

## ***FY2014 City of Albuquerque IT Plan***

### **Introduction:**

The FY14 Information Technology (IT) Plan lays out the vision for the use of technology within the City of Albuquerque. The goal is to empower our City and expand government accessibility for our citizens and businesses city-wide through the smart use of technology. Specifically, this plan relates to the mission and functions of the Department of Finance and Administration Services (DFAS), Information Technology Services Division (ITSD).

The appropriate use of technology within City government will provide citizens with improved services while expanding the accessibility to City government for our constituents in Albuquerque and beyond. This plan sets out initiatives for FY14 in these four areas of interest:

1. Open Data Initiatives. (Gov 2.0)
2. Mobile Strategies. (“City Hall in the Palm of Your Hand”)
3. Constituent Engagement. (External, Citizen facing)
4. Employee Facing Applications. (Create internal efficiencies).

### **1 – Open Data/Web Initiatives.** *See attached list for specific projects*

Continue to build and expand upon ABQ View and ABQ Data (the City’s transparency and open data portals). Increase the number of datasets in the open data portfolio. Continue to enhance performance data. Continue to improve and foster Gov 2.0 initiatives within the City of Albuquerque.

- Develop a relationship with Code for America (CFA) and partner with them to bring an open-data coding event to the City of Albuquerque.
- Provide for [www.cabq.gov](http://www.cabq.gov) responsive design by upgrading to Plone 4.
- Provide for the shift to mobile device transactions on the City website.

### **2 – Mobile Strategies, “City Hall in the Palm of Your Hand”.** *See attached list for specific projects.*

Bring City services to citizens through mobile applications. All IT projects and applications need to be designed and evaluated to ensure that appropriate mobile access is provided (where it makes business sense). Central to this initiative is the 311 online and mobile applications from See-Click-Fix and ABQ311.

Continue to partner with City Departments in developing their mobile application portfolio; i.e., expand and compliment the Bio Park and Museum mobile applications.

### **3 - Constituent Engagement. (External, Citizen facing). See attached list for specific projects**

Identify business processes that are candidates for online services (e.g. bill pay, work-orders, team registrations/scheduling, park/facility reservations, and noise/party/barricade permits). Offer new ways to improve the difficult permitting process for applicants and the City. Continue to build upon the success of recently implemented online parking payments and renewal of business registrations by implementing alarm permit applications and payments in 4<sup>th</sup> quarter 2013. Specifically:

- League Management online, Parks and Recreation
- Early Childhood Development online pay, Family & Community
- Volunteer Management, Mayor's Office
- Permitting online, Planning and DMD

ITSD will facilitate and partner with the Dept. of Municipal Development (DMD) in their infrastructure and physical asset management solution, VueWorks. DMD has successfully implemented VueWorks enterprise Asset Management system and this application is currently managing:

- all the Traffic engineering signs
- all roadway striping (crosswalks, lane lines, double yellow lines, etc...)
- all roadway markings (bicycle icons, turn arrows, school x'ing, etc...)
- all roadway painted curbs (loading zones, fire lanes, etc...)

DMD is in the process of configuring VueWorks to manage:

- all traffic signals (reactionary work as well as preventative)
- all ITS infrastructure (traffic cameras, traffic control cabinets, etc...)
- storm drainage infrastructure (Manholes and Inlets)

Also in process is the integration of VueWorks assets into See-Click-Fix (ABQ 311 online application) and in the near future DMD will be in position to migrate off of KIVA and into EdgeSoft Enterprise Permitting. (Edgesoft is a companion product tightly integrated with VueWorks). This migration will provide for the streamlining of the permitting process of:

- Barricade and excavation permitting
- EPA storm water quality permitting (Federal mandate)
- Provide for on-line permit submittals, permit tracking, and workflow approvals
- Construction inspections

All of these solutions are:

- Integrated with the City's existing GIS system
- Licensed as enterprise solutions so other CABQ entities can easily jump on board and leverage the initial investment
- GASB 34 compliant

ITSD will facilitate and partner with the Planning Dept. to assess options to replace its Kiva application with intent to begin implementation in calendar year 2014. The new application will provide permitting, tracking, and enforcement functionality for code enforcement (zoning), building safety, and planning.

- The software will also interface with ProjectDox (ePlan) and is expected to accommodate other City permitting and licensing processes.
- This system will enable greater mobility for Planning staff by allowing them to connect to the system while in the field, providing access to work orders and relevant information such as zoning, variances, and permits.
- There is an online module that allows the public to submit, track, pay, and print permits as appropriate.

