Title	**Information Technology Commodities**
Type	Standard
Related Policy	[CIO Approval Authority Policy](#)
Category	Hardware/Software
Status	Approved
Approved	04/04/2013
Revised	08/04/2016
Scope	Applies to all City information technology purchases.
Standard	**Commodity:**

Commodity	Details

Desktop/Laptop computers	Minimum Configurations for: New Desktop Personal Computers
	
	Recommended Brands:
	
	- Hewlett Packard
	- Panasonic (ruggedized models)
	- Lenovo
	
	Tablets:
	    All tablets will be supported by the Department and Vendor.
	
	Recommended GIS Brands:
	
	    Dell

Mobile Telecommunication Devices	Supplier: - Verizon
Network multi-function devices (e.g., printers, scanners, copiers)	Maintenance and Support Requirements: - Must include device configuration with cost, if any, to be paid by requesting Department - Three-years minimum preferable five-years on-site maintenance and support from the supplier Approved Manufacturers: - Hewlett-Packard

		• Xerox
	Servers and Storage	All server configurations will need an ITSD review before proceeding to TRC. ITSD will review these items and how it fits into the current infrastructure. Component Minimum Standards: • Memory: • Cache: • Disk Configuration/Fault Tolerance: SCSI, FibreChannel, ATA/IDE (conditional), iSCSI. • Operating System: local, hardware RAID (level may vary by platform). • Data: local, hardware RAID (1, 1E, 5, 5E, 1+0) Hot -swapable with on-board spare as necessary. Storage platforms: • IBM System Storage • HP Storage Network Attached Storage (NAS) platforms • IBM System Storage: NetApp Tape Backup/Library: • Quantum Tape Library Power: • Redundant, UPS required if not ITSD resident • Network Interface Card(s) Monitor: • Required if not ISD resident, or KVM present, 15" minimum Operating System: • Microsoft Windows Server 2008 and 2012 • Red Hat Enterprise Linux (RHEL)

	• Oracle Enterprise Linux (OEL) Backup and Archiving: • Veritas Virus Protection: • Trend Micro System Management: • xClarity Maintenance: • 3 year minimum warranty 5 year preferred • 24 hour x 7 day support (tier-1) • 8-5 Work day (tier-2 or lower) or tier-1 • 4 hour on-site response • parts and labor included Preferred Platforms: • Lenovo • Dell • HP
Enterprise system software	Component Standards E-mail: • Server - Microsoft Exchange • Client - Microsoft Outlook 2010 /13 • Client (web) - Microsoft Outlook Web Access (OWA) E-mail Antispam and Encryption: • ProofPoint Multi-Factor Authentication:

- 2FA and hardware compatible with 2FA

Instant Messaging:

- Microsoft

Remote Desktop Support:

- Bomgar

Team Collaboration:

- Microsoft

Web Application Server (Internal Development):

- Apache Jakarta/Tomcat
- Microsoft IIS

Web Application Server (COTS):

- BEA Weblogic/Tuxedo (PeopleSoft)
- Apache Jakarta/Tomcat, Geronimo
- Microsoft IIS
- Oracle Forms Server

Web Server:

- Apache HTTPd
- Microsoft IIS

Web Filtering:

- Cisco ASA

Web Editing Tool:

- Contribute

Web Content Management:

- Plone

Database Management Systems:

- Oracle 11g, 12c
- Microsoft SQL Server 2012, 2014, 2016

DBMS Administration Tools:

- Embarcadero Technologies DBArtisan
- Quest TOAD

Oracle Enterprise Manager:

- Oracle SQL Developer
- Microsoft SQL Server Management Studio

Directory:

- Microsoft Active Directory (COA Domain only)

Identity Management:

- Microsoft

Application Centralization:

- Citrix MetaFrame
- VMWare
- Microsoft

Production Scheduling:

- Appworx

Centralized Desktop Management:

- Microsoft Active Directory
- AdminStudio Professional
- KACE

Geographic Information Systems (GIS)

- Environmental Systems Research Institute (ESRI) Components

Operating System Virtualization/Hypervisor:

		- VMWare - Microsoft - Oracle System Monitoring: - Oracle Enterprise Manager (OEM) - Whats Up Gold (WUG) Network Monitoring - Cisco - Cacti - Solar Network VPN - Cisco - Netmotion Intrusion Protection - Cisco Service Desk (Ticketing System) - ServiceNow (ITIL)
	Desktop software	Supported Software: (includes installation and limited how-to and problem-solving. No instructional courses are offered.) - Microsoft Office 2010/13 Suite - Professional (organization charts) - Mocha TN3270 - Adobe Acrobat (current versions) - activePDF, PrimoPDF, PDF Writer - Microsoft Internet Explorer 6.0 - Macromedia Contribute Unsupported Software: (no installation, instructional, how-to or problem-solving support. If installation is required to perform specific job duties, it must be provided by Department staff or through vendor

support.)

