



**City of Madison, Wisconsin
Information Technology**

Technology Standards Directory

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Introduction

Standards

Standards provide a consistent set of tools for the development and efficient maintenance of the City of Madison's Information Technology (IT) infrastructure.

A well-defined set of standards can reduce support costs and improve support while allowing needed levels of flexibility. First, reduce support costs by setting standards for hardware, software, networks, and backup technologies. Second, reduce training costs by standardizing certain applications that will have widespread use. Third, reduce security risks by maintaining support on products by the vendor for security related patches and fixes.

City of Madison Information Technology maintains technology standards with input from content experts in various IT divisions and other City agencies. These standards reflect the best industry practices that meet the requirements of the City of Madison. Minimum configuration requirements reflect the hardware specifications needed to use the technology applications with minimal complications. City agencies may exceed the minimum configuration requirements if the agency can prove the need. The request will be subject to review by the IT Department.

Standards related to information security services and capabilities are not publicly listed as a precaution against the malicious use of, or exploitation against, City systems and networks.

Security

In addition to providing a reliable and manageable set of tools, software standards meet base protections for City data. Each technology presents opportunities to provide services, as well as risks, based on those services. City technologies must meet or align with National Institute of Standards and Technology (NIST) federal best practice requirements.

The City is accountable for several federal standards depending on in-scope systems and data. Examples include: Protected Healthcare Information (PHI) as part of HIPAA, Cardholder data defined by the Payment Cardholder Institute (PCI), Criminal justice data in the Criminal Justice Information System (CJIS), Electronic health record technologies defined in the Health Information Technology for Economic and Clinical Health (HITECH) Act, Financial accounting standards issued by the Governmental Accounting Standards Board (GASB) Statement 34, and IRS tax data as part of Federal Tax Information (FTI). Applicable laws for Personally Identifiable Information (PII), data retention, and data disclosure also introduce state-level requirements for our technology selection and use.

When leveraging a technology, there are also requirements in how we use the tools and protect data. Not following security requirements increases City cyber and liability risk and can cause significant monetary loss and legal issues. These requirements must be understood and managed by the Agencies utilizing each technology. Compliance and legal examples above are not inclusive of all requirements. In addition, all City workers have a responsibility to keep the City network, assets and data safe. The software standards meet a common, understandable base level of security controls.

Exception to Standards

All technology requests that do not conform to the technology standards established in this document will require approval as an exception. Customers must work with their [IT Authorized Contacts](#) to submit an exception request.

The exception review process consists of validation of compatibility with, and review of technical risks to, the existing City standard infrastructure. The process may also recommend evaluation of existing products already in use by the City. Additionally, agreement documents such as Terms of Service, Terms and Conditions, End-User License Agreements, Privacy Policy, and associated documents are also reviewed for technical, legal, and business risk. Exception requests are reviewed and processed within two (2) weeks.

The IT Department does generally not support products allowed as an exception. Utilizing standard technologies ensures easier and less expensive maintenance of City requirements. All requests must follow APM [3-20](#) (Software Acquisition Policy), APM [4-5](#) (Policy for the Purchase of Printers, Faxes, Copiers, Paper, and Toner), APM [4-7](#) (Policy for the Procurement and Disposal of Electronic Products), and the City's [Purchasing Guidelines](#).

Standard Classification

This document classifies Technology Standards as follows:

Classification	Description
Standard	This classification represents the current accepted technology for general installation within the City. The adoption of technologies in this classification are to occur at the earliest opportunity.
Agency	This classification represents technology that has been adopted and approved for use within an agency. These technologies will typically be Agency/Vendor supported (see Support Model below).
Allowed w/ Exception	Not a standard, but allowed as an exception in the technology environment through the approval process outlined in APM 3-20.
Legacy	This classification represents technologies that are legacy standards, previous releases or versions. These typically outdated technologies are approaching or at the end-of-life, but are still in active use within the City. New installation of technology in classification requires a clear business justification and may require an exception.

NOTE: Definition as a standard does not guarantee that IT is providing technical support for the technology unless specifically noted in the support model.

Support Model

IT has established four standardized support models:

Support Model	Description
Full Support	IT fully supports the product including ordering, provisioning, installation, information security, configuration, troubleshooting, patching, de-installation, and disposal.
Limited Support	IT may support the product in one or more of the following instances. These include ordering, provisioning, installation, information security, de-installation, or disposal.
Agency / Vendor Support	IT does not support the product. Support is the responsibility of the customer agency and/or the vendor.
Minimal Support	IT may order and/or provision the product, and dispose of it only.

