FY13 Annual Report

City of Jacksonville Information Technologies Division

June 30th, 2013

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TO:	**Karen Bowling, Chief Administrative Officer**
	Cleveland Ferguson, Deputy Chief Administrative Officer
From:	**Usha Mohan, Chief Information Officer**
CC:	**All Elected Officials, Department Heads, Independent Agencies, IT Executive Committee, Council Auditor**
SUBJECT:	**ITD FY13 Annual Report per Ordinance Chapter 23, Part 4, Section 23.401**

Please find attached the FY13 Annual Report for the Information Technologies Division per Ordinance Chapter 23, Part 4, Section 23.401.

Thank you for the opportunity to serve your technology needs.

Please contact me at 904-255-8000 if you have any questions or concerns.

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ITD Background

ITD provides 24 by 7 technology support via 630-1818, EOC telecom support, website and intranet support and maintains 6500 desktops, radio towers/ equipment, 10,500 radios, 6000 telephones, 1300 cell phones, 1100 network switches, fiber infrastructure, connectivity to all COJ buildings and 220 remote locations, 2 datacenters, 300+ applications. ITD supports technology needs for all city departments, Constitutional officers and State funded entities like Court administration and SAO.

Strategy

ITD has a 3 prong strategy - $$ Focused, City Focused and Citizen Focused to help support and advance the city's priorities of Economic Development, Quality of Life and Efficient Government while sustaining technology operations.

Budget and Personnel

ITD's FY13 Budget is $29.9M, with a headcount of 137. The budget is 37% lower than FY09 and 18% lower than FY12. The headcount is 30% lower than FY09 and 4% lower than FY12. The value added by ITD over the last 8 months was $4.34M with a combination of cost savings, cost avoidance and revenues.

Awards and Media Coverage

ITD has won multiple awards and was instrumental in getting Jacksonville placed on several Top 10 lists and getting national and local media coverage. Significant awards are 1) Government Computer News (GCN) award for the JaxReady mobile app 2) Jacksonville named in the Top 10 Large Digital Cities list.

Accomplishments

- High speed Internet – 1Gig/10Gig Internet – ITD is bringing in high speed Internet to COJ and sharing it with independent agencies with significant taxpayer savings
- New transparent Customer Billing model - Customers had complained about the lack of transparency in ITD billing for many years and ITD has worked on an extremely detailed, fair and transparent Cost Allocation and billing model which will be piloted in FY14 as a parallel bill
- ITD was restructured to streamline and flatten the organization and to do more with less
- Developed 5 year Technology Infrastructure and Enterprise solutions plans for COJ
- Many IT processes improved to increase efficiency and communication with our customers
- Deployed JaxAnalytics- Finance (BI solutions) to provide insight into FAMIS / finance data
- Brought 2 technology conferences to Jacksonville (Hyatt)
- Deployed many Mobile apps – JaxReady, JaxHapps, JaxLibrary, Parker & JaxFerry
- Deployed All-in-one Dashboards for Operations - CARE, AVL , ops and GIS data
- Many automation solutions implemented – Pension Opt-in, FAMcare, Oracle benefits
- Reclaimed PCs and reduced fleet
- Implemented multiple cyber security measures

Collaboration

- Multiple collaborative projects with JSO, Clerk, JEA, JTA, JPA, JAA, School Board and UNF
- Currently renegotiating contracts as a consolidated entity (with independent agencies and JSO) to save taxpayer money
- Sharing knowledge and processes with each other via Monthly Jax Metro IT meetings
- Collaborating to source new software together and share services when it makes sense
- Formed a CIO Advisory Panel with Industry CIOs to advise the City on technology strategy, 5 year vision and direction
- High speed Internet – 1Gig/10Gig Internet – ITD is working to bring in high speed internet to COJ and sharing it with independent agencies with significant taxpayer savings

IT Governance – Information Technology Executive Committee

The Information Technology Executive Committee (ITEC) was established to review and prioritize IT projects submitted for approval. The mission of ITEC is:

- Ensure alignment of IT services and resources with COJ and Constitutional's business needs.
- Determine and enforce demarcation of centralized and decentralized IT services.
- Provide oversight and approval of an annual IT Investment Plan that identifies the priorities, IT resource requirements, and estimated funding levels for new IT initiatives.
- Provide input and approve the development and implementation of the Information Technology Vision, Mission and Strategic 5 Year Plan and Roadmap.

5 year Strategic Plan

Goal of the 5 Year Enterprise Solutions Plan:

- Improve the quality of interaction for the citizens with the Government
    - With mobile apps, online website, credit card payments, usability
- Make Jacksonville a city where it is a pleasure to do business
- Improve efficiency in government (automating processes and paper)
- Take City Hall to the citizens versus having them come to City Hall
- Reduce 300+ current systems to a more reasonable set of applications

ITD Enterprise Infrastructure 5 year plan

- Projects to refresh technology critical to all Operations that is at end-of-life and high risk of failure
- Storage Area Network (SAN) Replacement, Server, Network Equipment, UPS refresh and Disaster Recovery

ITD Enterprise Solutions 5 Year plan

- Conducted assessment of critical enterprise applications
- Evaluated applications against criteria of importance and level of risk and assigned a ranking
- Obtained Budgetary quotes from vendors for financial forecasts and resource requirements
- Developed timelines for a 5 year plan
- Enterprise Solutions include: ERP, Permit Management, Document Management, CRM, Asset Tracking and Management, AVL, Grants Management, Global Online Payment, Website consolidation and rebranding

