of the County's Technology Services Group (TSG), which also contains Application Services (AS), and Geographical Information Services (GIS).



FTE count is:

FTE Count	Area
3.	Service Desk
8	Desktop support
4	Network administration
4	System administration
1.8	Administrative support
2	Open, vacant positions
4	Management
.7	Project technical support
27.5	Total

**Limitations**

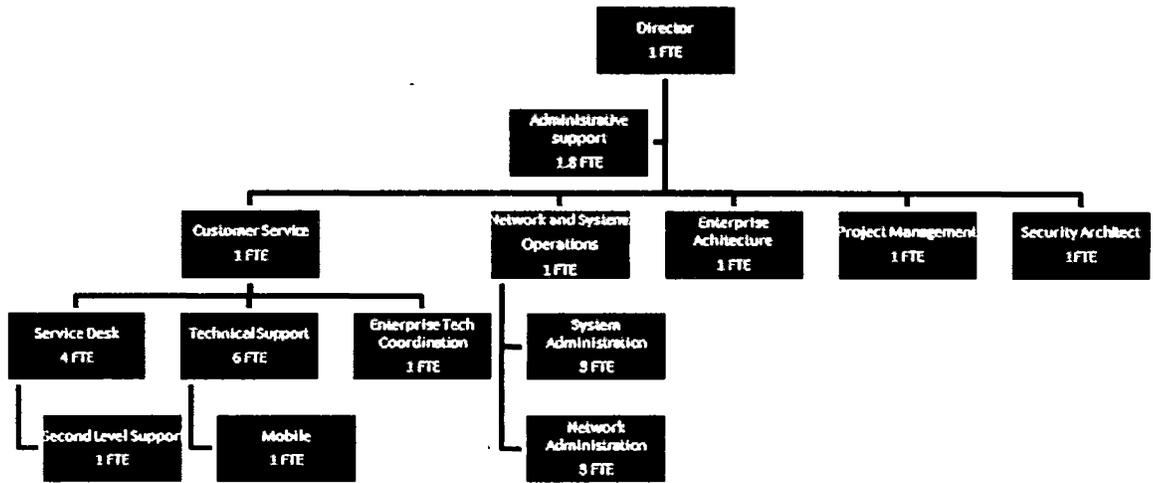
The current structure has the following limitations:

1. Designed to maintain existing systems, but is weak on the ability to initiate new products or processes. It lacks project management, security and system architecture elements, which are essential for evaluating and implementing new technologies.
2. Does not allow the department to manage its own technologies through a DISC, as is done other departments. This causes inefficiency as staff tries to simultaneously work for their customers and service/maintain their own systems.
3. Does not provide the opportunity for desktop technicians to become specialized in new technologies.

**Proposed new structure**

The proposed new structure directly addresses these limitations:

1. Adds resources for enterprise architecture, security architecture and project management. The purpose of resources is to plan for and implement new technologies, and enhance existing services.
2. Adds an enterprise technical support coordinator to the Customer Service division to serve both Infrastructure Services and Application Services. The coordinator will maintain the hardware and software of both organizations.
3. Adds second level support and mobile computing coordinator to the Customer Service division to support customer needs.



The proposed new FTE count is:

FTE Count	Area
4	Service Desk
1	Service Desk second level
6	Desktop support
1	Mobile coordination
3	Network administration
3	System administration
1	Enterprise technology coordination

1	Project management
1	Security architect
1	Enterprise architect
1.8	Administrative support
3	Managers
0	Open, vacant positions
26.8	Total

This alternative is considered the best approach based on experience with the organization and feedback from customers. Over the last seven years, the organization has struggled to meet demands for faster and more astute replacement of technology. Managers involve existing staff in the analysis and decision making, but find the daily work load is so demanding that staff cannot maintain the existing systems and simultaneously undertake the rigorous research and evaluation necessary implement new technologies. Asking staff to work in dual roles is frustrating and time consuming. Customers become annoyed and begin their own "work-around" when Infrastructure Services is perceived as non-responsive.

This reorganization proposes adding six new roles to the organization, which may or may not be filled by current employees.

### Transfer opportunity

The proposed new structure does not address transfer of telecommunications from General Services to Infrastructure Services. The transfer is not reflected in the FTE counts, budgets, or organization chart of this document. If county administrators believe a transfer is desirable, Infrastructure Services believes 1FTE telecommunication specialist and 1 FTE Office Assistant could be transferred. They would be assigned to the network and systems administration division. The telecommunications positions are currently funded through General Fund.

### Funding

Funding for the reorganization does not rely upon one time changes or savings. It relies on currently vacant budgeted positions and competitive recruitments. We expect, over time, retirements and voluntary attrition will assist both the reorganization and staff opportunities for advancement and promotion.