Administrative Procedure Memoranda

City staff should reference the following Administrative Procedure Memoranda (APM) that apply to technology standards:

APM	Description
1-4	Purchasing Policies and Procedures
3-6	Records Management Program
3-9	Appropriate Use of Computer Network Resources
3-12	Telephones
3-17	Acquisition and Use of Surveillance Technology
3-20	Software Acquisition Policy
4-5	Policy for the Purchase of Printers, Faxes, Copiers, Paper, and Toner
4-7	Policy for the Procurement and Disposal of Electronic Products

IT Support Model Matrix	Full Support	Limited Support	Agency / Vendor Support	Minimal Support
Support Model Codes (used in the tables)	Full	Limited	Agency	Minimal
Support Services				
Order / provision product – Order the product. In the case of cellular equipment, perform the initial setup (provisioning) of the device.	IT	IT	IT	IT
Install the product (hardware/software) – Install the product on a server or workstation.	IT	IT	IT	IT
Security Standards – Evaluate, implement, and periodically review related security standards.	IT	IT	IT	IT
Software Install Point – Create a network location to house the software installation package.	IT	IT	IT	IT
Configure features of the product – Perform standard product configuration steps that are required.	IT	Negotiated	Agency	Agency
De-install the product – De-install the product, ensuring that remaining interfaces, security, configuration, etc. are intact	IT	IT	Agency	Agency
Dispose of the product – Dispose of the product according to approved disposal protocol.	IT	IT	IT	IT
Troubleshoot problems – Working with the customer and/or vendor as needed, resolve issues with the product working in the environment.	IT	Agency	Agency	Agency
		Vendor	Vendor	
Track updates and patches – Manage the testing process of updates and patches.	IT	IT	Agency	Agency
Apply updates and patches – Periodically package, distribute and/or implement updates and patches.	IT	IT	IT	Agency
			Vendor	
Lifecycle Management – Manage lifecycle upgrades to the product	IT	IT	IT	Agency
			Vendor	
Fix bugs for in-house developed software – IT will track and fix SW bugs.	IT	Agency	Agency	Agency
		Vendor	Vendor	
Develop software enhancements for in-house SW – IT will develop and implement new functionality as authorized and funded by the customer.	IT	Agency	Agency	Agency
		Vendor	Vendor	

Key to Support Model table entries:

- IT IT is responsible for support service. The service is not billable.
- Agency The Agency is responsible or may opt for the support service. Supplemental IT assistance is billable or not available as indicated.
- Negotiated The Agency negotiates with IT for the support service. The service is billable
- Vendor The Agency will negotiate with the vendor for the support service.

Agency Standard Owner

Each defined standard has an assigned Agency Standard Owner. Responsibilities of the Agency Standard Owner includes:

- Evaluating the products supporting a standard.
- Monitoring for patches, updates, and end-of-life (EOL) model changes.
- Bringing patch and update projects forward to IT management for action and scheduling.
- Alerting IT to EOL model changes to update this Directory.
- Working collaboratively within IT to help establish important lifecycle dates and roadmap strategies.
- Identifying when to remove items from Legacy status.
- Coordinating the testing of products unless otherwise designated through a larger project.

The Agency Owner is not necessarily the group within the City that provides technical support for the standard.

Permitted Outside Agency

Each defined standard may be used outside of the agency that serves as the Standard Owner. If a standard is permitted for use outside that agency, it will be noted in this Directory. Note that use may be limited to a small group of agencies that have displayed a business need to have access. Most standards that support the City's technology infrastructure (e.g., servers) are not permitted to be accessed, administrated, or used by agencies other than IT.

IT Standards Setting Process

IT will conduct an annual review of the standards in September to capture changes in hardware and software over the past year. During the review, the Directory will be reviewed for any exceptions that should be included as standards; deployments of standard software will be reviewed; software owned by other agencies will be reviewed for business need; and annual technology roadmaps will be reviewed and incorporated in the Directory as appropriate. Note that the external-facing version of the Directory may have redacted standards to protect the security and integrity of the City's technology infrastructure. The updated Directory, with appropriate redactions, shall be posted to the City's EmployeeNet website.

