

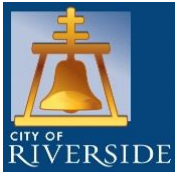
# PERFORMANCE AUDIT

## Innovation and Technology Department

### **IT Inventory Asset Management**

**January 11, 2016**

Office of the City Manager  
Internal Audit Division  
Cheryl Johannes, Internal Audit Manager



## Internal Audit

### Objectives of Review

- Determine if IT inventory purchases are recorded and managed timely and accurately;
- Determine whether IT assets are appropriately safeguarded while in the physical control of IT; and
- Ensure donation of surplus or obsolete IT assets is in compliance with City policy.

### Background

The Innovation and Technology (IT) Department is responsible for ensuring that all technology-related purchases conform to City technology standards. In collaboration with the City's Purchasing Department, IT is responsible for the actual purchasing process for technology-related items (assets) requested by other departments (e.g. computers, mobile devices, servers, etc.). In order to provide City Departments with the most convenient way to order and track progress on needed IT related hardware, software, supplies, etc., IT has created an online Order Request Form located on the Department's Intranet webpage.

## PERFORMANCE AUDIT ~ Summary

### Innovation and Technology Department ~ IT Inventory Asset Management

One of the primary roles of the Innovation & Technology Department is to guide the use of technology for the City. A component of that responsibility is ensuring a strong inventory management environment exists (which is a practice that plays a small part in an initiative from the department's Riverside 2.0 plan<sup>1</sup>)

According to the Government Accountability Office's (GAO) Executive Guide on *Best Practices in Achieving Consistent, Accurate Physical Counts of Inventory and Related Property*, there are 12 key factors to achieve consistent and accurate counts of physical inventories, which was used as a preliminary basis for this review in evaluating the IT Department's inventory practices:

1. Establish Accountability	7. Provide Adequate Supervision
2. Establish Written Policies	8. Perform Blind Counts
3. Select an Approach	9. Ensure Completeness of Count
4. Determine Frequency of Counts	10. Execute Physical Count
5. Maintain Segregation of Duties	11. Perform Research
6. Enlist Knowledgeable Staff	12. Evaluate Count Results

Source: GAO Report noted above.

During our review<sup>2</sup>, we discovered that IT Administration had previously identified several deficiencies related to inventory management efforts and had already begun implementing corrective actions to address those issues. To further build upon the actions previously taken by the department, Internal Audit recommends the following:

- ***Utilize the existing IT Online Ordering procedure as a guide to develop a Citywide policy for technology purchases;***
- ***Develop a procedural document that provides IT sections with instructions on conducting physical inventories;***
- ***Conduct a physical inventory of current IT assets; and***
- ***Consider further enhancing the efficiency of operations by automating the inventory tracking process.***

<sup>1</sup> Initiative #2, Create a Citywide Comprehensive Continuity of Operations Plan (COOP) – from the Innovation & Technology Riverside 2.0 Strategic Plan.

<sup>2</sup> This performance audit did not include a review of IT's compliance with the Equipment and Asset Inventory (06.005.00), as oversight for that process is handled by the Finance Department.

## OBJECTIVES, SCOPE and METHODOLOGY

In accordance with the Internal Audit Work Plan for FY2015/16, we have completed a review of the Innovation and Technology (IT) Department's IT Inventory asset management operations. The objectives of the review were to:

- Determine if IT inventory purchases are recorded and managed timely and accurately;
- Determine whether IT assets are appropriately safeguarded while in the physical control of IT; and
- Confirm whether donation of surplus or obsolete IT assets complies with City policy.

Our review, which was conducted during the months of September through October 2015, covered day-to-day operational and administrative processes, along with a review of inventoried IT assets <sup>3</sup>and physical security controls in place. We relied upon the following to assess the overall control environment and internal processes in planning for our review:

- Research material from various sources to obtain inventory asset management-best practices;
- Discussions with the IT CIO, Deputy CIO, and additional IT Department staff;
- A physical review of existing security controls;
- Conducted walkthroughs of departmental data, practices, and facilities;
- Riverside Equipment and Asset Inventory ([06.005.00](#)) and Donation of Surplus or Obsolete Personal Computers ([07.013.00](#)) administrative policy manuals<sup>4</sup>;
- IT Department internal procedural documents;
- Review and testing of departmental inventory-related and other documentation; and
- Data from the City's financial system, IFAS.

## BACKGROUND



The Innovation and Technology (IT) Department has a total of 16 authorized positions (though only 14 of those positions are funded), as seven (7) new full-time positions were approved during the last fiscal year. There are an additional 45 contract positions from the City's agreement with ACS Enterprise Solutions, Inc. (ACS, now known as Xerox) <sup>5</sup>, which includes a full-time Account Manager that serves as the primary point of contact for the City and coordinates the provision of various general management services. While the IT

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<sup>3</sup> To maximize the allotment of time budgeted for this review, Internal Audit's physical review of inventoried IT assets to test for existence was limited to computer desktops, printers, and monitors only, and does not represent an overall audit scope limitation.

<sup>4</sup> Administrative manual [07.012.00](#), Surplus or Obsolete Materials and Equipment, was also reviewed in preparation for this audit; however it was determined that while that policy addresses fixed assets, policy 07.013.00 was created to specifically address donation of obsolete or surplus technology assets, and the focus of one of our audit objectives was revised to verify IT's compliance with the new policy.