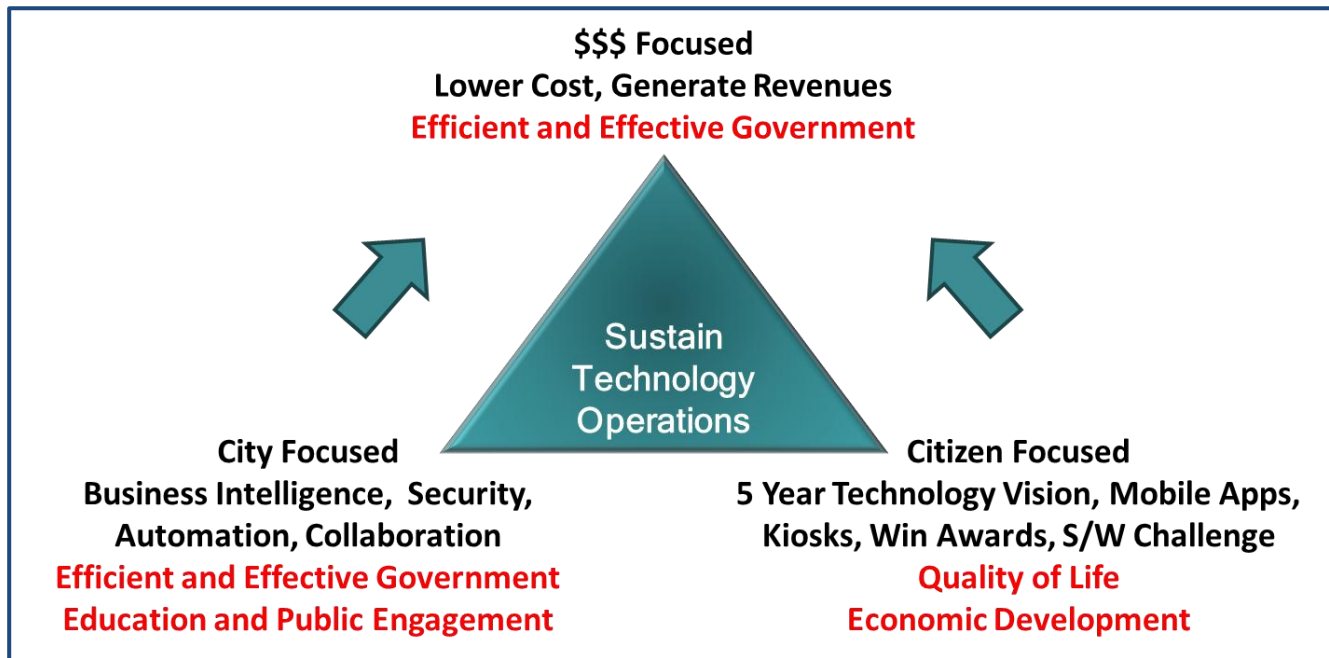# Information Technologies Division FY13 Annual Report

Vision
To be an acknowledged Center of Excellence; enhancing Jacksonville's future through technology.

Mission
Demonstrating strategic leadership and excellence by providing innovative, reliable and cost effective technology solutions for our customers and partners

Strategy
ITD has a 3 pronged strategy - $$ Focused, City Focused and Citizen Focused to help support and advance the city's priorities of Economic Development, Quality of Life and Efficient Government while sustaining technology operations.

$$$ Focused
Lower Cost, Generate Revenues
Efficient and Effective Government

Sustain Technology Operations

City Focused
Business Intelligence, Security, Automation, Collaboration
Efficient and Effective Government
Education and Public Engagement

Citizen Focused
5 Year Technology Vision, Mobile Apps, Kiosks, Win Awards, S/W Challenge
Quality of Life
Economic Development

Operational Summary

FY13 started for ITD with an 18% reduction in the budget from FY12 numbers and a resolution to do more with less. ITD provides 24 by 7 technology support via 630-1818, EOC telecom support, website and intranet support and maintains 6500 desktops, radio towers/ equipment, 10,500 radios, 6000 telephones, 1300 cell phones, 1100 network switches, fiber infrastructure, connectivity to all COJ buildings and 220 remote locations, 2 datacenters, 300+ applications. ITD supports technology needs for all city departments, Constitutional officers and State funded entities like Court administration and SAO. Most commonly provided services for all agencies are Payroll, FAMIS, JaxPro, time and attendance, telephones and network.

$$ Focused Strategy:

- ITD was restructured to streamline and flatten the organization and to do more with less
- Savings were derived from renegotiating contracts, reducing headcount in certain areas and rightsizing technology across the city
- Customers had complained about the lack of transparency in ITD billing for many years and ITD has worked on an extremely detailed, fair and transparent Cost Allocation and billing model which will be piloted in FY14 as a parallel bill
- Revenues were generated from antennas on city towers and from encouraging non-city agencies to use City resources (encouraging collaboration)
- RFPs were done for hosted Email solutions, PBX and Telecom maintenance

ITD has added value of $4.34 Million FY13 YTD.

	FY 2012	FY 2013 YTD (8 mths)
Cost Savings in millions	$ 2.90	$ 0.70
Cost Avoidance in millions (due to expertise of ITD)	$ 1.79	$ 1.47
Revenues (from non-city agencies + Grants) in Millions	$ 2.60	$ 2.17
Total in millions	$ 7.29	$ 4.34

City Focused Strategy:

- Developed 5 year plans for City of Jacksonville (COJ) Infrastructure and Enterprise solutions
- Created an ITEC (Information Technology Executive Committee) process to prioritize IT projects
- Numerous IT processes improved to increase efficiency and communication with our customers
- Developed and deployed Business Intelligence:
    - JaxAnalytics- Finance (BI solutions) to provide insight into FAMIS / finance data
    - JaxAnalytics- PW and CARE solutions to provide insight into PW and CARE data
    - JaxOps: Balanced scorecards for various Ops departments to increase focus on efficiency
- Deploy multiple automation solutions for our customers
- Security team was established to increase focus on cyber security
- Improving connectivity for remote locations with cost savings – win-win projects
- Collaboration – Many collaborative projects underway

- JaxMetro meetings with independent agencies and surrounding cities/counties monthly
- Consolidating maintenance on vendors such as Oracle, ESRI and Microsoft
- 1Gig/10Gig internet being shared with considerable savings
- UNF MS students collaborated to develop 2 IT projects as part of their curriculum: Lobbyist Database and Value Adjustment Board

Citizen Focused Strategy:

- Goal: Get national recognition for Jacksonville as a vibrant growing city/ increase Eco Development
  - Won multiple awards, including: Jacksonville on the Top Digital City list and other Top 10 lists
  - Numerous positive news articles and accolades in Gov Tech, TU, WJCT Radio and 904 Magazine
  - Spoke at multiple conferences and presented Jacksonville as a well accomplished city with a lot to offer
  - Brought 2 conferences to Jacksonville
- Goal: Take the City government to the citizens:
  - Mobile app strategy, released 2 so far – JaxReady and JaxHapps. Getting ready to release another one
  - Website enhanced to support more online transactions and interactions