ADA Assistive Technologies

Several products have been included for use as ADA assistive technologies. Identify these products in this document with the **[ADA]** tag.

The products are currently in use within the City and while not an exhaustive list, it represents products most commonly used.

By including these products in the Technology Standards Directory, it eliminates the need for an exception request, making it easier for City employees to acquire the necessary technology they need.

Hardware Standards

1. Workstation Hardware

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
1.1. Desktop	Dell OptiPlex 3080	Standard	Full	IT	Yes
	Dell OptiPlex 3010, 3020, 3040, 3050, 3070, 390, 5050, 7010, 7050, 760, 780 Dell Precision 3620, 5810, 7810, 7910, 7920 Tower Dell Precision 7510, 7520, 7530, 7710, 7720, T1700, T3610, T5610	Legacy	Full	IT	Yes
	Dell OptiPlex 3080M	Standard	Full	IT	Yes
Desktop – Micro	Dell OptiPlex 3060M, 3070M	Legacy	Full	IT	Yes
	Dell Precision Tower 5820, 7920	Standard	Full	IT	Yes
Desktop – CAD	Dell Precision Tower 5820, 7920	Standard	Full	IT	Yes
1.2. Keyboard	Dell KB216 Wired Multi-Media	Standard	Full	IT	Yes
1.3. Monitor	19" – Dell P1917S 24" – Dell P2419H 27" – Dell P2719H 24" UltraSharp – Dell U2415 27" UltraSharp – Dell U2719D	Standard	Full	IT	Yes
	Dell 1504FP, 1703FP, 1704FPT, 1704FPV, 1707FP, 1708FP, 1708FPBLK, 1901FP, 1905FP, 1907FP, 1908FP, 1908FP-BLK, 1908WFP, 2001FP, 2007FP, 2208WFP, 2209WA, 2408WFP, E151EP, E178EP, E190S, E193FP, E2011H, E2013H, E2209W, E2211H, E2213H, E2214H, E2311H, E2414H, E248WFP, G2410, P170S, P190S, P1911, P1913, P1913S,	Legacy	Full	IT	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	P1914S, P2014H, P2211H, P2212H, P2213, P2214H, P2217H, P2312H, P2314H, P2411H, P2412H, P2414H, P2417H, P2419H, P2714H, P2715Q, P2717H, S2409W, ST2410, U2212HM, U2311H, U2312HM, U2410, U2412M, U2414H, U2515H, U2711, U2713H, U2713HM, U2715H, U717D, U2913WM, U3417W, U3419W, UP2716D				
1.4. Mouse	Dell MS3220 USB Laser Wired Mouse	Standard	Full	IT	Yes

2. Laptop Hardware

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
2.1. Laptop	Dell Latitude 14" 5420	Standard	Full	IT	Yes
	Dell Precision M3800, 7510 Dell Latitude 5400, 5410, 5490, 5480, 5590, 6430U, 7370, 7390, E5420, E5430 non-vPro, E5430 vPro, E5440, E5450, E5450, E5470, E5550, E5570, E6420, E6440 Dell Precision M4500, M4600, M4700, M4800	Legacy	Full	IT	Yes
2.2. Laptop – Lite	Dell Latitude 7300	Standard	Full	IT	Yes
	Dell Latitude E7440, E7450, E7470	Legacy	Full	IT	Yes
2.3. Laptop – Rugged	Dell Latitude 5420 Panasonic 54-1	Standard	Full	IT	Yes
	Dell Latitude 5414, 7212, 7214 Panasonic CF-191DYUX1M, 191HYCX1M,	Legacy	Full	IT	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	31-5, 31-6, 31AAAAX1M, 31AAAAX2M, 31JAGAX1M, 31JEGAX1M, 31SBLAX1M, 31WBLAHLM, 31WBLAXLM, 53-4, 53JSLZY1M, , C2CQAZFCM				

Workstation and Laptop Hardware Notes:

- The planned lifecycle replacement for desktop workstations and laptop computers is 3-4 years.
- Information Technology does not recommend cascading workstations where a workstation that has been in use for its lifetime is moved to another desktop for continued use beyond the planned lifecycle. Any such request must be submitted as an exception request.
- Monitors have a longer life cycle and are typically run until failure.
- For existing workstation setups, Information Technology will provide either one 24" monitor or two 17" monitors at IT's expense. The cost of a second 24" monitor is paid by the requesting agency. Information Technology does not support dual monitors of different sizes on one workstation.