The current organization with 2015 salary and benefits is presented below with a comparison to the 2015 salary and benefits for current employees and the new positions. Please note that this table does not result in the same financial impact as presented in the staff roster change form. The staff roster change form uses assumptions that result in a much greater financial impact because it assumes the highest potential benefit costs for each employee and makes other "worst case" assumptions. The summary below is based on a staff assessment of the probable impacts of the reorganization, instead of a theoretical budget impact. The real impact will be somewhere between the table shown below and the roster change form. We believe it is important to show the range of possibilities so the county does not plan for a large budget windfall as a result of the reorganization.

### Estimated Difference Between New Organization and Old Organization Salary and Benefit Costs

	New	Old	Change
<b>305BUD</b>	\$ 1,338,919.00	\$ 1,417,423.00	\$ (78,504.00)
<b>390DPE</b>	\$ 1,372,492.49	\$ 1,343,742.49	\$ 28,750.00
<b>Total</b>	\$ 2,711,411.49	\$ 2,761,165.49	\$ (49,754.00)



**SECTION II: Office of Budget Review**





The information you provide here will demonstrate how you expect to secure or make changes to funding for your request and will be reviewed by the Office of Budget.

**Exhibit A:**

FUND	PRO G	DEPT	BA SUB	ELE	OBJ	WORK ORDER NUMBER	OBJECT CODE DESCRIPTION	CURRENT BUDGETED AMOUNT	PROPOSED BUDGETED AMOUNT	EXP INC/ REV DEC (DR)	REV INC/ EXP DEC (CR)
0001	000	305	518	852	110-236	000000	Salary and Benefits	2,410,605	2,563,486	152,881	0
0001	000	305	518	873	110-236	000000	Salary and Benefits	447,943	44,661	0	403,282
5092	000	390	518	855	110-236	000000	Salary and Benefits	2,603,359	2,602,331	0	1,028

**Narrative description of funding sustainability:**

Based on current information, we believe county resources will be available in the future to sustain the Infrastructure Services budget at the level of the re-organization, a level that is smaller than the existing budget. The reorganization, per se, does not increase TERR labor costs or the need for TERR funding across the county. Other technology driven criteria may influence the TERR rate but the reorganization will not impact the TERR rate.

## SECTION III: Human Resources Review and Approval

### INFRASTRUCTURE SERVICES POSITION CROSSWALK: REORGANIZATION 2014 OCTOBER 17, 2014 DRAFT

CURRENT CLASSIFICATION	ACTION	FOLLOWED BY	NEW WORKING DESCRIPTION	EXISTING WORKING DESCRIPTION	UNDERLYING CLASSIFICATION
Information Technology Manager 1	Delete	Add	Enterprise Architect		Information Technology Manager 2
Network Administrator, Principle	Delete	Add		Program Manager 1	Program Manager 1
Systems Administrator, Sr.	Delete	Add	Security Architect		Information Technology Manager 1
Technical Support Specialist, Principle	Delete	Add	Enterprise Technology Coord		DISC 2
Technical Support Specialist, Sr.	Delete	Add	Mobile Coord.		Mobile Coordinator
Technical Support Specialist, Sr.	Delete				
Technical Support Specialist 3	Delete	Add		Technical Support Specialist 3, Second Level Support	Technical Support Specialist 3
Technical Support Specialist 2*		Add		Technical Support Specialist 2	Technical Support Specialist 2
Technical Support Specialist 1: Project	Delete				

\* This re-instates a position erroneously deleted in the county system, in the re-organization this is the second level support role

#### Relationship between Working Descriptions and Classifications

Clark County's human resources system relies upon job classifications with associated pay ranges. Multiple working descriptions can be associated with a classification.

This reorganization proposes creation of two new working descriptions associated with the information technology manager 1, 2, 3 classification. These are the enterprise architect and the security architect.

The program manager 1 position will use the existing working description associated with the program manager 1 classification. Existing working descriptions will be used for the second level technical support specialist and the technical support specialists proposed in this reorganization.

The Enterprise Technology coordinator working description will be associated with the DISC 2 classification.

#### Proposed new working description and new classification

The Mobile Technology Coordinator is the only new classification proposed in the reorganization.

A new classification is proposed because the senior technical support specialist is an advanced level classification within the technical support specialist job family. Incumbents focus on client support in a PC or mini environment, and work independently providing a full range of client support, to a limited number of departments.

The mobile technology coordinator is an advanced support classification distinguished by a focus on mobile technology and support of the systems, countywide. The mobile technology coordinator implements, coordinates and manages the county's mobile technology program to meet service delivery goals. Incumbents ensure delivery of results, monitor progress and direct activities to include: planning, monitoring, allocating, adjusting, controlling, preserving, and evaluating mobile systems across multiple County departments.