Key Accomplishments and Initiatives

<u>Awards and Positive Media (National and Local) Coverage</u>

- Government Computer News (GCN) award for the JaxReady mobile app – Oct 2012
- Jacksonville named in the Top 10 Large Digital Cities list – Nov 2012
- Jacksonville in the Top 10 Cities where America's Tech Future is taking shape – Forbes 2012
- Jacksonville #2 in The Cities Winning the Battle for America's Biggest Growth Sector – Forbes 2013
- GovTech Articles*:*
    - ***NEW** Articles on Big Data Analytics and it's Challenges: http://www.govtech.com/policy-management/Big-Data-Raises-Big-Questions.html*
    - *Article on Jaxhapps boosts Jax's Economic Development: http://www.govtech.com/e-government/New-App-Helps-Jacksonville-Fla-Boost-Economic-Development.html*
- Times Union Articles
    - *http://jacksonville.com/news/metro/2012-09-10/story/jacksonville-city-government-focus-more-data-analysis-difficult-money*
    - City hopes app, website will help promote Jacksonville events - *http://members.jacksonville.com/news/premium-news/2013-03-11/story/city-hopes-app-website-will-help-promote-jacksonville-events?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+JacksonvillecomNews+(Jacksonville+Local+News+%E2%80%93+Jacksonville.com+and+The+Florida+Times-Union*
- 904 Magazine Article:
    - ***NEW **First Coast of Technology – recognizes Local Government efforts in boosting Jacksonville's technology sector - Article on Pages 34 thru 36 here: http://trendmag2.trendoffset.com/publication/?i=152520&p=32*
- Tech Tuesday – WJCT Radio
    - 10/20/12 – JaxReady GCN award
    - 12/11/12 – Top Digital Cities award

<u>Automation, Upgrades and Actionable Intelligence Solutions</u>

- Procurement BID notification emails to vendors on BID releases – a huge success with vendors
- JFRD CAD 911 GIS Dashboard - allow tracking vehicles and asset for efficient dispatch
- Multiple JaxAnalytics solutions – Finance, PW and CARE to provide insight to Ops
- Upgraded Oracle HRMS to R12 and supported change from Aetna to BCBS in time for Open enrollment
- Implemented off the shelf FAMCare (BHS) solution to Upgrading or integrating 3 homegrown apps
- Implemented Oracle Discoverer to provide a reporting solution for HRMS (savings
- Pension Opt in –electronic notification
- Developed 5 year Enterprise Solution plans to consolidate and reduce 300 supported apps to a lower number
- Created/Updated maps/layers of Council districts and JFRD fire stations, Evacuation zones, ADA pavements, fire hydrants, etc.

- Multiple GIS-AVL-CARE comprehensive dashboards – Mosquito control, Solid waste, etc.
- Provided the Address Point File to JSO to facilitate improved crime analysis and use in e-911 systems. This has been agreed to by all parties as the most important element needed to resolve public safety computer aided dispatching address and location issues.
- GIS Analysis for Gambling Control: Provided focused commercial enterprise analysis /custom map book to assist the Illegal Gambling control inspector to significantly improve efficiency and results

Mobile Apps: and Website

- JaxReady – Emergency preparedness app – won GCN Award
- JaxHapps – City wide events app
- JaxFerry – aimed at increasing traffic on the Ferry
- Rebranded JaxHappenings website

Infrastructure & Security

- Upgraded phones at Police Memorial Building and Prison farm (574 phones) & 65 digital phones (VOIP) in Fleet
- PC reclamation to reduce PC fleet (eliminate duplicate devices & save money) and save money in license true up - $34K+
- Upgraded and patched 394 servers – prevent attacks and viruses
- Constantly upgrading servers, software and hardware to prevent from becoming end-of life
- Upgraded Wifi access points (25 WAP) in Ed Ball
- Complete rollout of MS Office 2010
- Developed a 5 year plan to refresh 8 year old infrastructure across the city
- PC refresh for FY12 nearing completion and FY13 in planning stage
- Multiple cyber security initiatives & policies implemented – https internet filtering, strengthening and expiring passwords, screen lockout, CJIS, Wifi security, etc.
- Proactively identified issue with Lenovo PCs and ensured the vendor fixed via warranty ($75K cost avoidance)
- Support of EOC and Cecil Field

Collaboration

- Currently renegotiating contracts as a consolidated entity (with independent agencies and JSO) to save taxpayer money
- Sharing knowledge and processes with each other via Monthly Jax Metro IT meetings
- Collaborating to source new software together and share services when it makes sense
- Formed a CIO Advisory Panel with Industry CIOs to advise the City on technology strategy, 5 year vision and direction
- High speed Internet – 1Gig/10Gig Internet – ITD has been working to bring in high speed internet to COJ at a significantly lower cost
- Fiber/ Hi-speed network –collaborating with multiple partners to share infrastructure and save taxpayer funds

- Implemented creative and cheaper solutions to improving network/internet speeds at smaller remote locations

Revenue Generators

- Conferences brought to town by individuals in ITD – Economic development
    - CIO (Large govt jurisdictions) conference in September 22nd – 26th at the Hyatt
    - ESRI GIS conference in April 2013 at the Hyatt
- Hosting servers for Early Learning Coalition- revenue to ITD of $18K/year
- MetroPCS hung antenna on COJ radio tower - $25K annual
- Revenue from public facing phones contract
- Revenue from non-city Agencies, DCSB, UNF, City of Atlantic Beach, Neptune Beach, JEA, etc. sharing the county wide Radio system
- Grants:
    - Received $300K+ in grants for radio and computer equipment.
    - The Radio Group was awarded $112,784 in grant funding for the upgrade of twenty (20) remote mounted radio control stations to support Public Safety.
    - As Unit Lead for the EOC, received $196k in grant funding to upgrade the EOC computers.