3. Tablet Hardware

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
3.1. Tablet – Rugged	Dell Latitude 7220 Rugged Extreme Panasonic FZ-55	Standard	Full	IT	Yes
	Dell Latitude 7212 Rugged Extreme Panasonic CF20-1 Panasonic FZG1-2, 3, 5	Legacy	Full	IT	Yes
3.2. Windows 10	Dell Latitude 7210 2-in-1	Standard	Full	IT	Yes
	Dell Latitude 5290, 5285, 5300 Dell Venue 11 Pro 7130 vPro Microsoft Surface Surface Pro 3, Pro 4	Legacy	Full	IT	Yes
Windows 8 Pro	Microsoft Surface w/ Windows 8 Pro	Legacy	Full	IT	Yes

Tablet Hardware Notes:

- iPads or other non-standard tablets may be purchased if there is a business need and upon approval from Information Technology.
- Non-standard tablets will not be added to the CITY domain and will not be supported by Information Technology.
- Replacement non-standard tablets will not be included in the planned lifecycle replacement, and the replacement cost of those devices is the responsibility of the agency that owns those devices.

4. Server Hardware

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
4.1. Direct Attached Storage	Dell PowerVault MD1000, MD1200, MD3460	Standard	Full	IT	No
4.2. Cisco Blade System	Cisco UCS C210 M2	Standard	Full	IT	No
4.3. HP UX	HP RX2800 i2	Standard	Full	IT	No
4.4. Windows based	Dell PowerEdge R540, R610, R620, R630, R640, R710, R720, R730, R730XD, R740	Standard	Full	IT	No ¹

Server Hardware Notes:

NONE

5. Network Protocols

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
5.1. Email	SMTP, TLS	Standard	Full	IT	No
5.2. Monitoring	SNMP v2, SNMP v3, WMI	Standard	Full	IT	No

¹ Except for specific instances that require local server hardware; needs to be evaluated and approved by IT.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
5.3. POE	802.3af, 802.3at	Standard	Full	IT	No
5.4. Routing	OSPF, BGP4, EIGRP	Standard	Full	IT	No
5.5. Transport	TCP / IP (IPv4, IPv6)	Standard	Full	IT	No
5.6. Wi-Fi Radio	802.11ac 802.11n (2.4 GHz / 5 GHz)	Standard	Full	IT	No

6. Network Connectivity

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
6.1. Cabling	Horizontal: UTP Cat 6, Cat 6a, Cat 7 Vertical: Fiber – Single Mode Patch: UTP Cat 6, Cat 6a, Cat 7, Fiber Copper patch cables should be hoodless.	Standard	Full	IT	No ²
	Horizontal: UTP Cat 5e Patch: UTP Cat 5e	Legacy	Full	IT	No ³

Network Connectivity Notes:

- New construction: – two Cat 6A or better cables per cubicle. May be used for either voice or data as needed.
- Remodel: Will be evaluated case by case due to other constraints.

² Except for specific instances that require local server hardware; needs to be evaluated and approved by IT.

³ Except for specific instances that require local server hardware; needs to be evaluated and approved by IT.

7. Network Routers

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
7.1. Layer 3 Switch	Cisco 3750, 3750-X, 4300, 4500	Standard	Full	IT	No
	Cisco 2950	Legacy	Full	IT	No

8. Network Switches

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
8.1. Router Layer 2 Switch	Cisco 6500E, Nexus	Standard	Full	IT	No

