



# 2014 / 2015 INFORMATION TECHNOLOGY ACTION PLAN

*Presented to*



*Client Locations*  
Coast-to-Coast

*Practice Locations*  
California  
Illinois  
North Carolina

1.800.806.3080

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## SUMMARY

During Fiscal Year 2012 / 2013, the IT Division conducted a comprehensive information technology assessment and master planning process. Representatives from all departments worked collaboratively to identify (then) current and future needs of all the departments. This process was not completed in time for the 2013 / 2014 budget process, so a five-year IT Master Plan was developed for 2014 / 2015 through 2018 / 2019 (*see attached Information Technology Master Plan Report*).

This 2014 / 2015 Information Technology Action Plan represents the first year recommendations from the IT Division that will be brought forward for the 2014 / 2015 budgeting process.

## BACKGROUND

The IT Division conducted a comprehensive information technology assessment and master planning process with representatives from each department participating. *CLIENTFIRST* Technology Consulting, independent specialists in municipal information technology, was engaged to manage the assessment and planning process. *CLIENTFIRST* has worked with hundreds of municipalities across the United States and does not resell hardware or software. *CLIENTFIRST*'s approach is not to simply submit a findings and recommendations report, but to collaboratively develop a complete list of projects and initiatives for the City to consider and/or implement over the next five years based upon citywide staffs' recommended priorities. Each project/initiative includes departmental feedback, recommendations for consideration and estimated budget if implemented.

The IT Master plan will be revised/updated annually with a special ad hoc committee. Each fiscal year's project/initiative list will be brought forward as an individual budget requests, and final project contract requests will follow City of San Gabriel normal purchasing processes.

### Future IT Division Principles, Goals & Focus

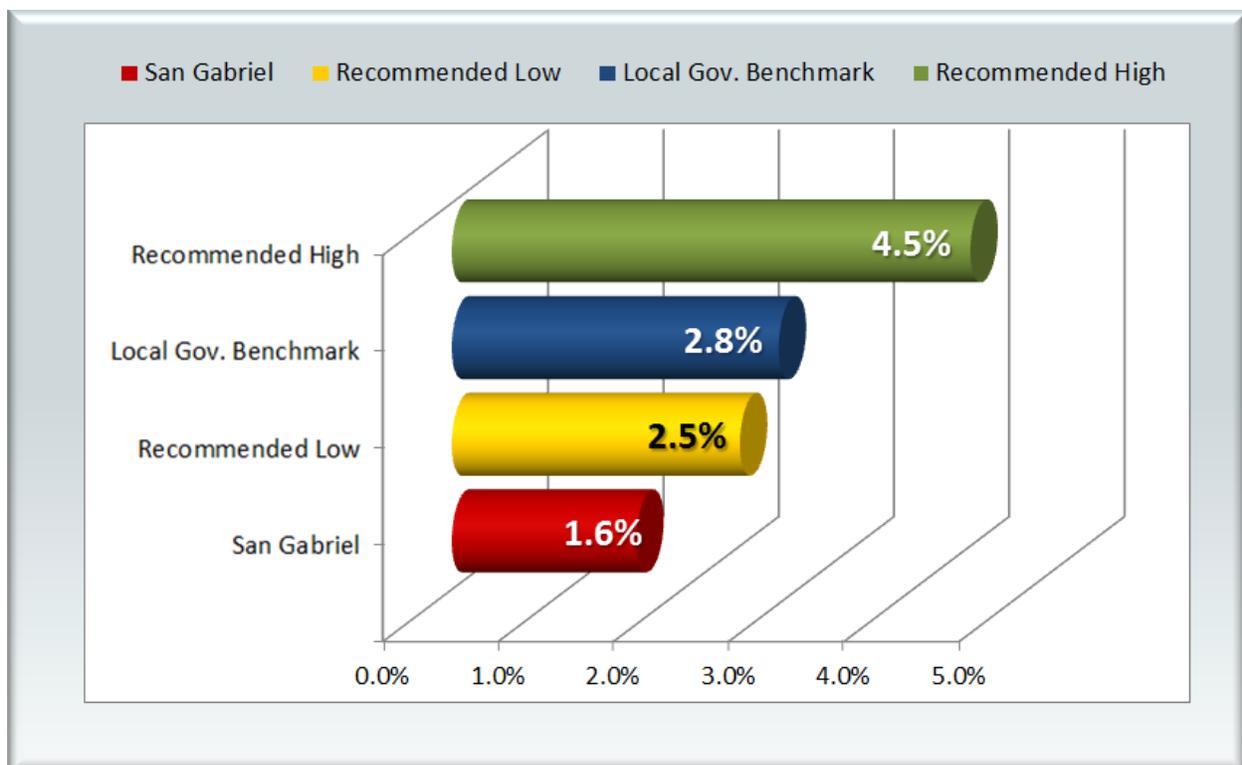
As the economy improves, the IT Division needs to refocus its dedication as follows:

- Provide high quality technology-based services,
- in the most cost effective manner possible,
- to deliver services effectively and efficiently,
- on a sustainable basis,
- in a manner that reflects the organization's dedication to excellent customer service

# KEY IT MASTER PLAN FINDINGS

## IT INFRASTRUCTURE AND SUPPORT FUNDING

Due to recessionary budget constraints over several years, Information Technology support for the City, as a whole has been underfunded when compared to industry standards and peer municipalities for several years resulting in the current state of technology. Although the City processes have functioned reasonably well during this period, the IT Infrastructure has fallen behind and key issues have been negatively affecting staff productivity. See 2012 / 2013 IT spending versus revenue fund budgets:



IT support staffing for non-Police users and facilities has historically been significantly less than industry and best practice standards. Non-Police IT support includes users and facilities at City Hall, Fire stations, Mission Play House, Public Works Yard, and Parks & Recreation. See the table and graph on the following page.

	San Gabriel Non-Police	San Gabriel Police	Municipality Benchmark	Recommended Best Practice
IT Staff (Full-time equivalent)	<b>.5</b>	<b>1.0</b>	<b>1.0 FTE</b>	<b>1.0 FTE</b>
Logins	<b>160</b>	<b>90</b>	<b>66</b>	<b>75</b>
Computers	<b>162</b>	<b>60</b>	<b>57</b>	<b>60</b>
Servers	<b>20</b>	<b>11</b>	<b>6</b>	<b>10</b>



The result has been a delay in funding and staff availability to work on various improvement projects both for all City departments. Please note that for fiscal year 2013 / 2014, the Fire Department has contracted for part-time IT support through a third resource, which should help in the interim.

## IT INFRASTRUCTURE

### Municipal Area Network (MAN)

- Existing sites are interconnected through Virtual Private Networks (VPN) across the Internet
  - ◆ Cable and DSL Internet-based MAN is slow and lacks business class reliability
  - ◆ Bandwidth is based on "best effort", no Quality of Service (not guaranteed)
  - ◆ Complaints exists from most departments regarding response times
- Current network design limits ability of sites to utilize citywide or multi-department applications
- Current network design limits future applications such as video surveillance cameras
- Security appliances, electronic mail, file servers, and applications are located at various City facilities
- New MAN will save IT time, reduce expenditures on firewalls and other devices
- Some ROI for increased MAN expenditures can be found through reduced equipment and support costs of a consolidated infrastructure
- An improved MAN will be required for many of the above citywide software application initiatives

### City Hall Computer Room

- The City Hall computer room is significantly sub-standard
- Physical security is poor and the floor is below grade
- The presence of a window increases environmental risks
- Lack of labeling and lack of organization will increase repair times for anyone not familiar with the environment
- The computer room needs to be moved to a facility that will allow improved environmental and sufficient space for a best practices arrangement

### Local Area Network (LAN) Upgrade

- Significant parts of the current LAN were installed in 2000
- Existing equipment is mostly obsolete and at end of life

### Backups

- City Hall computer room backups are currently stored on-site. Off-site backups should be required.
- Backup to tape system installed many years ago. Backup to tape slows file restoration. City should move to disk backup as well.