Cost Savings

- GIS data migration: Migrated 50 applications from Oracle to Microsoft SQL saving the city $300K hardware cost and $30K annual maintenance fee.
- The BID Official Payments project provided the Building Inspection group with an alternative to online payment for an estimated $200K per year savings in transaction fees
- Downsized the Service Desk & Operations teams from 13 full time agents to 9 full time and 2 part time agents for 24 by 7 coverage –Annual savings - $140K
    - Sun Server Maintenance Renewal – phased out 2 GIS servers for a cost savings of $20,260.50
    - Purchased new switches with extended warranty and decommissioned older switches with higher maintenance cost for a cost savings of $21,234.26.
    - Creatively purchased Microsoft Office Licenses for Jacksonville Public Library to achieve a cost savings of $116K over 3 years
    - PC Reclaim – cost savings of over $65,000 related to pc refresh and $104,000 in cost avoidance related to Microsoft license compliance
    - Discontinued call forward capabilities to various city agencies for an approximate annual lease line of savings of $8,000.00
    - Migrating cellular wireless services from Verizon to Sprint for an approximate annual savings of $54,000.00 and a transitional credit of $48,350.00. Savings total amount is contingent on all remaining Verizon devices moving to Sprint services.
    - Disconnected unused lease line services during non-election periods that terminated at the Supervisor of Elections Call Center Gateway location for an approximate savings of $33,360.00.

Cost Avoidance

ITD identified several cost avoidance opportunities such as right-sizing annual licensing and maintenance agreements and leveraging internal expertise more efficiently. Most notable achievements include:

- Oracle R12 Upgrade: The Oracle upgrade was mandated by the vendor, and the option not to upgrade would have cost the city $75K per year increase in maintenance fees. Vendor implementation would have cost the city an additional $500k which was a net savings for the city. Moreover, while many users reported degradation in system performance, our team was able to maintain and slightly improve processing time.
- Maximo-Animal Care Inventory: Configured the existing Maximo application to track inventory items for Animal Care and Control. The acquisition of a new application would have cost the city approximately $50K.
- Avoided $177,450 in vendor ticket costs through Service Desk first call resolution of 2,535 issues and requests
- Achieved Cost avoidance by negotiating to prevent increases in maintenance:
    - eDMZ (secure password management)maintenance renewal –$2,247
    - Enterprise Vault (email archiving) maintenance renewal –$7,111
    - Avocent (remote server management) maintenance renewal –$600
    - VMware Enterprise License support –$2,071
    - HP Mercury (testing) Software Support Renewal –$7,000

Process Improvements/Efficiency

- Consolidated ITD to Ed Ball 9th floor with the exception of the Data Center Operations
- Led a session for Operations Directors/ Chiefs on Org management with Balanced Scorecard
    - Supporting creation of Balanced scorecards for ITD, Procurement, JFRD, PW
- ITD Intake process–rolled out Oct 2012
    - Customer communication with ITD improved with automated solutions & IT Coordinator
- ITEC – Information Technology Executive Committee -ITD project prioritization process – rolled out Nov '12
- ITD FY14 Cost allocation model - provide more transparency and fairness in ITD billing; pilot parallel bill
- ITD internal Inventory Cleanup:
    - Consolidated all IT Inventory on the 9th floor and implemented cleaner process for tracking all equipment/parts entering and leaving ITD
- ITD citywide Asset inventory – rollout Dec 2012
    - Annual inventory for phones, PCs, Wifi, cell, wireless cards, radios, printers & scanners etc.
    - All IT assets across the city have been verified with help from our customers
    - Over 15,000 inventory changes have been made to IT assets in Maximo since January due to implementation of new, more detailed ITD billing model
- ITD citywide technology inventory tracking process – improve life cycle tracking of technology assets
    - Exploring asset tracking tools
- ITD internal process documentation & improvements - ongoing
    - All internal ITD processes are being documented and cross-functional process improvements are being performed

Customer Satisfaction

ITD Customer Satisfaction Survey was sent out to all COJ customers (6000+). We had 441 customers respond. The average rating for ITD was better than expected at 3.89 out of 5.

Category	Rating
Overall Performance	3.89
Effective Communication	3.92
Follow up on Service Requests	3.97
IT Cost Transparency	3.29
Quality of Solutions	3.85
Timeliness of Solutions	3.83

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ITD initiatives supporting Economic Development and Quality of Life:

Economic Development Initiatives: Technology is a critical part of any business. Fiber Infrastructure and internet bandwidth can help incentivize Economic Development and to create incubators. **Quality of Life Initiatives:** Citizens expect technology to make life easier for them**.**

IT Governance - Information Technology Executive Committee

The Information Technology Executive Committee (ITEC) was established to review and prioritize IT projects submitted for approval.

- Increase understanding and transparency of costs, risk, and benefits of ITD investments
- Increase the probability of selecting investments that have the potential for the highest returns
- Increase the likelihood of success of execution
- Due to reduced capacity, ensure laser focus on appropriate efforts
- Reduce surprises relative to IT cost and delivery

ITEC Mission

- Ensure alignment of IT services and resources with COJ and Constitutional's business needs.
- Determine and enforce demarcation of centralized and decentralized IT services.
- Provide oversight and approval of an annual IT Investment Plan that identifies the priorities, IT resource requirements, and estimated funding levels for new IT initiatives.
- Provide input and approve the development and implementation of the Information Technology Vision, Mission and Strategic 5 Year Plan and Roadmap.
- Establish stakeholder forums with a common set of business technology issues or opportunities, to participate in the IT governance as ad-hoc sub-committees to the ITEC.

Business Function Benefits

- Increase understanding and transparency of costs, risk, and benefits of ITD investments.
- Increase the probability of selecting investments that have the potential for the highest returns.
- Increase the likelihood of successful execution.
- Due to reduced capacity, ensure laser focus on appropriate efforts.
- Reduce surprises relative to IT cost and delivery.
- Ensure ITD is able to generate revenue to defray some or all of the cost of ITD operations.

ITEC Organizational Structure

ITEC is composed of five (5) permanent members. Permanent members will collectively represent those organizations that utilize the majority of services provided by ITD.

The composition of the Information Technology Executive Committee membership includes:
- Deputy Chief Administrative Officer - Committee Chair – Voting Member
- Chief Information Officer –Committee Chair in the absence of DCAO – Voting Member
- Chief Administrative Officer – Voting Member
- Chief Financial Officer – Voting Member
- Public Information Officer – Voting Member
- Office of General Council – Non-voting Member
- Budget Manager – Non-voting Manager

Communities of Interest (COIs) will form ad hoc sub-committees as needed.