9. Printers (Network)

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
9.1. Large Format InkJet	Color: HP Designjet T3500ps (36") HP Designjet Z5200 PostScript (44") HP Designjet Z5600 PostScript (44")	Standard	Full	IT	Yes
	Color: HP Designjet T1200 PostScript (44") HP Designjet T1300 (44") HP Designjet T1300 PostScript (44")	Legacy	Full	IT	Yes
9.2. Large Multi-Function	Monochrome: Ricoh MP2555, MP5055, MP6503 Color: Ricoh IM C2000, C4500	Standard	Full	IT	Yes
	Monochrome: Lanier MP 2000/LD320d Lanier MP 4000/LD040 Ricoh Aficio MP 2000, 2851, 2852, 4000, 4001, 4002, 5001, 5002, 6002, 9002	Legacy	Full	IT	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Ricoh MP 2555, 3053, 3054, 3554, 5055, 6001, 6503 Ricoh SP 4520DN Lanier MP 171/LD 117 Lanier MP 2550/LD425 Savin MP 6002 Color: Lanier MP C2500/LD425C Lanier MP C3300/LD533C Ricoh Aficio MP C2051, C2500, C3000, C305, C3501, C3502, C4501 Ricoh MP C2003, C2503, C307, C3503, C4503, C4504, C4504ex, C5503 Savin MP C4504				
9.3. Laser	Monochrome: HP LaserJet M402dn, M506, M507, M604, M607 Color: HP Color LaserJet M452dn HP Color LaserJet MFP M477fdn	Standard	Full	IT	Yes
	Monochrome: HP LaserJet 1022nw, 4050 Series, 4100 Series, 4200, 4350, 8150 Series, P2055dn, P3005, P4515 Color: HP Color LaserJet 4700	Legacy	Full	IT	Yes
9.4. Small Multi-Function	Monochrome: Ricoh MP305SPF Color: Ricoh IMC300F	Standard	Full	IT	Yes
	Monochrome: HP LaserJet Pro MFP M127fn Lanier MP 161/LD016 Lexmark T650 Ricoh Aficio MP 171, 201, 301, 305 Savin 920 Savin MP 301 Color: Lexmark X734de	Legacy	Full	IT	Yes

Printer Support Notes:

- External vendors provide printer support for network printers.
- Corporate Business Systems provides Multi-function printer support by maintenance agreement.

10. Scanners

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
10.1. Workstation	Fujitsu fi-7260 Epson TM-S9000II	Standard	Full	IT	Yes
	Fujitsu fi-5220Cdj, 6130Zdj, 6230dj, 6230Zdj, 7160 Epson TM-S9000	Legacy	Full	IT	Yes

11. Search

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
11.1. Website Search	Bing Custom Search	Standard	Full	IT	No

12. Telecommunications

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
12.1. IP Telephony	Cisco CP-8841	Standard	Full	IT	Yes

13. Video, Audio, and Audiovisual

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
13.1. Audio DSPs	Biamp Crestron	Standard	Limited	IT	Yes
13.2. Audio Amplifiers	Crestron QSC	Standard	Limited	IT	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
13.3. Audio Mixers/Recorders	Shure Yamaha Sound Devices Mackie	Standard	Limited	IT	Yes
13.4. Audiovisual System Controllers and Touch Panels	Crestron	Standard	Limited	IT	Yes
13.5. Carts for Flat Panel Displays	Chief Peerless	Standard	Limited	IT	Yes
13.6. Collaboration Hardware	Crestron Flex	Standard	Full	IT	Yes
13.7. Digital Signage Media Players	Brightsign	Standard	Full	IT	Yes ⁴
13.8. Flat Panel Displays (Indoor)	Samsung Sharp Panasonic Sony NEC Philips Christie	Standard	Limited	IT	Yes
13.9. Flat Panel Displays (Outdoor)	Peerless	Standard	Limited	IT	Yes
13.10. Loudspeakers	JBL QSC	Standard	Limited	IT	Yes
13.11. Microphones	Shure Sennheiser Monoprice Sony Audio Technica	Standard	Limited	IT	Yes
13.12. Mirrorless Cameras for Video/Still Photography	Panasonic Lumix	Standard	Full	IT	Yes
13.13. PTZ Cameras for Recording,	Panasonic	Standard	Limited	IT	Yes

⁴ Agency must purchase Carousel license in addition to Brightsign hardware.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
Streaming, and Broadcast					
13.14. SDI-Over-Fiber Transport	Evertz	Standard	Limited	IT	Yes
13.15. Tripods, Pedestals, and Monopods	Sachtler Libec Manfrotto	Standard	Full	IT	Yes
13.16. Video and Audio Processing	AJA Blackmagic Designs Evertz Crestron Newtek Extron	Standard	Limited	IT	Yes
13.17. Video, Audio, and Audiovisual Routers and Switchers	AJA Crestron Newtek	Standard	Limited	IT	Yes
13.18. Video Camcorders	Panasonic	Standard	Full	IT	Yes
13.19. Video Projectors	Panasonic Sony Hitachi Epson	Standard	Limited	IT	Yes ⁵
13.20. Video Recorders	Atomos AJA Blackmagic Designs Sonic Foundry	Standard	Full	IT	Yes
13.21. Wall-Mounts for Flat Panel Displays	Chief Peerless Monoprice	Standard	Limited	IT	Yes
13.22. Wireless Presentation Technology	Crestron AirMedia	Standard	Limited	IT	Yes ⁶

⁵ Agencies are strongly encouraged to use flat panel displays instead of projectors.