<sup>5</sup> The City had been receiving information technology and telecommunication services from ACS since 1996. However, it was determined in December 2007 that it would be in the City's best interest to explore all available options for provisions of such services, as the ACS contract was set to expire in June 2008.

Department currently operates under one division for funding purposes, as noted in the fiscal year 2015/16 budget there are nine (9) separate sections within the Department (Refer to *Appendix A*).

## OPERATIONS BUDGET

Description	2013/14 Actual	2014/15 Actual	2015/16 Budgeted
Personnel, Non-Personnel, and Special Projects	\$ 8,998,351	\$ 10,571,556	\$ 10,970,999

Source: City of Riverside IFAS Records.

As part of its internal services, the IT Department is responsible for ensuring that all technology-related purchases conform to City technology standards. In collaboration with the City's Purchasing Department, IT is responsible for the actual purchasing process for technology-related items (assets) requested by other departments (e.g. computers, mobile devices, servers, etc.).

In order to provide City Departments with the most convenient way to order and track progress on needed IT related hardware, software, supplies, etc., IT has created an online Order Request Form located on the Department's Intranet webpage. Since its inception in April 2014, City departments have placed a total of 712 orders as of June 30, 2015 using the online ordering process.

## IT ASSET PURCHASES / INVENTORY TRACKING

IT asset inventory tracking efforts begin with IT purchases – the IT Department established a procedure that directs/routes all technology-related purchases through the IT Department via the SharePoint page on the department's Intranet website, to ensure that all technology-related purchases conform to the City's technology standards.

When a City department initiates an order through the SharePoint site, the system assigns an order tracking number to each request.<sup>6</sup>

The tracking number provides a permanent record for the order as it progresses through the various stages of its purchase. Internal Audit tested a sample of orders from different stages of the SharePoint site to verify and/or validate the following:

- Accuracy of recordkeeping for each order
- Timeliness of updates for each order
- Delivery of final product (verified via Receipt Acknowledgment form)

Testing results confirmed that the IT Department's internal controls for recording and tracking assets ordered through the SharePoint website are adequate and reasonably mitigate any challenges/risks that could arise through the ordering process.

Additional inventory tracking efforts are conducted at the divisional level. The Network Services, Client Services, and Systems & Operations divisions each maintain Excel spreadsheets that lists the following:

- Device/Asset Type and Quantity
- Asset Location
- Model and/or Serial Number
- Asset or Service Tag Number

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<sup>6</sup> Refer to attached IT Order Request Form Procedures – *Appendix B*.

Internal Audit conducted inventories of randomly selected equipment for each of the divisions noted above, to validate the item was present as listed, or if appropriate documentation existed if an item was removed. No discrepancies regarding divisional tracking efforts were noted.

### **PHYSICAL SECURITY CONTROLS**

Discussions with IT personnel and Internal Audit review revealed that most IT assets under the department's physical control are stored in secure areas, appropriately safeguarded and only accessible to IT personnel via badge entry:

#### IT Tech Room

- Entry to this room is restricted to IT personnel only unless others are accompanied by IT
- Entry is granted via keycard access, with coding limited to IT personnel key cards

#### Storage Room Next to Men's Restroom

- This room contains both computer equipment used by the Client Services Division as well as network-specific equipment used by the Network Services Division
- This room is kept locked at all times and only specific IT personnel have key access to the room

#### Network-related Equipment

- Much of the network equipment under IT control is located in the IT Department on the basement level
- Access to this area is restricted to IT personnel; individuals requesting access must contact IT via phone in the lobby area of the department, and are given access when verified and granted

Additionally, there are various types of computer equipment located in the hallway downstairs on the basement level across from the elevators. This area is accessible by anyone, and equipment is not kept locked up or enclosed in any way. However, IT has implemented the following controls to address this issue:

- Security cameras are located on the equipment and at other points in the basement hallways
- Additional space is being constructed within the IT Department to house this equipment

### **DONATED IT ASSETS**

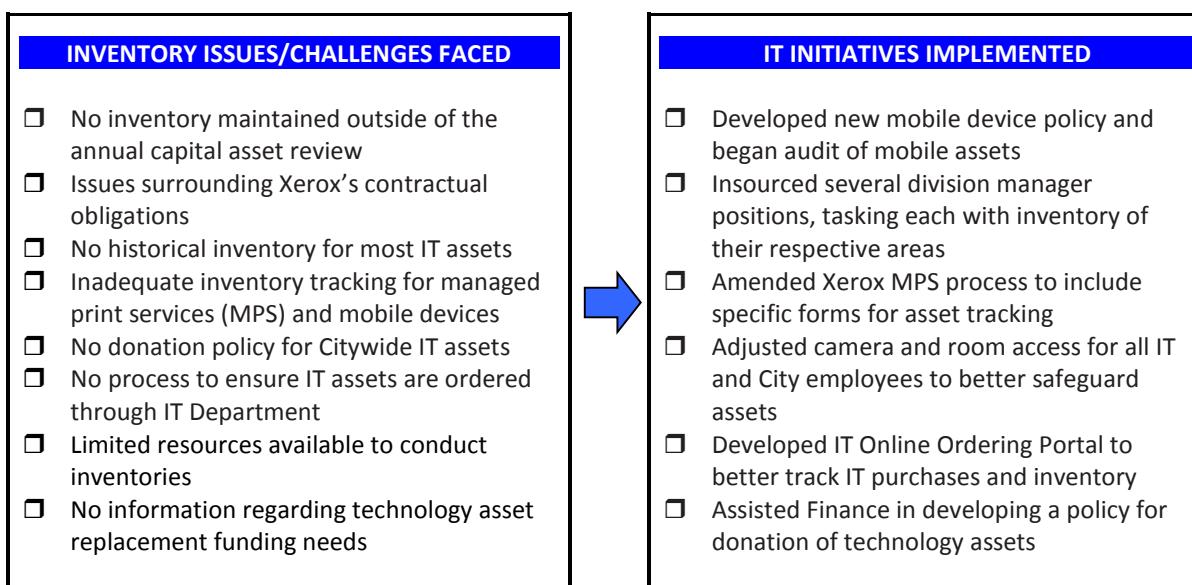
Internal Audit discussions, process walkthroughs and testing noted the following observations:

- IT Administration partnered with the City Attorney's Office and Finance to clarify conflicting information between the City Charter, Purchasing Resolution and administrative policies
- Through the partnership IT and Finance developed an administration policy effective November 2014 in which obsolete or surplus technology assets could be donated to eligible non-profit organizations
- IT Department makes determination if donated assets can be utilized internally or transferred to other departments, then estimates the value of items donated

Internal Audit review of documentation revealed that a total of 147 technology-related items with an estimated value of \$2,793 were donated pursuant to the policy during the period under review, and no discrepancies existed between the policy established and the actual practice in place by the department.

## OBSERVATIONS and RECOMMENDATIONS

The current IT Administration has been in place for approximately two years, and over the course of this time has identified several issues and challenges related to inventory management, and initiated a process to implement several plans to address them accordingly:



Source: Internal Audit Department. Data obtained from IT Department.

To further build upon the actions previously taken by the department, Internal Audit recommends the following:

### **Recommendation #1: Policies and Procedures**

***Documented policies and procedures provide a standard reference for staff to help ensure accuracy and efficiency are achieved and maintained for all departmental tasks performed. Policies/procedures that are incomplete or do not adequately state responsibilities and accountability could result in errors or inconsistencies in processing. As IT resource capacity increases, IT Administration should consider the following recommendations regarding policies and procedures:***

- To ensure accountabilities and responsibilities for technology purchases are addressed and maintained, the IT Department should draft and implement a Citywide policy that provides all users with a standardized process for IT purchases that is consistent with existing Purchasing administrative policies. The existing procedural document created for the IT Online Ordering Portal can be used as a guide to develop the policy, which should outline the purpose, roles and responsibilities of all affected personnel.***
- The IT Department should develop a procedural document that provides respective IT sections with instructions on conducting physical inventories, providing employees with a consistent practice to adhere to. The document should include (but not necessarily be limited to):***
  - Accountability for the inventory process
  - Methodology for how inventories will be conducted
  - Frequency of inventory counts (how often)
  - Procedures for when inaccuracies are noted

### **Recommendation #2: Conduct an Inventory**

*Discussions with IT Administration revealed that a physical inventory of IT assets was initiated in early fiscal year 2014-15, but not completed due to lack of appropriate resources. However, the results of that inventory effectively established a baseline for future inventories to be conducted against. Once adequate resources are available, the IT Department should establish a process for conducting inventories of IT assets<sup>7</sup> consistent with existing IT tracking mechanisms already in place.*

*Additionally, the IT Department should engage contacts in other City departments to assist with inventory efforts for IT assets in those respective departments. As ownership of IT assets converts to the department when assets are delivered, each department should ensure that appropriate inventory tracking mechanisms are in place to ensure accuracy of assets maintained.*

*Internal Audit conducted a brief survey of City departments to determine how many currently inventory/track IT assets<sup>8</sup>, in an effort to ascertain how quickly a partnership between IT and departments could be established; the results of the survey for responses received are indicated below<sup>9</sup>.*

Department	Tracks IT Assets
City Attorney	No
City Clerk	No
Economic & Community Development	No
Finance	No
Fire	Yes
General Services	Yes
Human Resources	Yes
Library	No
Museum	No
Parks and Recreation	Yes
Police	Yes
Public Works	No

Source: Internal Audit Department.

### **Recommendation #3: Automate Inventory Tracking**

*Discussions with IT personnel revealed that each division manager maintains a spreadsheet to track IT assets related to their respective sections. Edits and/or updates are made as necessary to the spreadsheets as needed. While this is deemed acceptable, the department should consider (as resources and funds are available) conducting a cost benefit analysis to determine the feasibility of implementing a more automated inventory management system to reduce potential errors that could occur from a manually driven process, while also providing the following benefits:*

- *Increased tracking efficiencies*
- *Timelier data*
- *Stronger reporting capabilities*

<sup>7</sup> IT inventory efforts should consist of assets valued at less than \$5,000, to ensure inventory efforts are not duplicated and do not conflict with existing City policies for fixed assets, which are owned by the Finance Department.

<sup>8</sup> A Citywide process related to technology inventory exists when employees leave the City; at that time all items (including those that are technology-related) are accounted for.

<sup>9</sup> The survey conducted was accomplished to determine how many departments have instituted a mechanism to track IT assets only, and not to verify compliance with any existing inventory policies or for comparison to industry best practices. As such, no additional testing was performed.