Scope and Responsibilities

ITEC is responsible for reviewing the financial, strategic and risk implications of proposed and active IT initiatives throughout the project life cycle. The activities performed in executing these responsibilities include, but are not limited to the following:

- Assess all IT projects based on cost, benefits, risk avoidance and potential return on investment.
- Validate and approve projected business case savings.
- Provide ongoing oversight of all active technology projects based on risk, financial viability and annual project portfolio. Recommendations for action will be derived from a decision process that takes into consideration pre-selected parameters and operational factors.
- Ensure business processes and technology projects employ best practices.
- Prioritize IT projects based on the following criteria:
  - Baseline / Breakfix - Non-Discretionary and required to maintain COJ Operations
  - Regulatory and Compliance – Non-Discretionary due to Regulatory or Administrative mandate
  - Discretionary/Strategic – As Time, Resources, Budget allows; Enterprise or multi-organizational impact
  - Upgrade/Refresh – Required to retain vendor support, obtain new functions and fixes, or Upgrading or integrating end-of-life equipment
- Discontinue any project not meeting the continue criteria and reassign remaining portfolio funds to the next project requiring funding.
- Re-prioritize project funding and approval based on business needs, reassign portfolio funds to new or established projects and remove scope and funds from other, less critical projects.

Benefit, Improvements & Results

The benefits are a well-defined technology project portfolio with a set Pro Forma spending that is established on an annual basis. Results from this process include an annual improvement of portfolio variance, project scope variance, requirements met, cost and schedule control and improvement to overall technology project customer satisfaction.

Project Request Process
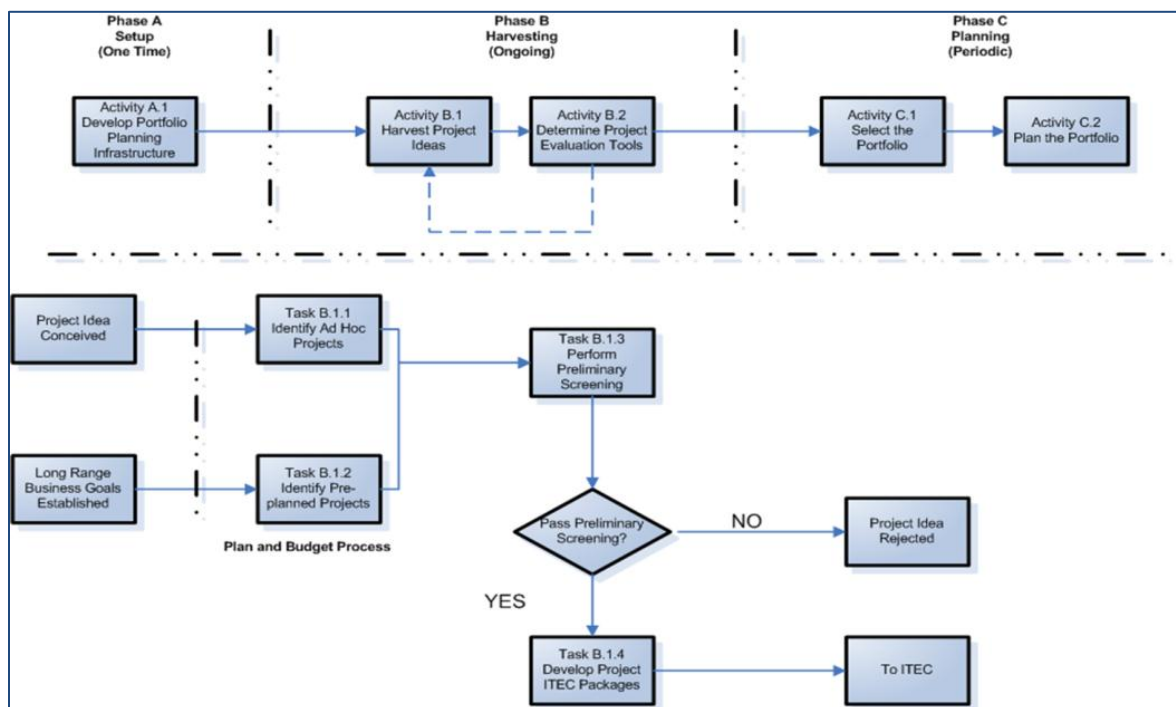
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5 Year Plan

Overview

Goal of the 5 Year Enterprise Solutions Plan:
- Improve the quality of interaction for the citizens with the Government
    - With mobile apps, online website, credit card payments, usability
- Make Jacksonville a city where it is a pleasure to do business
- Improve efficiency in government (automating processes and paper)
- Take City Hall to the citizens versus having them come to City Hall
- Reduce 300+ systems to a more reasonable set of applications
    - Some are COTs (commercial off the shelf) and some homegrown
    - More integrated and easier to maintain
    - Decrease manual steps/data entry

Process to create a 5 year Enterprise Solutions Plan
- Review Vision and Organizational goals of COJ
- Perform strategic planning/ assessments
- Assess Risk versus Importance (quadrants) to help prioritize the enterprise solution and the systems
- Gather information about build versus. buy versus lease
- Find Vendors in this space and get budgetary quotes
- Create a 5 year plan document with:
    - Enterprise Solutions with the biggest impact
    - Current Systems that will be Upgraded or integrated
    - Costs and timelines based on availability of money and staff resources
- Perform an annual review of the 5 year plan to align with current priorities
- Present 5 year plans to ITEC for prioritization
- MBRC makes the final recommendation to the Mayor
- City Council receives the proposed ITD 5 year plan with the associated financial plan
- Once adopted by the City Council – it becomes the City's IT Plan

Enterprise Infrastructure 5 year Plan – Refresh Projects (Keep the Lights On)

One of the greatest threats to any technology investment is premature obsolescence. The City has been successful in protecting its technology investment by investing in technologies that are tried and proven. Unfortunately, due to the budget decreases over the last several years, many of our Infrastructure technologies are seriously at risk. ITD has established a strategy to limit the risk by:

- Establishing refresh programs based on realistic product life cycles.
- Looking forward to identify and respond to trends in the marketplace.
- Minimizing costs and complexity in managing the technology infrastructure by establishing corporate technology standards.
- Collaborating with key Metro business partners to establish technology standards to move toward a reasonably homogeneous technology environment, which is supportable and maintainable at minimal costs and can be shared across all parties.