### Disk Space Expansion

- Current disk capacity nearly full at 1 Terabyte (TB)
- Parks complains of insufficient disk space for file storage
- Electronic mail storage requirements tripled in the last year
- Future storage of pictures and videos from inspections and Public Works will increase storage needs
- Centralized disk storage (SAN) will provide the most efficient use of disk

## IT OPERATIONS

### IT Automation

- Patches and security updates performed manually and Desktops are configured individually
- Patch management software should be utilized for desktop patch updates
- Increased use of PC imaging can improve computer deployment and troubleshooting efficiencies

### Help Desk System

- City IT and Police IT do not currently utilize Help Desk Ticketing software
- A citywide IT Help Desk Ticketing software will be able to track volume of requests and improve service levels

## IT SECURITY

### General

- Non-Police firewalls are obsolete and at end of life
- A new Municipal Area Network (MAN) will reduce the total number of firewalls needed
- City does not currently have a best practices Internet-facing infrastructure
- Desktop patches and security updates are manual
- City has never had an IT Security Review performed
- Limited IT and security policies and procedures exist today

### Disaster Recovery Planning (DRP)

- The City's financial audit Management Letter cited a lack of an adequate Disaster Recovery Plan

## IT STAFFING

### Findings and Observations

The City has traditionally only contracted a part-time IT support resource for non-police IT support, which is insufficient, especially given the nature of the current IT infrastructure and significant improvements that need to be made. Police utilizes a full-time staff employee for IT support. All departments feel that only part-time IT support is not sufficient for the City's needs, and Fire is a mission-critical function for the City. The Fire Department has recently contracted for a dedicated part-time IT support resource to assist in their daily help desk and project needs.

This somewhat disjointed and non-coordinated approach to overall IT support and system purchases results in some duplication of efforts and systems. It also sometimes results in short-term/fix-it approaches that may not be in the City's long-term, most cost effective interests. In the medium to long-term, the City should re-evaluate its overall IT support and staffing needs. In the short-term, the City may want to consider part-time contracted IT Directorship during implementation of the IT Master Plan.

## TELECOMMUNICATIONS

### Phone System Assessment

- Meridian Nortel PBX system upgraded in 2001
- Fire is replacing its Cisco VOIP system in 2013 / 2014 due to numerous problems.
- A new MAN will allow for a consolidation of telecommunications services, voice systems redundancy and should reduce monthly costs

## LAND MANAGEMENT SYSTEM

- The City needs a Planning, Permits, Inspection, Code Enforcement, and Parcel/Address Management software solution
- The City should expect significant productivity gains with the implementation of a new, integrated land management enterprise application solution

## IT PROCUREMENT

- Traditionally, the IT Division typically researches and determines and specific vendor product before obtaining quotes versus specifying the City's specific requirements and obtaining quotes from multiple vendors' products
- Making initial vendor agnostics system requirement may result in other reliable options at lower costs
- The City should approach procurements in a vendor agnostic manner without conflicts of interest between support staff reselling opportunities and potential solutions in the market place. The exception to this approach is when adding a software module to an existing software vendor's core solution (see the Software Selection Best Practices initiative).
- The City may also benefit from obtaining product or solution specifications from independent, professional subject matter experts (SME's)

# 2014 / 2015 IT ACTION PLAN

Moving forward in the short-term, the focus of IT should be on continual infrastructure, service delivery improvements. Additionally, some major software system utilization improvements and replacements would greatly benefit the City and citizens.

**Customer Service** – Implement a Help Desk system for the tracking and measurement of incident reporting and staff requests for service.

**Infrastructure** – The City must initially install a robust network that connects all major locations. Without this basic infrastructure, the distribution and integration of some software applications cannot occur. The City Hall computer room is another major area of concern, as it is located in an exposed area of the building.

**IT Systems Procurement** – It is recommended that procurement practices overall be revised to focus more on the solution rather than particular vendor offerings. *CLIENTFIRST* believes this will bring greater community participation, and will create a more transparent systems selection and procurement process.

**IT Security** – In this instance, we are defining IT Security in the broad sense, including back-ups, disaster recovery planning and overall system security in our recommended list of improvements. The City has an urgent need for the implementation of offsite backups, followed by Disaster Recovery Planning. As mentioned above, physical security of the City Hall computer room is problematic and overall processes related to updating and patching software are lacking.