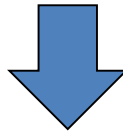
## CONCLUSION

There are a number of risks associated with inadequate controls over an inventory management system as noted in the table below, along with potential impacts on operations. The Government Accountability Office's (GAO) Executive Guide *Best Practices in Achieving Consistent, Accurate Physical Counts of Inventory and Related Property* states that all aspects of inventory management from accountability to storage are critical components for an organization's operational readiness.

### Risks Associated with Inadequate Inventory Management System Controls

Undetected theft and loss
Unexpected shortages of critical items
Unnecessary purchases of items already on hand
Unreliable or inaccurate data

Source: Internal Audit Department. Data obtained from GAO report noted above.



### Potential Impacts of Inadequate Controls

Inability to identify cost dependencies
Inability to determine assets owned and/or their location
Inability to create an accurate history of IT costs for assets
Redundant hardware assets in the environment
Higher support and IT costs

Source: Internal Audit Department.

Over the last two years, the IT Department has undertaken numerous steps to ensure that inventory records are updated and accurate, and that management efforts are consistent across divisions. Additional resources allocated to the department<sup>10</sup> will further assist efforts in refining existing inventory practices already in place and/or implementing new policies, processes, or procedures.

During the course of our review we discussed various aspects inventory management with the IT CIO and Deputy CIO. A draft of this report was provided for clarification, comment and feedback prior to finalization. Management's formal response to our recommendations is attached.

We extend our appreciation to the IT Department and staff that assisted us during this performance audit.

Vincent Price  
Senior Internal Auditor  
Office of the City Manager – Internal Audit Division

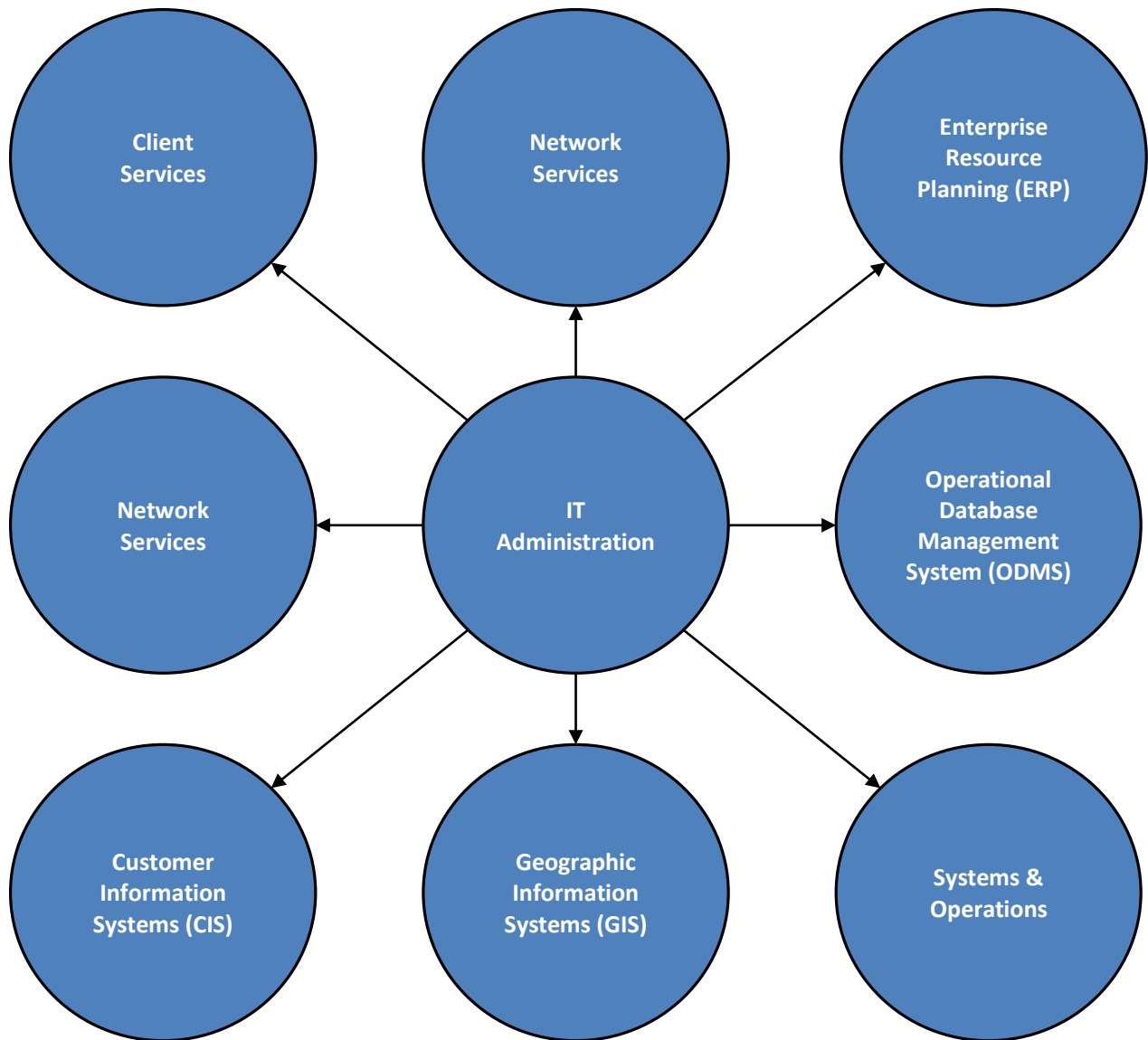
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<sup>10</sup> The IT Department requested additional staffing for fiscal year 2015/16, in an effort to provide better service to City Departments when purchasing technology-related items and to enhance internal controls over inventory (among other reasons). The request was approved by Human Resources but funding for the position was denied during the 2015/16 budget process.