⁶ Currently unavailable, will become available after wireless network upgrades.

Video, Audio, and Audiovisual Notes:

- All video, audio, and audiovisual equipment purchases shall be reviewed by the IT Media Team.
- The IT Media Team provides media production services per APM 4-4. Video and audio equipment for media production shall be purchased by agencies only when such use is specifically exempted by APM 4-4.
- The IT Media Team shall provide consultation when video, audio, or audiovisual equipment or systems are included in new construction or in the remodeling of existing City facilities. The IT Media Team shall work with customer agencies, City Engineering, and consulting engineers to ensure that audiovisual equipment and systems meet the standards in this document. The IT Media Team may assist in creating or modifying specifications, requests for proposals, or requests for bids for such projects.

Additional Notes for Integrated Audiovisual Systems:

- For integrated audiovisual systems in rooms where public events will be held, it is recommended that PTZ cameras, Dante-enabled audio components that are compatible with Dante Domain manager, equipment to convert presentation content to SDI, and SDI-over-fiber transport equipment be installed to allow for IT Media Team recording, streaming, and broadcasting. If this is not done, vendors shall rough in the cable runs so that this functionality can be easily added in the future.
- For integrated audiovisual systems, vendors shall have an Avixa Certified Technology Specialist (CTS) on staff and supervising the project.
- For integrated audiovisual systems, vendors shall have a Crestron Certified Programmer on staff for programming and configuration of Crestron audiovisual controllers.
- For integrated audiovisual systems, vendors shall be factory certified to provide service on the installed manufacturer's equipment and must have local service representatives within a 100-mile radius of the project site.
- The City of Madison shall own the un-compiled source code for audiovisual controllers, audio DSPs, and other programmed components of all audiovisual systems. Vendors may request source code from existing City systems.
- Vendors shall configure and program Crestron components so that they can be monitored and controlled by Crestron Fusion. Vendors shall provide X-Panels of all touch panels that can be accessed via Crestron Fusion.
- Vendors shall work with the IT Media Team to ensure that user interfaces on touch panels are similar in function and appearance to those in other City of Madison facilities.
- Vendors shall provide system documentation including manuals for all components and system schematics for all integrated audiovisual systems.
- Vendors shall provide training to customer agency staff and City IT staff for integrated audiovisual systems.
- Vendors shall provide a cost estimate for annual maintenance for integrated systems. Customer agencies are strongly encouraged to purchase annual maintenance.

Software and Application Development

14. Database Development Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
14.1. Editing/Compiling	SQL Server Management Studio 2017	Standard	Full	IT	Yes ¹
	Progress Desktop 10.2	Standard	Full	IT	No
	SQL Server Management Studio 2016 Progress Desktop 9.2	Legacy	Full	IT	No
14.2. Query Tool	SQL Server Management Studio 2017	Standard	Full	IT	Yes ²
	Progress Desktop 10.2	Standard	Full	IT	No
	SQL Server Management Studio 2016 Progress Desktop 9.2	Legacy	Full	IT	No
14.3. SQL Server Utilities	SQL Server Management Studio 2017	Standard	Full	IT	Yes ³
	Progress Admin Open Edge Explorer	Standard	Full	IT	No
	SQL Server Management Studio 2016	Legacy	Full	IT	No

¹ Requires IT approval for installation.

² Requires IT approval for installation.

³ Requires IT approval for installation.

15. Application Development Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
15.1. Client / Server	Visual Studio 2015	Standard	Full	IT	Yes ⁴
15.2. Mobile	PhpStorm Visual Studio Code	Standard	Full	IT	No
15.3. Multi-platform	Visual Studio 2015 (separate out) Visual Studio Code Notepad ++	Standard	Full	IT	Yes ⁵
	Visual Studio 2010	Legacy	Full	IT	No
15.4. Reporting Tools	Business Objects Enterprise 4.1 Crystal Reports 2013 Microsoft Power BI SQL Server Reporting Services 2014, 2016 BIRT	Standard	Full	IT	Yes
15.5. Tight VNC	Remote access to timeclocks for Parks, MT, and Engineering	Standard	Limited	IT	No
15.6. Workstation Based	Access	Allowed	Limited	IT	Yes

16. Collaboration Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
16.1. Enterprise Collaboration	SharePoint	Standard	Full	IT	Yes
16.2. Online Conferencing	Skype for Business	Standard	Full	IT	Yes
	Zoom	Standard	Limited	IT	Yes

⁴ Allowed in Metro Transit only.