**Best Practices Software Planning** – We believe additional due diligence before selecting any new software vendors would lead to better utilization and sustainability when replacing software solutions. Not all systems have been selected with sufficient feature/function definition, total cost of ownership budgeting, and overall user buy-in. More due diligence before signing a contract saves at least an equal amount of effort and expense during and after implementation.

## PROJECT FOCUS

The following projects/initiatives from the IT Master Plan are the focus for Fiscal Year 2014 / 2015.

### Best Practices

IT Initiative	Description
Return-on-Investment Considerations	Overview showing how to understand ROI opportunities in the City through various technology investments
IT Governance	Utilizing an ongoing IT Steering committee to drive technology education, policies and the implementation of the IT Master Plan over the next five years
Software Selection	Follow best practices needs assessments, evaluation, and procurement when considering new or replacement software solutions
IT Procurement	Using objective best practice procedures for procuring IT investments to ensure independent specifications and best cost/value is obtained for the City
User Training and Support	Improve ongoing user training to maximize system utilization and gain productivity and efficiencies
Maintaining Software Updates	Maintaining software updates for all applications and operating systems for all users in a timely manner
Social Media Policy	Establish rules of conduct for employees that post content on the internet

### Applications / Departmental Systems

IT Initiative	Description
Eden Improvements	Adding functionality to the existing financial/accounting system. Initial focus is Human Resources module.
EDMS (Electronic Document Management System) LaserFiche	Implementation of advanced document and content management technology to: manage records, document capture, storage and retrieval; provide workflow automation; manage FOIA requests; and provide electronic forms and application capabilities with routing and approvals
Citywide GIS Master Plan	Developing master plan and business case for GIS implementation and investment
Parks and Recreation System	Replacement of under-performing software system to improve customer service and streamline department processes
Work Order / Maintenance Management System	System for maintenance and asset management functionalities
Fire RMS	Consolidating and improving functionality of various systems used by Fire Department
Land Management System	Software suite that manages the following: <ul style="list-style-type: none"> <li>•Project Planning / Zoning</li> <li>•Permits</li> <li>•Inspections</li> <li>•Code Enforcement</li> <li>•Business Licensing</li> <li>•Land / Parcel / Address Management</li> </ul>

IT Initiative	Description
Theater Management Systems	System to management theater booking, tracking, billing, attendance, lighting and sound management
Reverse 911	Provides emergency telephone notifications to selected geographical regions
Pavement Management	Capability to monitor sidewalk and pavement deterioration, current improvements, and future considerations
Sewer & Storm Drain Management System	System for locating and monitoring manholes
Traffic Management System	System for federal mandated sign requirements

## Gov 2.0 (E-Government)

IT Initiative	Description
Citizen Request Management (CRM)	Completing implementation of system to track various requests initiated by citizens online or over the phone, including automated internal routing and status reporting

## IT Infrastructure

IT Initiative	Description
Municipal Area Network (MAN)	Design and implement a Municipal Area Network to significantly improve the City network functionality, reliability, performance and reduce redundant hardware and systems. A MAN is also required to implement a single VoIP (networked) telephone system.
Computer Room	Improve security and physical infrastructure of the computer room
Local Area Network (LAN) Upgrade	Upgrades needed to network
Wi-Fi	Allow users to connect wirelessly to City internet in conference rooms and key public locations
Backups	Improved maintenance and security for routine back up procedures
Disk Space Expansion	Increase disk storage capabilities which are currently at capacity

## IT Operations

IT Initiative	Description
IT Automation	Automation of application and security patching as well as PC imaging tools
Help Desk System	A central Help Desk ticketing system would simplify management of ongoing problem resolution

## IT Security

IT Initiative	Description
IT Security	Replace firewall, create DMZ and create additional IT security policies and procedures
Disaster Recovery Planning (DRP)	Develop and implement a City IT Disaster Recovery Plan per the City's financial audit Management Letter