The following projects refresh technology critical to all Operations that is at end-of-life and high risk of failure. Order of refresh was determined by assessing all components by age of component and risk level. Refresh schedules Upgrading or integrating equipment on 5 – 8 year schedules.

Rank	Project	Description
1	Storage Area Network (SAN) Replacement	Upgrading or integrating the existing end-of-life Storage Area Network (SAN) solution to avoid additional city-wide system slowdowns and outages (3 major within last 9 months) with newer technology that is more cost effective, provides faster disk access speeds and additional storage capacity.
2	Server Refresh	Establishes a refresh cycle to Upgrading or integrating older, failing servers on which critical Operations and Services depend. Many servers are past end-of-life and out of warranty. Recently "broken" servers were replaced with older servers retained for parts but inventory is depleted. Refresh will 1) ensure efficient response to server issues. 2) Reduce costs of labor and lost productivity due to server outages and "crashes." 3) Enhances application performance and system stability.
3	Network Equipment Refresh	Establish a recurring refresh cycle to Upgrading or integrating network devices (e.g. Wifi access points) each year resulting in all network equipment being replaced every 8 years. 1) Minimize network outages and business interruptions preventing productivity loss 2) Eliminate unnecessary equipment expenditures due to unsupported devices
4	Network UPS Refresh	Establishes a refresh cycle to Upgrading or integrating older, failing Uninterrupted Power Supply (UPS) devices, ensuring data and voice power continuity during power outages.
5	Disaster Recovery	Ensure uninterrupted public access to and continuation of mission critical operations and services following disasters/disruptive events.

Note: PC Refresh is being handled separately via Budget Office.

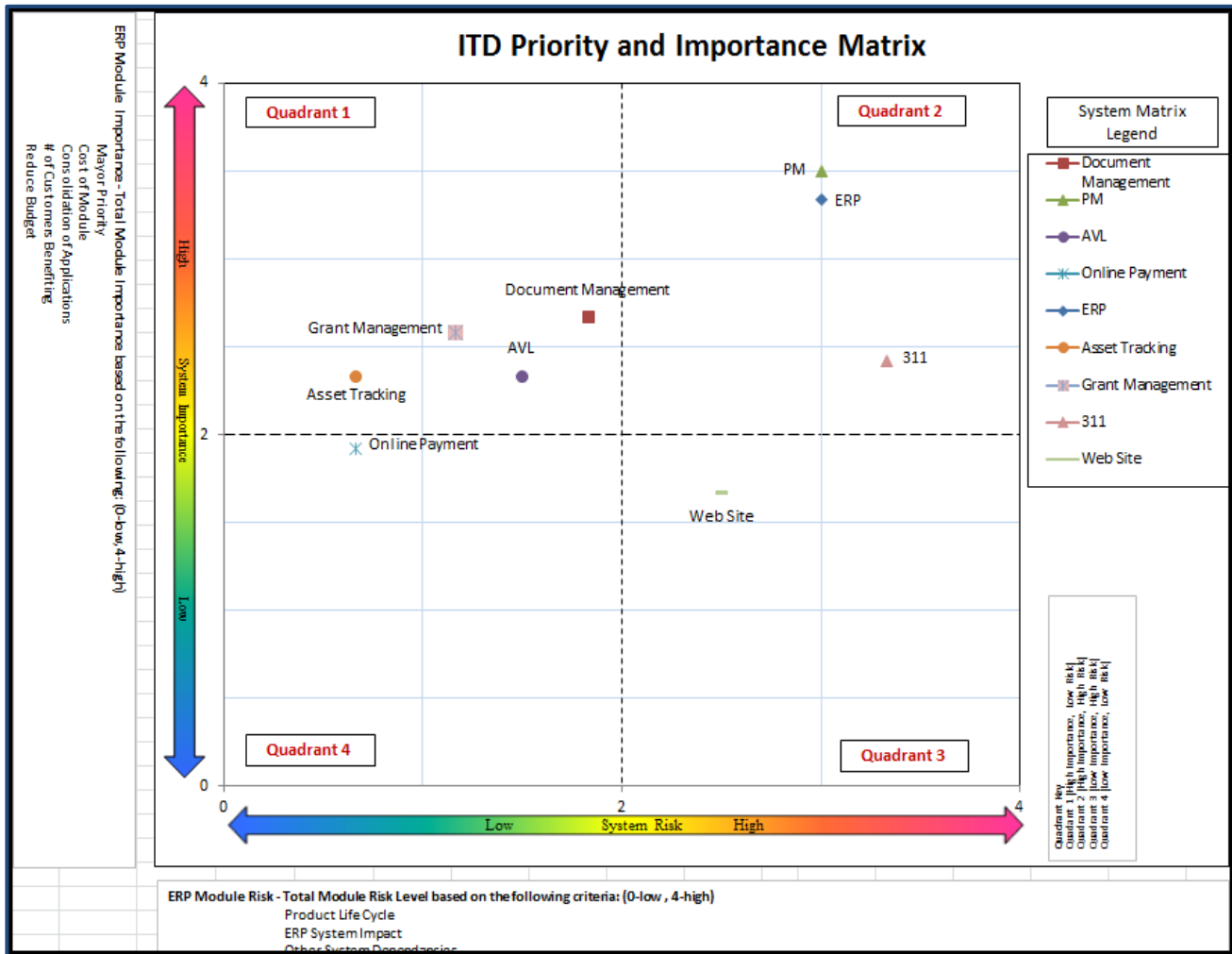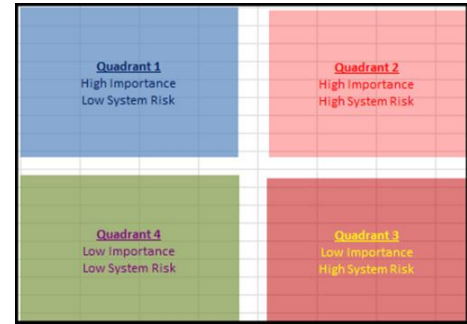### Enterprise Solutions 5 year Plan