⁵ Allowed in Metro Transit only.

17. Database Standards

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
17.1. Enterprise Database	SQL Server 2012, 2014, 2016 Progress	Standard	Full	IT	No

18. Directory Services

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
18.1. Directory Services	Microsoft Active Directory	Standard	Full	IT	No

19. Email

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
19.1. Email Lists Service	Mailchimp	Standard	Full	IT	Yes ⁶
19.2. Web Client	Outlook Web Access	Standard	Full	IT	No
19.3. Mail Client	Outlook 2016	Standard	Full	IT	No
19.4. Server Software	Microsoft Exchange 2013	Standard	Full	IT	No

⁶ Approved for use; may not create/purchase.

20. Fonts

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
20.1. Allowed Fonts	Adobe Fonts	Allowed	Limited	IT	Yes
20.2. City-Branding Fonts	Source Sans Pro Montserrat Merriweather	Standard	Full	IT	Yes
20.3. Non-Standard Fonts	Any font not included in 23.1, 23.2, 23.3, or 23.4.	Exception Required	Minimal Support	IT	Yes
20.4. OCR Font	OCR-A	Standard	Full	IT	Yes
20.5. Standard Fonts	Windows 7 & Windows 10 system fonts Microsoft Office & Office 365 built-in	Standard	Full	IT	Yes

City Brand Fonts:

The City of Madison's brand uses the fonts Source Sans Pro, Montserrat, and Merriweather. Calibri may also be used on informational documents. Using a standard set of fonts gives a consistent, professional appearance to communications with our residents and customers. This helps establish the City of Madison as a reliable, trustworthy provider of services, and provides a smooth, unified customer experience.

- Use City brand fonts on documents created and published by the City of Madison.
- Require contractors doing design and document creation to use City brand fonts when possible.

Non-Standard Fonts:

Using non-standard fonts can affect how content displays depending on whether or not the font is available on the viewer's workstation.

- Non-standard fonts in documents or email will not display correctly if the viewer does not also have the font installed. Some applications can embed the font in the document, making it available for the viewer in *that document only*.
- Non-standard fonts in PDF documents will generally appear as intended.
- Non-standard fonts in an image, such as a JPG, will appear as intended.
- Non-standard fonts on webpages require the webpage to reference the font.

Licensing & Installation:

- All non-standard fonts require an exception.
- Fonts may be free or may have a licensing fee. Fonts may be licensed by individual user, or site licensed. There may also be specific licensing rules for the use of the font.
- Non-standard fonts will not be installed automatically when a workstation is replaced.

21. Geographical Application Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
21.1. Asset & Work Management	Cityworks AMS	Standard	Full	IT	Yes ⁷
	CrescentLink – manages fiber network	Agency	Agency / Vendor	IT	No
	ECS Housing System – housing operations management system	Agency	Agency / Vendor	Housing	No
21.2. GIS Desktop Application	ArcGIS 10.5.1 & 10.6.1 – ArcGIS Pro	Standard	Full	IT	Yes
GIS Desktop Application – Extensions	3D Buildings – building models	Standard	Full	IT	Yes
21.3. GIS Development	ArcGIS Engine 10.5.1 & 10.6.1 Python 2.7 ArcGIS Online – Cloud SaaS Portal for ArcGIS 10.5.1 & 10.6.1 – On-premise SaaS	Standard	Full	IT	Yes ⁸
21.4. GIS Open Data	ArcGIS Online	Standard	Full	IT	Yes

22. Graphic Design Software

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
22.1. Computer Aided Design (CAD)	AutoCAD SketchUp Pro subscription	Allowed	Limited	IT	Yes
	InfoSWMM ⁹ – hydrologic and hydraulic modeling	Agency	Agency / Vendor	Engineering	No

⁷ Limited to Engineering, Parking Utility, Traffic Engineering, and Water Utility.