- Adobe PageMaker
- Macromedia Dreamweaver
- Mozilla Firefox
- Adobe Photo Shop
- File Maker Pro
- WordPerfect
- Microsoft FrontPage
- Centurion DriveShield (for public-access machines only)
- Microsoft Sharepoint Designer 2007
- Eclipse Integrated Development Environment

Supported Operating Systems:

- Windows 7

Unsupported Operating Systems: (no installation, instructional, how-to or problem-solving support. If installation is required to perform specific job duties, it must be provided by Department staff or through vendor support.)

- Windows Vista Enterprise (purchase license, but run Windows XP Professional until Vista-compatible City standard security software is available)
- Red Hat Enterprise Linux WS or Red Hat Desktop (version 4 or higher)
- SuSE Linux Enterprise Desktop (version 10 or higher)
- MacOS (Version X or higher)
- Microsoft Office 2013 (is not compatible with the current Exchange Environment)

Legacy Operating Systems: (limited support available for existing installations; no new installations permitted)

- Windows 2000
- Lotus Notes

Digital cameras and projectors	• Need to support XVGA	
Global Positioning System ("GPS") devices	• GPS devices should be compatible with ESRI data formats, such as a shapefile. • At a minimum, the GPS device should be able to export an ASCII text file or other tabular format of the coordinates collected. • Information collected on the GPS unit should be downloadable to a PC via USB or other connection. • GIS Sharepoint site: http://sharepoint.cabq.gov/gis/GPS/Forms/AllItems.aspx	
Parking Stations	• Parkeon (electronic mid-block parking station) • Duncan (electronic single head credit card capable) • IPS (electronic single head credit card capable)	
Physical security equipment and software	Video surveillance system • System must be DVTel or DVTel Compatible. • Alarm Detection System (such as intrusion and process monitoring, but not fire). • Equipment must have an output associated to each alarm condition to interface to a Software House system by means of a Software House control panel. OR The system must be OpenEye RADIUS.	
Non-Public Safety Audio Logging Recorders	• The following equipment is the City standard for digital audio logging recorders: Verint	
Public Safety Digital Logging recorders	• The following equipment is the City standard for public safety digital logging recorders: o Mercom Audiolog	
Public Safety Dispatch Consoles	Minimum standard requirements for a public safety dispatch PC console setup:	

	3 GHz Processor 2 GB Memory 160 GB Hard Drive 3 1/2 Floppy Disk Drive - DVD +/- RW Disk Drive - DB9 Male RS 232 Serial Port assigned to COM 1 - DB9 Male RS 232 Serial Port assigned to COM 2 - DB25 Male RS 422 Serial Port assigned to COM 3 (PartSeaLevel 7108) - PS2 Port (Quantity 2) - VGA Video Port - USB 2.0 (Quantity 4) - Windows XP operating system - Keyboard or Mouse/Footswitch control - Desktop Microphone - Dispatch Headset - Select and Unselect Speakers
General Services Radio System	Minimum Standard Requirements: Harris Communications™ mobile (vehicle) and portable (handheld) radios. 806-870 MHz Enhanced Digital Access System (EDACS) compatible 30 Watt RF output power mobile 3 Watt RF output power portable 128 Channel minimum 800 MHz antenna - FCC type-accepted
VHF/UHF Isolated Repeater Radio System	Minimum Standard Requirements: Harris Communications™ mobile (vehicle) and portable (handheld) radios
Imaging system document scanning devices	Must be on the Pixel Translation supported scanner manufacturer list available at the following
Public/Education/Government Access (PEG)	Need recommended brands