## APPENDIX A

### Innovation and Technology Department Sections



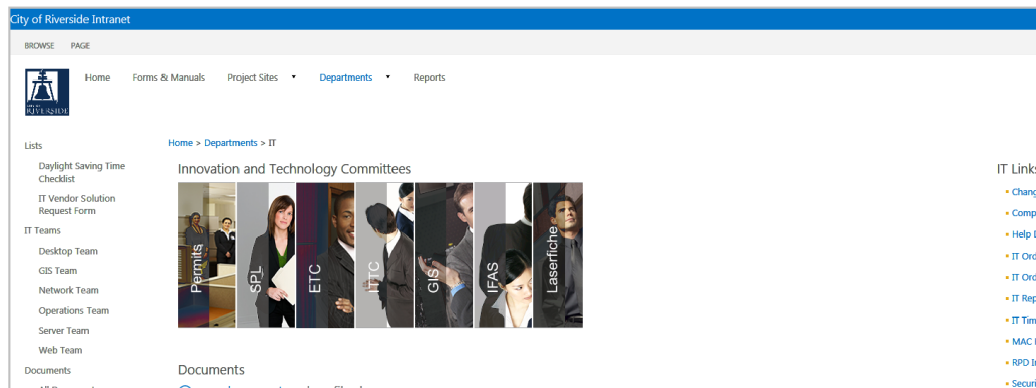
Source: Internal Audit Department. Data obtained from IT Department Organizational Chart.

## APPENDIX B

### IT Order Request Form Procedures

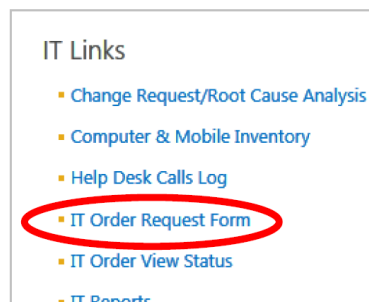
#### INTRODUCTION:

The Innovation and Technology (IT) Department is responsible for ensuring that all technology-related purchases conform with the City's technology standards. Many times, this process also includes being responsible for the actual purchasing process for technology-related items requested by other departments (e.g. computers, mobile devices, servers, etc.). In order to provide City Departments with the most convenient way to order and track progress on needed IT related hardware, software, supplies, etc., the IT Department has created an online IT Order Request Form located on the [IT Department's Intranet Page](#).



#### REQUESTORS:

1. To submit your order, click on the IT Order Request Form link on the far right:



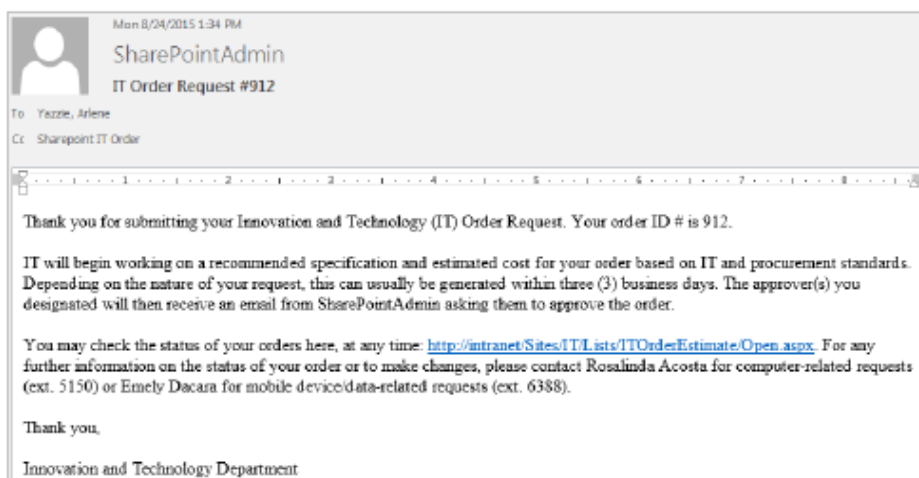
2. You (Requestor) must fill out the IT Order Request Form. A brief description of each field is provided on the following page.

Requester *	<input type="text" value="Enter a name or email address..."/>
Requestor Extension	<input type="text"/>
Recipient(s) *	<input type="text" value="Enter names or email addresses..."/>
Recipient Location	<input type="text"/>
	Please enter building name and floor level.
Business Extension	<input type="text"/>