**4 - Employee Facing. (Creating internal efficiencies).** *See attached list for specific projects*

Application and Platform Rationalization. Continue to consolidate and simplify the application and platform portfolio by collapsing redundant functionality and legacy applications into enterprise applications and platforms. In particular:

- Replace and retire the Lotus Notes/Domino applications (CTS, HR Job Applications, and TRC). Move this functionality to Enterprise apps (ERP, NeoGov, and ServiceNow).
- Promote a shared systems (solutions) strategy. Deliver departmental solutions based on an enterprise vision. Implement solutions that are shared across City Departments with common business requirements (e.g. point-of-sale, case management, and asset management). Shared solutions consisting of a single-instance, enterprise versions should be considered ahead of department-specific solutions. Examples of recent shared system implementations include:
  - PeopleSoft
  - Kronos (automated time keeping across all City Depts.)
  - Yardi (facility lease and maintenance management across multiple City Depts.)
  - ServiceNow (self service Help Desk and IT service level management)
  - Siriusware Point of Sale
  - Plone web content management system

Data Center consolidation. Take full advantage of the City's primary and secondary data centers by consolidating Departmental data centers and closets into these two main datacenters. This will allow for a better utilization of compute resources and provide for Disaster Recovery. Departments will still manage and own their compute resources, but by consolidating into these two co-location centers, the City will reduce its overall cost for cooling, security, and energy expenses.

Create an on-premise/internal cloud service as an alternative option to off-premise cloud. When considering new applications, the business case needs to address criteria such as internal vs. external cloud hosting in order to establish which option would be more desirable based on cost and performance factors as well as the needs of the business.

The City will create an internal cloud environment through Virtual Servers connected to Storage Area Networks that utilize updated switches. An internal cloud environment will also be more efficient, save energy and will allow the City to start the upgrade of enterprise applications such as Email, Active Directory, backup/recovery/archive, and Kronos.

The City will also enhance its Disaster Recovery site with the same tools. This will provide high availability and disaster recovery.

Strengthen the Disaster Recovery Program by exercising failover continuity testing to the Pino yards fail-over site. Successful fail-over testing will be accomplished for all Tier 1 (high priority) applications. All other applications must be fully restored based upon the mean time to recover requirements as identified by the business owners.

Continue to expand and build a robust cyber security program that takes into account the following;

- Recurring security posture assessments. Address any gaps and implement proactive cyber security processes to address threats and security vulnerabilities
- Mature Layered Security Model. Ensure all of the components of cyber security are optimized and integrated for optimal results, (e.g. firewalls, intrusion detection/prevention, internet/web filtering, spam filtering, virus/malware protection, and patch management)

Mature the ITSD Information Technology Infrastructure Library (ITIL) program currently in place by fully developing the remaining ITIL Service Level Management processes and ensuring they are inculcated into all IT Operations. In particular:

- Develop an IT Services Catalog and Configuration Management Database (CMDB) using ServiceNow.
- Ensure all IT projects are assigned to project managers and are being managed within the Service Now project portfolio management tool.

Develop an IT services cost allocation model such that all IT costs are identified and attributed to services that can be measured by usage.

Determine the appropriate approach and methodology to replace the XP and Office 2003 desktop applications. Ease the burden of managing 5,000 end-point, desktops. This will require:

- Determining whether an enterprise fund can be used for a five-year, enterprise refresh cycle for the City desktop computing inventory (i.e. replace 1000 PCs each year citywide).
- Improving upon Tablet/Smartphone management (to also include Bring Your Own Devices) by instituting mobile device management tools and processes.

Improve and enhance the Network and Infrastructure, and Voice and data communications by reducing the recurring cost and dependence on leased lines, T1s and one flat rate phone lines (1FB) and by expanding the City Fiber network. Leverage the City's franchise agreements and continue to connect fiber to the city service buildings.

- b. Use Gigabit Wireless, where/when fiber is not feasible (as an alternative to metro fiber cabling). Leverage wireless backhaul technology to connect city service buildings, (up to five miles).
- c. Replace existing PBX switches with Voice Over IP (VOIP) technology. Continue the roll-out of citywide VOIP to city facility sites that currently have adequate bandwidth and a traditional PBX voice switch.

Community Broadband/Gigabit Albuquerque. Contingent upon voter approval, provide for a public/private partnership that will provide the citizens of Albuquerque a high-speed, fiber to the premise, gigabit bandwidth network. This will foster economic development and provide much needed bandwidth to businesses, non-profits, governmental entities, and residential citizens that require high bandwidth access to the Internet.

800 Radio System replacement for Public Safety and General Services. The current 800 MHz Radio System for Public Safety and General Services is past end-of-life and obsolete. The system is over 15 years old and replacement parts for critical components are becoming harder and harder to find. Work with Bernalillo County to determine a funding source and develop an RFP for system replacement.

Upgrade the Microsoft Exchange Email System to current version. Upgrade Microsoft Exchange Email System to the current version. The City's email and messaging system is outdated and will be at end-of-life in April of 2014.