The mobile coordinator is expected to perform complex specialized technical support for client mobile systems including software and hardware, act as network administrator in support of client Local Area Networks specific to mobile solutions. Participate in advanced planning for mobile systems, provide advanced troubleshooting and support for clients, and provide integration and support to clients where telephone and mobile computing systems are integrated or overlap.

Human Resources staff surveyed four counties in Washington and Oregon with a total of eight job classifications with similar duties. The comparable counties did not have a Mobile Coordinator position, but had positions such as systems support, business analyst, IT consultant, information specialist, etc.

Minimum pay rates ranged from \$25.25 to \$31.31 per hour with an average minimum of \$28.23 per hour. Maximum pay rates ranged from \$32.10 to \$41.75 with an average of \$36.55. Review of the comparables against the Clark County pay ranges for Technical Support Specialist 3 and Technical Support Socialist, Sr. results in a recommend pay range for the Mobile Coordinator between \$28.23 and \$36.02 per hour. This range is an average of the two Clark County positions and is within \$1.36 to \$1.76 per hour of the average of the comparables.

Please note the Technical Support Specialist; Sr. classification is a retired classification in the county. There are incumbents in this classification, but no new employees can be placed into the classification.

Overview

The re-organization may change the number of people occupying roles or classifications, but does not delete any classifications.

This table provides more detail on new duties and skills than the skills and duties of retained roles. Please reference current job descriptions for more detail on current positions.

Role	Duties and skills
Service Desk	<ul style="list-style-type: none"> <li>• First level support</li> <li>• Answer calls, service desk requests</li> <li>• Create records</li> </ul>
Service desk back office	<ul style="list-style-type: none"> <li>• Second level support referred from first level support because of complexity, length of time to answer call, coordination necessary, etc.</li> <li>• Follow up on calls</li> <li>• Create outage notices</li> <li>• Reviews and escalates incidents</li> <li>• Documentation or services</li> <li>• End user training</li> <li>• Self-service services</li> <li>• Account administration</li> </ul> <p>These duties are currently performed by Level 1 service technicians and will be shifted to a second level support specialist</p>
Desktop Support	<ul style="list-style-type: none"> <li>• Manage and support desktops, laptops and virtual desktops, replace hardware</li> <li>• Support desktop hardware and software</li> <li>• Manage AV and O/S patching</li> <li>• Manage printers</li> <li>• Support special hardware</li> </ul>
Mobile Coordination	<ul style="list-style-type: none"> <li>• Develop and implement a mobile strategy and plan</li> <li>• Manage and support mobile devices</li> <li>• Implement and manage the solution</li> <li>• Integrate and collaborate with telephone systems and telephony staff</li> </ul> <p>These duties are currently performed ad hoc by multiple desktop technicians. The re-organization will focus the day to day operation in this area to one individual. Increased collaboration with telephony is a new role.</p>
Enterprise Technology	<ul style="list-style-type: none"> <li>• Supports the specialized hardware and software platforms within Application Services, Infrastructure Services and GIS</li> </ul>

Role	Duties and skills
Coordination	<ul style="list-style-type: none"> <li>• Coordinates and executes desktop patching for department and countywide systems</li> <li>• Prepares project plans and schedules to coordinate and install S/W, S/W upgrades, and patches to County-wide utility tools;</li> <li>• Prepares project reviews and maintains quality assurance procedures</li> <li>• Loads specified software packages such as operating systems, word processing, or spreadsheet programs into department PCs</li> </ul> <p>Currently these duties are performed ad hoc by multiple technical support specialists. The duties will be consolidated into one FTE and expanded across the technology departments.</p>
Project Management	<ul style="list-style-type: none"> <li>• Manage IS specific projects</li> <li>• Coordinate with Application Services, GIS and other agencies</li> <li>• Apply project management methodologies</li> <li>• Maintain project documentation</li> <li>• Perform quality assurance</li> </ul> <p>Currently IS has no project management capacity. Operating staff attempt to manage projects while performing their daily work.</p>
Security Architect	<ul style="list-style-type: none"> <li>• Ensure the integrity, confidentiality, and availability of County systems and information</li> <li>• Ensure the integrity, confidentiality, and availability of County physical systems in cooperation with General Services and operators of other infrastructure and buildings of the county</li> <li>• Develop, maintain, and publish up-to-date security policies, standards and guidelines,</li> <li>• Oversee the dissemination of security policies and best practices</li> <li>• Implements Cyber Security Awareness</li> <li>• Create, test, and implement business continuity and disaster recovery plans.</li> <li>• Provide reporting measuring the efficiency and effectiveness of the information security program.</li> <li>• Ensure compliance with federal, state, local laws, regulations, and County policy</li> <li>• Perform vulnerability assessments and gap analysis.</li> <li>• Recommend firewalls, data encryption, and other security measures and enhancements.</li> <li>• Create and maintain all information system and software security certificate activities.</li> </ul> <p>Currently these duties are performed ad hoc by various staff resources. The scope of responsibilities will be consolidated into one FTE and expanded across the all organizations that interface with County data systems.</p>
Systems Administrators	<ul style="list-style-type: none"> <li>• Manage server environment</li> <li>• Manage storage environment</li> <li>• Manage backup environment</li> <li>• Deploy patches</li> <li>• Replace environments</li> <li>• Email support</li> <li>• Maintain onsite cloud and hosted services</li> </ul>
Network Administrators	<ul style="list-style-type: none"> <li>• Manage and support the enterprise network</li> <li>• Plan for future network services and capabilities</li> <li>• Manage wireless, remote access, firewalls, switches</li> <li>• Support off site and cloud network services</li> </ul>
Enterprise Architect	<ul style="list-style-type: none"> <li>• Management of design of the enterprise infrastructure topology, including Networks, Server Virtualization, and Storage.</li> </ul>