Digital Video Broadcast Servers	
Library Automation Hardware and Software	Vendor: Innovative Interfaces, Inc. • Sierra integrated library platform. The Sierra system includes vendor-supplied configured servers and software that consists of the following modules: Acquisitions, Cataloging, Serials, Circulation, Patron database management, Program Event Registration. • WebPacPro • Encore Vendor: 3M Library Systems: • 3M SelfCheck • 3M Detection Systems: 3M Tattle Tape security strips, 3M Detection Gates, Sensitize/Desensitize devices. • 3M Automated Materials Handling and Detection Systems. • Public Access Management System (PAMS): 3M/Comprise Technologies Smart Access Management system. • Point of Sale: 3M/Comprise Technologies Smart Money Manager: part of the SAM system and is compatible with Innovative Interfaces, Inc. Sierra library automation platform.
Siriusware Salesware Kiosk Hardware	Radiant 601 Kiosk - • Celeron M 1.3 GHz processor • 3.5" hard drive 160Gb • 1Gb RAM • Windows XP

		• Quad-bulb, Active Matrix 17" SXGA LCD primary display; sunlight readable • 2-track dual head magnetics stripe reader • Barcode scanner • Powered serial ports (RJ12) • 4 USB 2.0 ports • 1 DVI port • 1 mini PCI • Sub ATM Ticket Printer (Fan Fold only) • Wall/Floor mount • HVAC Winstanley 25900 ATM Style Kiosk • 15" LCD touchscreen monitor • BOCA SubATM 46 Printer with input ticket hopper and output ticket hopper • Dell small form factor Computer • Windows XP • 512 Mb RAM • Symbol bar code reader • Credit Card Reader, conformal coated circuit board • Power strip surge suppression
	Emergency Management Software	Vendor: EMSystems (Emergency Medical Software Services)
	Transit Automation Hardware and Software	**Vendor:** Trapeze Software Group Paratransit service: trip booking, automated vehicle routing, onboard mobile data computers and computer aided dispatch modules and automated reminder calls. Trapeze: online driver's schedule information, online Paratransit trip booking, online trip planning tool, scheduled and real-time next bus information via text messages, interactive voice response or e-mail notification. • **AVL:** GPS based automated vehicle location system and schedule adherence. • **BB:** Fixed route automated blocking module. • **BSM:** Software to track amenities, repairs and maintenance schedules for bus stops.

- **FX-Info-MON:** Estimated time of arrival at bus stops based on AVL data. Enhances FX-Info-IVR and FX-Info-SMS below with real-time information.
- **FX-Info-email:** Automated e-mail notification of next bus information.
- **FX-Info-IVR:** Automated interactive voice response module providing next bus information.
- **FX-Info-SMS:** Automated text message response module providing next bus information.
- **FX:** Scheduling module for the fixed route service.
- **Info-Agent:** Trip planning software for call centers.
- **Info-Publish:** Fixed route schedule publication module.
- **Info-Web:** Web based trip planning module.
- **MapMaker:** Import and conversion tool to utilize existing GIS maps.
- **OBS hardware:** Onboard mobile data computers for driver communication, on-time performance information, dynamic Paratransit manifest and fixed route directions.
- **Ops:** Software module to track drivers' schedules, bid assignments vs. actual work, union rules and absences.
- **Ops-Web:** Web based communication tool for drivers.
- **PASS:** Automated routing, trip booking, and computer aided dispatch system for the Paratransit service.
- **PASS-IVR:** Automated telephone based scheduling system for the Paratransit service and reminder calls the day prior to customer's travels. Also provides reminder calls on the day of travel 10 minutes prior to vehicle's arrival.
- **Plan:** Fixed route analysis, planning and budgeting module.

Vendor: Digital Recorders, Inc.: DRI provides the Predictive Arrival System, LED signs and the automated announcement system.

- **PAS:** Predictive Arrival System calculates the estimated time of arrival based on current vehicle position and historical data.
- **Onboard Announcements System:** Announce the current location of the vehicle by using GPS coordinates including bus yard wireless updates and central recording software (CRS).

Vendor: TwinVision, Inc.

- **Destination Sign:** Vehicle's high-intensity LED signs. Integrates to the Digital Recorders onboard announcement system to reduce the number of logon devices for the driver.

Vendor: GE Security

- **Mobile View:** Ruggedized onboard surveillance system with audio recordings, wireless download of data at bus yards, centralized management software, open architecture for interfaces to GPS receivers and other onboard devices.

Vendor: Infodev

- Infordev provides automated passenger counters, including directional sensors, onboard data storage, infrared and radio frequency links, integration services on onboard network.

Vendor: GFI Genfare

- **Odyssey:** Onboard fare boxes for collecting revenue, recording use of passes and issuance of passes.
- **TVM:** Outdoor rated Ticket Vending Machines compatible with fare boxes.
- **PEM:** Printer Encoder Machine compatible with fare boxes.