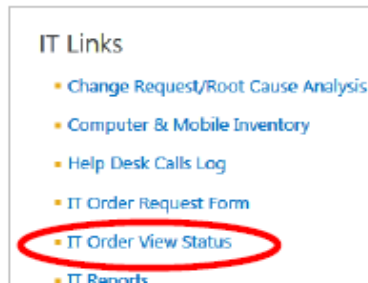
- *Requestor* – Person filling out request;
- *Requestor Extension* - Allows IT to call and follow-up with questions, if needed;
- *Recipient(s)* – Include all recipients, including Requestor, if applicable;
- *Recipient Location* –Allows for easy delivery of requested items;
- *Recipient Extension* – Allows IT to setup delivery, if needed;
- *Department* – Requestor can either type two digit department number (e.g. 24) or name (e.g. Innovation and Technology) and the IT Ordering Site will pull up department information from IFAS;
- *Division* – Requestor can either type two digit department number (e.g. 24) to see a list of divisions or name (e.g. Administration) and the IT Ordering Site will pull up division information from IFAS;
- *Type of Item(s) Needed* – Check all categories that apply. If item category does not exist, please select specify your own value and type category in space provided;
- *Description* – Requestor can include as much detail on the requested purchase as deemed necessary;
- *Accounting String* – Requestor must include the account number that the requested item will be charged to – the form will validate all account numbers provided. If additional account numbers are needed for the request, please include those under the Comments section;
- *Budget Verification* – Requestor must validate that sufficient budget exists in the account number provided;
- *Budget Year* – Requestor must include what fiscal year the purchase should be made in. This will help eliminate confusion during the end-of-year accounting procedures (e.g. Requisition cut-off);
- *Approval Level 1-3* – Requestor (e.g. Sr. Admin. Assistant) must include at least one approver, but may include up to three individuals. The request will be routed for approval in numerical order and the Requestor is responsible for ensuring the proper approvals necessary are listed on the form;
- *Expedited Purchasing* – If the request requires expedited purchasing, please check “Yes” box and list the reasons below in the *Expedited Purchasing Justification* box; and
- *Comments* – This field is to be used by Requestor or Approvers throughout the approval process to include any additional information deemed necessary. Requestor may also attach additional documentation needed by selecting the Attach File button on the top of the form.

Click the Save button to submit your request.

3. Once you submit the request, you will receive an acknowledgement e-mail from “SharePointAdmin” that your request has been submitted.



4. The Client Services Manager or designee will get an email requesting to a quote for the request submitted. Upon receiving the request, the Client Services Manager or designee will submit quote and initiate the approval workflow process.
5. The person(s) you submitted as the Approver(s) will get an email from "SharePointAdmin" requesting approval for your request in the order in which they are listed on the request.
6. Upon completion of the approvals, IT Administration will receive an email from "SharePointAdmin" notifying them of the request and begin processing the order (e.g. Requisition for PO or P-card order). Depending on the nature of the request, the IT Department may need to follow the formal bidding procedures outlined in the City Purchasing Resolution and Administrative Manual.
7. IT will update your order record with Requisition number, PO number, etc. to keep departments up to date on the status of their request. Once item(s) arrive, the Client Services Manager or designee will schedule delivery and installation. To check the status of your order, click the IT Order View Status link on the IT Department's Intranet Page, under IT Links.



The Status column tells you what step the order is at in the process (e.g. Initiated, Estimated Provided, Requisitioned, Purchase Order Cut, etc.).

✓	Department	Order Id	Department	Created	Status	IT Order Approval	Requester	Division	Type of Item(s)
	Order Details	916	24 Innovation and Technology	3 minutes ago	Estimate Provided	In Progress	Yazzie, Arlene	2400 IT-Admin	Desktop Works

If the IT Order Approval column shows "In Progress," this means that your order has been routed to the Approver(s) you designated for approval.

✓	Department	Order Id	Department	Created	Status	IT Order Approval	Requester	Division	Type of Item(s)
	Order Details	916	24 Innovation and Technology	3 minutes ago	Estimate Provided	In Progress	Yazzie, Arlene	2400 IT-Admin	Desktop Works

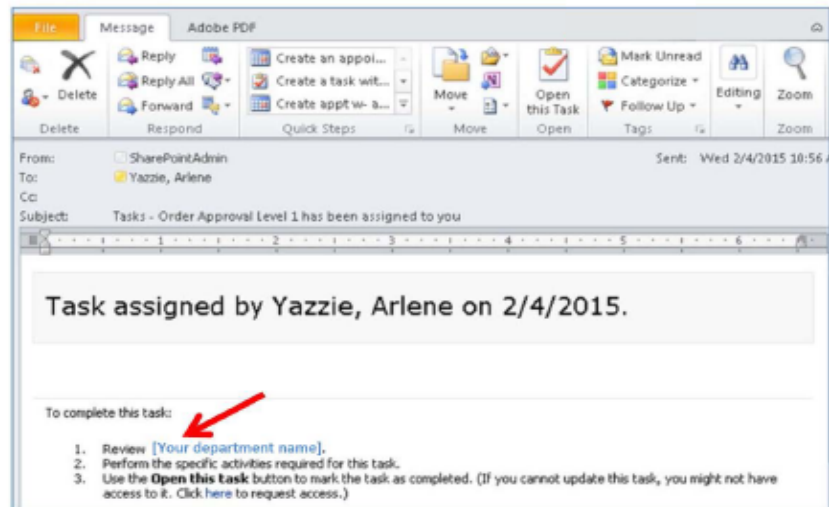
If the IT Order Approval column shows "Completed," this means that the Approver(s) you designated have approved the order. IT can then move forward with placing the order.