The analysis began with an assessment of critical applications such as those supporting Finance, HR/Payroll, Building Inspections, JFRD and JSO. Each application was evaluated against criteria of importance and level of risk and assigned a ranking.   Sample Evaluation Criteria include:

Importance*: Total Module Importance based on the following: (0-low, 4-high)*	**Risk:** *Total Module Risk Level based on the following criteria: (0-low, 4-high)*
Supports City Priorities	Product Life Cycle
# of Customers Benefiting	BID System Impact
# of Customer Enhancement /New System Requests	Other System Dependencies
Application Total Cost of Ownership	Knowledge Drain
Potential to reduce # of Applications	Implementation Impediment (e.g. # of interfaces)
Potential to Reduce Budget	Support Internally (Yes = 0, No = 4)

Importance/Risk were assigned to Quadrants with Quadrant 2 (in the upper right) being the highest rank – High Importance; High System Risk. The applications that fall into the Permit Management (PM) Enterprise Solution ranked the highest in Quadrant 2, with Enterprise Resource Planning a close second. I
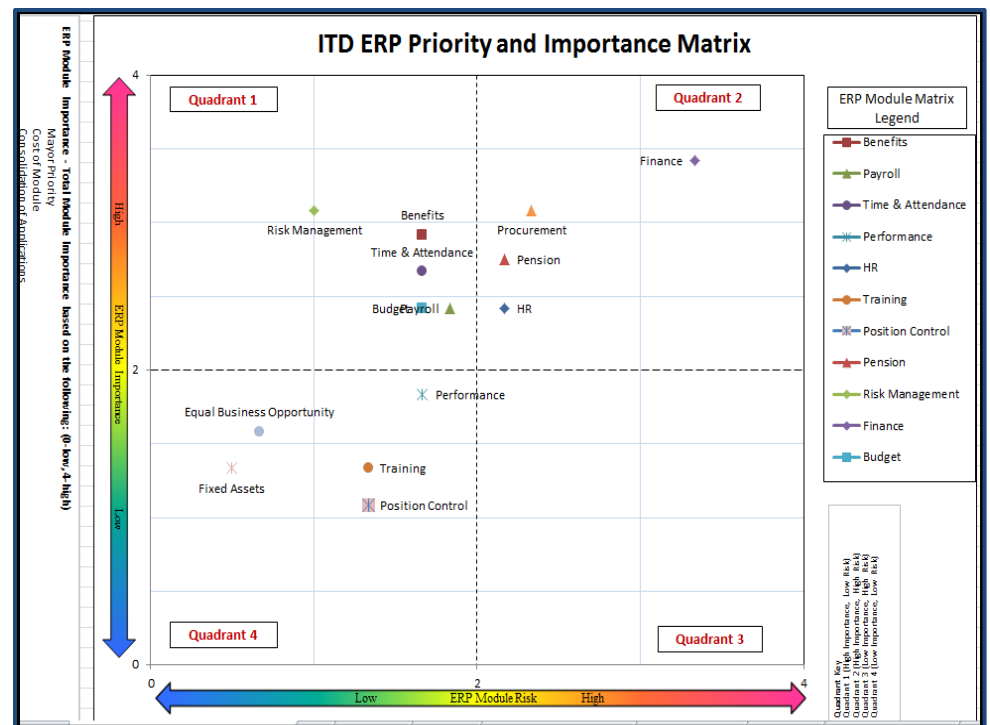
The Permit Management Enterprise Solution includes upgrading 10 or more custom developed applications as depicted in the diagram below.

The custom developed Building Inspection (BID) system comprises multiple applications and interfaces currently needs to be upgraded, with numerous active enhancement/change requests, and no ITD FTEs with experience with the system.
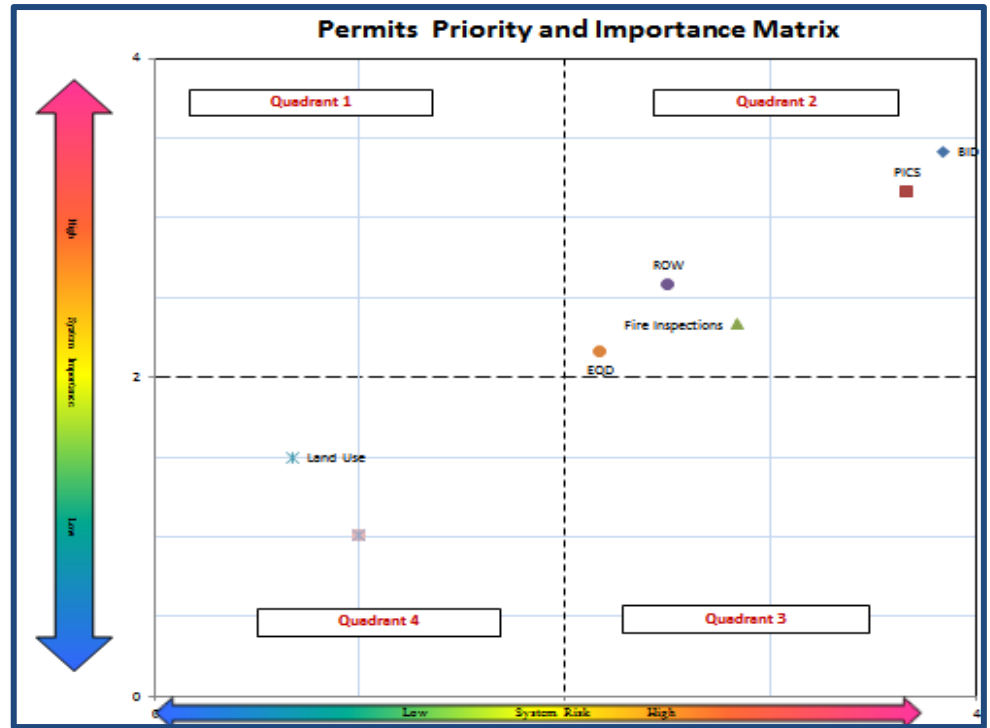
Applications within the Enterprise Resource Planning domain, for example, are in the matrix below. Integrating or replacing these systems with a commercial, hosted solution has the potential to significantly reduce cost by Upgrading or integrating FAMIS, Budget Prep, Oracle Position Control, Oracle HRMS, Employee Performance Management; reduce operational expenses by maintaining a single ERP platform, drive down the need for disaster recovery of multiple systems, faster reporting, reduce long term Business Intelligence costs by providing a central, authoritative data source, and reduce data warehouse costs long term.