## Telecommunications

IT Initiative	Description
VoIP Phone System Assessment	Implement new citywide telephone system after design and implementation of a Municipal Area Network (MAN)
Telecommunications Costs Review	Evaluation of present telecommunication services (voice and data) to determine possible cost reduction and improved performance

## IT Staffing

IT Initiative	Description
IT Staffing	Assess current staff size, additional staffing needs, and potential solutions
GIS Staffing	Staff needed to administer geographical coordination efforts

**BUDGET REQUEST**

ITMP Initiative #	IT Initiative	H = High M = Medium L = Low	Recommended Prioritization	Dept(s)	2014 / 2015
<b>Best Practices</b>					
2	IT Governance	Plan Update	H	All	\$ 10,000
6	User Training and Support	MS Office Focus	H	All	\$ 10,000
<b>Applications / Systems</b>					
10	Eden Improvements	Human Resources Focus	M	Fin,All	\$ 25,000
11	EDMS (Electronic Doc. Management System)	Implementation	H	All	\$ 25,000
12	Citywide GIS Master Plan	Consulting	H	CD,PW	\$ 20,000
14	Parks and Recreation System	Assessment or RFP	H	PR	\$ 20,000
15	Work Order/Maintenance Management Sys.	RFP	H	PW	\$ 25,000
16	Fire RMS		H	Fire	\$ 50,000
18	Land Management System	New System Implementation	H	CD	\$ 250,000
19	Theater Management Systems	New System	H	Thtr	\$ 43,000
25	VisionAire CAD/RMS Improvements		H	PD	\$ 100,000
26	Reverse 911		H	Fire,PD	\$ 50,000
28	Pavement Management	New System Implementation	H	PW	\$ 25,000
29	Sewer System	New System Implementation	H	PW	\$ 35,000
30	Traffic Management System	New System Implementation	H	PW	\$ 25,000
<b>GOV 2.0 (E-GOVERNMENT)</b>					
31	Citizen Request Management (CRM)	Implementation	H	Admin,All	\$ 5,000
<b>IT Infrastructure</b>					
34	Construction - IT Planning Needs	IT Engineering	H	PD,PW	\$ 25,000
35	Municipal Area Network	Improvements	H	All	\$ 98,500
36	New City Hall Computer Room	Includes construction	H	All	\$ 76,800
38	Local Area Network (LAN) Upgrade	Improvements	H	All	\$ 31,250
41	Wi-Fi Improvements	Improvements	H	All	\$ 10,000
43	Backup Improvements	Improvements	H	IT, All	\$ 17,000
44	Disk Space Expansion		H	IT, All	\$ 20,000
47	City Pool Computers	Annual telecom service	H	PR	\$ 2,400

ITMP Initiative #	IT Initiative	H = High M = Medium L = Low	Recommended Prioritization	Dept(s)	2014 / 2015
<b>IT Operations</b>					
48	IT Automation	Tools	H	IT	\$ 5,000
49	Help Desk System	Software	H	IT, All	\$ 5,000
<b>IT Security</b>					
51	IT Security	Improvements	H	IT	\$ 10,000
53	Disaster Recovery Planning (DRP)	Consulting	H	IT, All	\$ 10,000
<b>Telecommunications</b>					
54	VoIP Phone Systems Assessment	Design & Implementation	H	All	\$ 85,000
55	Telecommunications Costs Review		M	All	\$ 10,000
<b>IT Staffing</b>					
56	IT Staffing (Non-Police)		M	IT, All	\$ 145,000
<b>Project Expenditures</b>					<b>\$1,143,950</b>

Previously Allocated, Funded, Offset, Grants, etc.				Dept(s)	2014 / 2015
<b>Applications / Systems</b>					
16	Fire RMS		H	Fire	\$ 50,000
18	Land Management System		H	CD	\$ 50,000
25	VisionAire CAD/RMS Improvements		H	PD	\$ 100,000
<b>IT Staffing</b>					
56	IT Staffing (Non-Police)		M	IT, All	\$ 110,000
<b>Less Previously Allocated/Funded Projects</b>					<b>\$ 310,000</b>

**Net New Fiscal Impact** **\$ 833,950**