✓	Department	Order Id	Department	Created	Status	IT Order Approval	Requester	Division	Type of Item(s)
	Order Details	916	24 Innovation and Technology	About an hour ago	Estimate Provided	Completed	Yazzie, Arlene	2400 IT-Admin	Desktop Works

8. For assistance, please contact the Help Desk at ext. 5508.

**APPROVERS:**

1. If you are listed as an approver for a request submitted through the IT Order Request Form, you will receive an email from "SharePointAdmin" requesting approval. To view the complete order request, click on the Review link (your department's name).



\*If the email says that you do not have the required permissions to view the task, please contact Arlene Yazzie at [ayazzie@riversideca.gov](mailto:ayazzie@riversideca.gov) or ext. 6091.

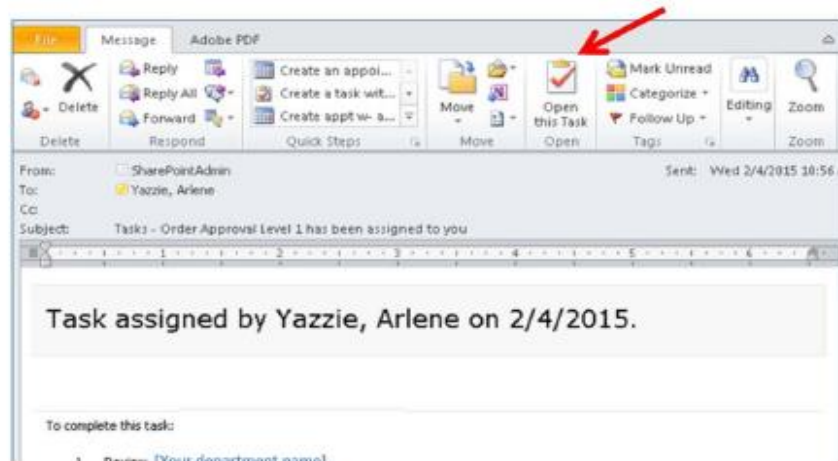
2. Review the order details to ensure that you approve of the order. In particular, note the account that the Requestor designated, any Comments that have been added to the order, the suggested Vendor for the purchase, the Estimated Cost, and quote attached to the order. You can then close this screen.

Requester	Yazzie, Arlene
Requestor Extension	6091
Recipient(s)	<a href="#">Yazzie, Arlene</a>
Recipient Location	City Hall, 2nd floor
Recipient Extension	6091
Department	24 Innovation and Technology
Division	2400 IT-Admin
Type of Item(s) Needed	Desktop Workstation
Description	Standard desktop workstation.
Accounting String (GL/JL)	2400000-425800
Accounting String 2 (GL/JL)	
Accounting String 3 (GL/JL)	
Budget Verification	Yes
Budget Year	FY 2015/2016

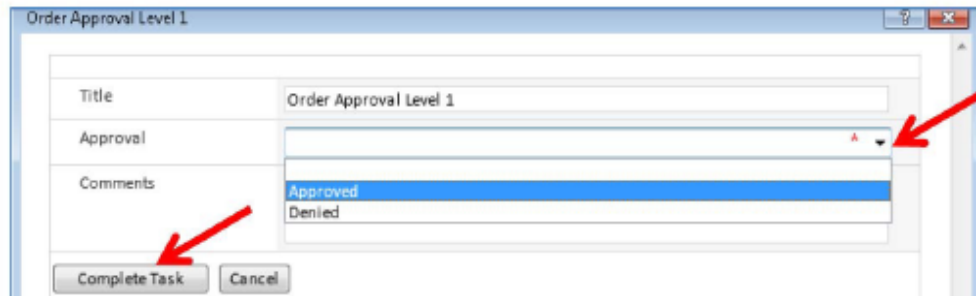
Approval Level 1	Raymond, Adam
Approval Level 2	
Approval Level 3	
Expedited Purchasing	
Expedited Purchasing Justification	
Comments	Yazzie, Arlene (8/26/2015 1:12 PM): IT staff contacted requestor to confirm that she would like one standard PC tower and monitor. See attached quote for specifications.
Vendor	Dell
Specification	
Estimated Cost	\$1,077.35
Approval Routing	
Approval Comments	
Status	Estimate Provided
Bid Number	
Requisition Number	
P-Card Transaction ID	
Purchase Order Number	
ETA (Receipt Date)	
Received Date	
Estimated Installation Date	
Order Id	916
Attachments	<a href="#">Quote.txt</a>
Version: 9.0 Created at 8/26/2015 11:00 AM by Yazzie, Arlene Last modified at 8/26/2015 1:12 PM by Yazzie, Arlene	

[Close](#)

- To approve the order, go back to the email you received from SharePointAdmin and click the "Open this task" button on the e-mail's toolbar.



4. Once you click on “Open this Task” you will be directed to the window below. By selecting “Approved” and clicking “Complete Task” you can approve the request. To deny the request, please contact Arlene Yazzie ([ayazzie@riversideca.gov](mailto:ayazzie@riversideca.gov)).

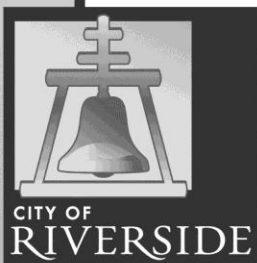


The screenshot shows a window titled "Order Approval Level 1". It contains a form with the following fields:

- Title:** Order Approval Level 1
- Approval:** A dropdown menu with "Approved" selected (highlighted in blue) and "Denied" as an option.
- Comments:** A text area.