Enterprise Solutions 5 Year List

Rank	Project	Description
1	Enterprise Document Management	Complete the conversion/implementation of an enterprise-wide document management and retention solution to optimize document storage and retrieval while ensuring compliance with applicable State and City document retention policies. The proposed solution will result in reduced operating costs by avoiding the need to house, locate and manage millions of paper records and avoid significant increases in maintenance cost by migrating off of the original solution.
2	Enterprise Permit Management (EPM)	Upgrading or integrating 10 or more home grown, end-of-life applications with a vendor solution that could be used by several City departments for their permitting, licensing, design review, inspections, and violation and citations processing and tracking. Reduce maintenance costs and provide faster turn-around time to the public and contractor/builders.
3	Enterprise Asset Tracking	Phased improvements will alleviate the need to conduct annual asset inventory reconciliation efforts that currently impact every agency. The end-state solution will provide a uniform methodology for tracking IT assets and maintaining an accurate, real-time inventory in the enterprise Asset Management System. The end-state solution, for example, will associate all current non-enterprise and enterprise devices with an employee, applicable department, division, or City agency and will ensure automated updates across organization.
4	Enterprise Customer Relationship Management (CRM)	Enable the tracking and reporting of customer/citizen issues, collect data related to service requests or issues, provide reporting visibility into performance measures. The solution will leverage hosted, web based applications while integrating mobile functionality, incorporate the use of Interactive Voice Response (IVR), leverage the current CISCO technologies and/or partner with JEA; deploy "311" type functionality.
5	Global Online Payment	Provide a single point of entry on COJ.net for citizens to purchase and render electronic payment for all services eliminating the need for disparate Agency oriented systems. This consolidated revenue collection and purchasing capability will have added security and improved data transmission capabilities.
6	Enterprise Resource Planning (ERP)	Potentially reduce software maintenance and support by 30-70% by Upgrading or integrating FAMIS, Budget Prep, Oracle Position Control, Oracle HRMS, Employee Performance Management; reduce operational expenses by maintaining a single ERP platform, drive down need for disaster recovery of multiple systems, faster reporting, reduces long term BI costs by providing central source of data, reduce data warehouse implementation costs long term.
7	Auto Vehicle Locator (AVL)	Upgrade current technology, purchase additional units and new telemetrics resulting in saving in fuel costs, less citizen complaints and potentially reduce Risk to the City.
8	COJ Website Consolidation/Rebrand	Reduced operational costs of managing and maintaining multiple systems. Reduces cost via web self- service. Reduces call center traffic/costs, reduces infrastructure costs to maintain unused data. Provide more intuitive navigation to critical data e.g. COJ KPIs & metrics, Economic Development, Military/Veterans Affairs.
9	Grants Management	Currently there are several Grants Management solutions (etc. SAMIS, GIFTS, CursorControl) in use throughout the City. Several organizations are investigating new vendor solutions. This effort will evaluate the possibility of replacing multiple solutions with an enterprise solution.

Enterprise Solutions 5 Year Timeline

Rank	Enterprise Solutions w/ 2014 Projects
1	SAN Disk Replacement
2	Server Refresh - 5 year Strategy
3	Network Equipment Refresh - 8 year Strategy
4	Network UPS Replacement - 6 year Strategy
5	Disaster Recovery
6	Document Management
7	Mosquito Control System (MCMS) Replacement
8	Permit Mgt.
9	Solid Waste Collection System Enhancement
10	Asset Mgt (Maximo)
11	Customer Relationship Mgt / 630 -CITY
12	BHS Fam Care Enhancements
13	Global Online Pay - Ecommerce
15	Library Pharos Replacement
16	Enterprise Resource Planning Solution
17	Enterprise Auto Vehicle Location Solution
18	Web Rebranding/Collaboration
19	Enterprise Grants Management Solution

Timeline columns: 2013 (Q2, Q3, Q4), 2014 (Q1–Q4), 2015 (Q1–Q4), 2016 (Q1–Q4), 2017 (Q1–Q4), 2018 (Q1–Q4)

Timeline entries:
- SAN Disk Replacement
- Server Refresh 1st Year, 2nd Year, 3rd Year, 4th Year, 5th Year
- Network Refresh 1st Year, 2nd Year, 3rd Year, 4th Year, 5th Year
- UPS Refresh 1st Year, 2nd Year, 3rd Year, 4th Year, 5th Year
- Disaster Recovery 1st Year; DR Test
- Convert Existing 9 Customers – City Council, JSO, BID, EQD, Parks, ITD, HR, JCC, …
- Implement New Groups — Tax Collector, Risk, Procure
- MCMS Replacement
- RFP Process/Contract; BID; Env; Plan; OCC; Municip
- Fire; Land Use/Zoning; Right of Way; Business Licensing
- Solid Waste Enhancements
- 7.5 Upgrade; EMS; Fleet Vendor Billing; Parks Inventory
- IT Inventory Phase 1; IT Inventory Phase 2; IT Inventory Phase 3; IT Inventory Phase 4 - Rollout RFID/Barcode
- CARE Stabilization; Mobile App; iCare Enh; IVR Enhancements
- BHS Fam Care Enhancements
- RFP Process; Parks; JPL; JFRD; Tax; Planning; EDC
- Library Pharos Replacement
- Requirements; RFP Process/Contract; Implementation
- Finance; HR; Position Control; Benefits; Fixed Assets
- Procurement; Payroll; Pension; Budget; Risk Mgt
- RFP; Upgrade Existing Groups; Implement New Groups
- Kentico Upgrade; JCC; EBO/JSEB; SP2010 Upgrade
- RFP Process; OGM; JFRD; EQD; Special Services; Parks; JSO; JPL; Housing