Role	Duties and skills
	<ul style="list-style-type: none"> <li>• Infrastructure impact assessment and monitoring and measurement strategies.</li> <li>• Recommend enhancements of enterprise infrastructure performance and availability.</li> <li>• Integrate planning efforts, COTS systems integration, and infrastructure implementations with the Application Services Enterprise Architect.</li> <li>• Ensure delivery of a scalable infrastructure compatible with department/agency business needs across applications, technologies, and facilities. Recommend strategies for allocation and/or re-deployment of resources for future needs.</li> <li>• Conduct audits to ensure systems compliance with federal, state, and local rules and regulations.</li> <li>• Consult with County departments on critical issues, new concepts, new problems, and new technology and resource (people) needs that are responsive to evolving technologies.</li> </ul> <p>Currently IS has no enterprise architect capacity. Operating staff attempt to do this work while also performing their daily work.</p>
Office Assistant II: (0.8 FTE)	<ul style="list-style-type: none"> <li>• Augment administrative and purchasing support</li> <li>• Data entry</li> <li>• Inventory management</li> </ul>
Information Tech Assistant	<ul style="list-style-type: none"> <li>• Office management and administration</li> <li>• Purchasing</li> <li>• Support to directors</li> </ul>
Customer Service Manager	<ul style="list-style-type: none"> <li>• Manage the service desk and desktop support policies and procedures and staff</li> <li>• Prepare project plans, budgets and performance evaluations</li> <li>• Interact with internal and external customers</li> </ul>
Network and Systems Manager	<ul style="list-style-type: none"> <li>• Manage the network administration, systems administration and telecommunications policies and procedures and staff</li> <li>• Prepare project plans, budgets and performance evaluations</li> <li>• Interact with internal and external customers</li> </ul>
At Large Manager	<ul style="list-style-type: none"> <li>• All duties are distributed to other managers and staff.</li> </ul>
IS Director	<ul style="list-style-type: none"> <li>• Manage policies and procedures and staff of the department</li> <li>• Prepare project plans, budgets and performance evaluations</li> <li>• Interact with internal and external customers</li> </ul>

We believe that the overarching responsibilities for enterprise architecture, security, project management, mobile coordination, enterprise technology coordination and other support duties compliment the IS organization's responsiveness to immediate and emerging business needs.

### Internal equity

We believe the proposal is internally consistent in the proposed classifications and distribution of work across divisions.

The reorganization provides opportunities for specialization for employees interested in developing new skills.

We intend to increase equity by making all new positions subject to competitive processes so all members of the department can compete for them.

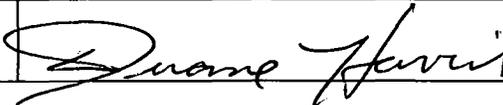
**Management Structure**

The reorganization deletes an at large manager who does not supervise staff. The role is replaced by the System Architect and Enterprise architect who will supervise staff in teams, but who do not have direct reports.

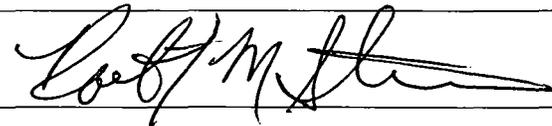
**Comments**

This is a significant reorganization that will take a year to implement. We know that, during the implementation time period, new circumstances will arise that will change the order of the steps necessary to complete the reorganization. Some employees will choose to leave county employment, leaving vacancies to fill. Others will compete for positions internally, be successful, and create vacancies that must be filled immediately. Other opportunities rely upon retirement of existing personnel.

**Required Signatures:**

Department Manager		Date 10/21/2014
Department Head		Date 10/21/2014
Received in HR for initial review	Date	
HR Staff Assigned		

**Section II required sign off:**

Budget Director or Designee		Date 10/22/14
Comments:		

**Section IV County Administrator Review**

**Required sign off:**

County Administrator		Date 10/22/14
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