	• **DS:** Data System, automated data collection, reporting, backup, and archive components. **Vendor:** Security Control Integration (SCI, Inc) • **C-Cure:** Access control and logging of employee's entries. Create and issue photo badges. • **DVTel:** Video surveillance system for facilities. **Vendor:** AssetWorks Inc. • **FleetFocus:** Fleet management, inventory, bar coding, work orders, labor and repair tracking. • **FuelFocus:** Fuel management, inventory and control module. **Vendor:** Cummins Rocky Mountain • **Insite:** Engine diagnostic and repair software **Vendor:** Stuart & Stevenson LLC • **ATDT:** Transmission diagnostic and repair software **Vendor:** Advanced Presentation Systems • **Industrial Displays :** Industrial large format displays intended for continuous operation in a production environment.
Municipal Development Automation Software	• VueWorks • EdgeSoft
Police Automation Hardware and Software	Vendor: Tiburon, Inc. • CommandCAD • MobileCOM

- LawRECORDS
- TiburonCONNECT

Vendor: The Omega Group

- CrimeView
- CrimeView Server
- CrimeView Community

Vendor: Xanalys Limited

- PowerCase
- Link
- Indexer

Vendor: TASER

- Axon Flex Camera
- Evidense.com

Vendor: Landesk

- IT Service Management

Vendor: Public Safety Corporation

- CryWolf

Vendor: Innovative Data Solutions

- PowerDMS Policy Manual Software

Vendor: QueTel Corporation

- Evidence TraQ.
- Bar Code Scanners and Data Collection Terminals -

	• Bar Code Printers and Labels Vendor: MorphoTrak • Printrak Biometrics Identification Solution (BIS) • LiveScan Vendor: CAD Zone, Inc. • CrimeZone Vendor: PIPS Technology • Automatic License Plate Recognition System Vendor: Stratus Technologies • ftServer - Fault tolerant, high availability servers. Vendor: LEFTA Systems • LEFTA (Law Enforcement Field Training Application) Vendor: CI Technologies • IAPro
Configurations for Siriusware Handheld Scan Access Hardware	Required: • Symbol PPT8846 Wireless Scanner w/Pocket PC 2003 • Single slot communications & charge cradle • Spare 1700 mAh battery • Protective screen cover for PPT8846 • Symbol 3-year Service Center Bronze Service PPT8846

	• Siriusware Salesware Handheld License must exist for each device or be purchased at time of equipment purchase.
Environmental Health	• EIC – Vehicle Emissions Inspection System

Data Communications/Network Equipment/Telecommunications Standards:

Network Cabling	• Local Area Network (LAN) copper cabling must co with ANSI/TIA/EIA-568-B.1 2001 ("T568B") Cate 5e or better standards and must provide a 25-year application assurance and extended warranty. • Cabling in new facilities must utilize Category 6 ca • Fiber-optic cabling shall be Optical Cable Corporat manufactured tight buffered fiber, installed by a OC certified installer, and must provide a minimum 10- warranty. • All patch panels and wall plates shall utilize 110-bl type insulation-displacement connections. • Switch interfaces shall utilize IEC 60603 8P8C ("R connections for copper and IEC 61754-20 ("LC") o 61754-4 ("SC") connections for fiber. • All cabling must be installed by a City of Albuquer approved network contractor. • ISD Network Group is responsible for the coordina all network installations in City owned and leased facilities.

	Telecommunications Equipment	Minimum Standards: - Siemens Hicom 300 - HiPath 4000 - Hicom 150 - Optipoint 500 Telecommunications switch - Software release must be either at a 6.4 or 6.6 revision level. - Cisco - Palo Alto - Exault - Netformix

Telecommunications Small/Remote Site Network and Equipment	Minimum Standards: • Siemens HiCom 300 Mod 80EX or Mod 30EX Release 6.4 to 6.6, • Siemens Hicom 150E, • Siemens HiPath 4000 • Siemens Optipoint 500. • Cisco

Rationale These standards are intended to satisfy the requirements of conducing daily business in an efficient manner. Departments must recognize, specify, and justify the need for purchasing new platforms. Recycle standards change as new operating systems and application software require more processing power and/or hardware changes.

These standards provide the following benefits:

- Facilitate the exchange and sharing of data electronically, by using the same programs (with related file formats) and platforms across City Government.
- Achieve substantial savings in person-time support costs, over a period of time, by reducing the number of products that are supported.
- Reduce training costs and facilitate staff transfers, by having the same software in use throughout City Government.
- Enable City Government to avail of volume purchase discounts from major hardware and software vendors.