At the bottom of the window, there are two buttons: "Complete Task" and "Cancel". A red arrow points to the "Complete Task" button. Another red arrow points to the "Approved" option in the "Approval" dropdown menu.





## MEMORANDUM

### Innovation & Technology Department

**DATE:** January 8, 2016

**TO:** Vincent Price, Senior Internal Auditor

**FROM:** Adam Raymond, Innovation & Technology Deputy Director

**CC:** Lea Deesing, Innovation & Technology Director  
Cheryl Johannes, Internal Audit Manager

**RE:** **Response to IT Inventory Asset Management Recommendations**

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#### **Recommendation #1: Policies and Procedures**

(1) To ensure accountabilities and responsibilities for technology purchases are addressed and maintained, the IT Department should draft and implement a Citywide policy that provides all users with a standardized process for IT purchases that is consistent with existing Purchasing administrative policies. The existing procedural document created for the IT Online Ordering Portal can be used as a guide to develop the policy, which should outline the purpose, roles and responsibilities of all affected personnel.

#### **Response:**

The Innovation and Technology (IT) Department agrees with this recommendation. Although the scope of the audit centered around certain technology items (e.g. desktop computers, printers and monitors), the policy should apply to software and technology related maintenance, hardware, consultants, professional services, etc. For example, software-as-a-service agreements, purchased by departments without review of IT, can hinder the City's ability share data among systems without costly/timely integration and/or third party systems that require multiple passwords/user interfaces per user, heighten the risk of being locked into one vendor, and expose the City to greater cybersecurity risk.

While the IT Department can draft a policy based on best practices, the City's technology standards, and citywide policies and procedures currently in place, the impact on staffing needs to be taken into consideration. Given that technology impacts the daily life of every City employee, any policy of this nature should include a service level agreement component and standards about the time needed for review by the IT Department based on the type of request requests (e.g. enterprise software implementation vs new mobile device). Review of agreements and technology requests in can save millions in project overruns, but may require substantial time to do the review properly (e.g. questions to vendors, cybersecurity business needs assessment of Department, impacts on City's infrastructure, etc.). Additional personnel may be needed in the Administrative, Project Management and other divisions of the IT Department.



(2) The IT Department should develop a procedural document that provides respective IT sections with instructions on conducting physical inventories, providing employees with a consistent practice to adhere to. The document should include (but not necessarily be limited to):

- Accountability for the inventory process
- Methodology for how inventories will be conducted
- Frequency of inventory counts (how often)
- Procedures for when inaccuracies are noted

**Response:**

The Innovation and Technology (IT) Department agrees with this recommendation and will seek the help of the Internal Audit Division and Finance Department to develop the appropriate protocols. Specifically, the IT Department will need to know what falls under the responsibility of the IT Department (Basement) versus other City departments (e.g. Recommendation #2). As it relates to the IT Department, the Deputy CIO will draft a departmental inventory policy that specifically states what will be covered (e.g. equipment \$100 and over), what format it should be kept in (e.g. Excel vs. SharePoint), useful life of each asset (e.g. budgetary purposes), how often it should be completed (e.g. once a year), and what citywide policies are applicable. Given the limited City resources and Xerox contractual challenges noted in this report, staff will aim to have the policy and first inventory completed by June 2016 and will require additional personnel to perform the audits on a routine basis without business impacts to the City.

**Recommendation #2: Conduct an Inventory**

Once adequate resources are available, the IT Department should reestablish a process for conducting inventories of all IT assets. Additionally, the IT Department should engage contacts in other City departments to assist with inventory efforts for IT assets in those respective departments. As ownership of IT assets converts to the department when assets are delivered, each department should ensure that appropriate inventory tracking mechanisms are in place to ensure accuracy of assets maintained.

**Response:**

The Innovation and Technology (IT) Department generally agrees with the recommendation as written. Specifically, IT appreciates the acknowledgement that a baseline inventory was started through Xerox, but was not completed until IT received City Council approval to insource the Division Manager positions. The IT Department is an advocate for a citywide technology inventory requirement and will seek to establish this citywide guidance through a section of the proposed technology resource acquisition policy (Recommendation #1). Additionally, as the Finance Department is responsible for the oversight of several inventory related Administrative Manual policies – Equipment and Asset Inventory (06.005.00), Surplus of Obsolete Materials and Equipment (07.012.00), and Donation of Surplus or Obsolete Personal Computers (07.13.00) – IT will seek guidance from Finance when drafting the inventory section of the proposed policy. For example, any changes to how a new and/or expanded inventory requirement would impact various financial accounting standards and processes, would be vetted and researched in conjunction with Finance Department to ensure all citywide policies are in-line with one another.

**Recommendation #3: Automate Inventory Tracking**

The department should consider (as resources and funds are available) conducting a cost benefit analysis to determine the feasibility of implementing a more automated inventory management system to reduce potential errors that could occur from a manually driven process, while also providing the following benefits:

- Increased tracking efficiencies
- Timelier data
- Stronger reporting capabilities

**Response:**

The Innovation and Technology (IT) Department agrees with this recommendation; however, request involves more than resources and available funds. Specifically, without a citywide technology inventory policy in place, inquiry of other departments about asset management, review of current applicable applications (e.g. SPL), the scope, impact, and cost of the “Automate Inventory Tracking” project cannot be accurately determined.