⁸ With IT review and approval.

⁹ Adding additional users requires an amendment to the existing contract.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	PC SWMM ¹⁰ – hydrologic and hydraulic modeling Trace3D Plus ¹¹ – energy modeling for HVAC HEC-RAS 5.0.5 ¹² – hydraulic modeling for water flow WUFILight ¹³ – one-dimensional hydrothermic analysis IES Virtual Environment ¹⁴ – building energy simulation My Smart Cover ¹⁵ – water flow monitoring Revit – building modeling				
	Groundwater Vistas ¹⁶ – groundwater modeling	Agency	Agency / Vendor	Water Utility	No
22.2. Graphic Design	Adobe Creative Cloud (InDesign, Photoshop, Illustrator, Premier Pro) Adobe Photoshop Elements	Standard	Limited	IT	Yes
	Microsoft Publisher 2016	Standard	Full	IT	Yes
22.3. PDF Creation	Microsoft Office 2016 Pro Plus built-in Microsoft Print to PDF printer built-in W10	Standard	Full	IT	Yes
	Adobe Acrobat DC Standard Adobe Acrobat DC Professional	Standard	Limited	IT	Yes
22.4. Screen Capture	Camtasia SnagIt	Allowed	Limited	IT	Yes
22.5. Visual Diagramming	Microsoft Visio 2016 Microsoft Visio Viewer 2016	Standard	Full	IT	Yes
	Microsoft Visio Standard 2010 Microsoft Visio Professional 2010 Microsoft Visio Viewer 2013 Microsoft Visio Standard 2013	Legacy	Limited	IT	Yes

¹⁰ Adding additional users requires an amendment to the existing contract.

¹¹ City-wide purchases cannot exceed \$10,000.

¹² City-wide purchases cannot exceed \$10,000.

¹³ City-wide purchases cannot exceed \$10,000.

¹⁴ Adding additional users requires an amendment to the existing contract.

¹⁵ City-wide purchases cannot exceed \$10,000.

¹⁶ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Microsoft Visio Professional 2013				

23. Internet Domain Names

The City of Madison’s website domain name is cityofmadison.com. Department websites use the standard naming convention of *www.cityofmadison.com/department-name*. This naming standard maintains City of Madison branding and does not have added costs.

Applications and systems hosted by the City of Madison use the standard naming convention of *application-name.cityofmadison.com*. In this standard, the application name shall be the generic title of the function or service provided by the system, not the product name of third-party systems.

City departments may request additional domain names, as business reasons dictate. Any additional domain names must be reviewed and approved by Information Technology. All new domain names must be registered and maintained by IT to ensure the domain name is catalogued centrally to reduce the chance that a domain name expires without the City’s knowledge. Registration/renewal costs of additional domain names are the responsibility of the requesting department.

24. Miscellaneous Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
24.1. [ADA] Speech to Text	JAWS Dragon Naturally Speaking	Standard	Full	IT	Yes
24.2. Appointment Scheduling	No Wait Inside ¹⁷	Standard	Limited	IT	Yes
24.3. Asphalt Design	PerRoad ¹⁸	Agency	Agency / Vendor	Engineering	No
24.4. Asset Management	Tokay – manages cross-connections	Agency	Agency / Vendor	Water Utility	No
	ASMobile – mobile homes Aspprop – personal property	Legacy	Full	Assessor	No

¹⁷ City-wide purchases cannot exceed \$10,000.

¹⁸ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	CommBldg – commercial buildings	Legacy	Full	Assessor	No
	Geo/Property	Legacy	Limited	Assessor's	No
24.5. Asset & Work Management	TOPS Database – property management	Agency	Agency / Vendor	Housing / Real Estate	No
	TransitMaster – schedules, routing, maintenance, & drivers	Agency	Agency / Vendor	Metro	No
	Ungerbock – room & theatre usage	Agency	Agency / Vendor	Monona Terrace	No
	FAMIS – facility management	Legacy	Agency / Vendor	Engineering	No
24.6. Availability Tracking	Signout Board	Legacy	Limited	IT	No
24.7. Billing	CURSOR/CDM – reverse mortgage management	Agency	Agency / Vendor	Real Estate	No
	DonorWorks – donation tracking & solicitation	Agency	Agency / Vendor	Senior Center	No
	Emphasys ELITE Database – CRM	Agency	Agency / Vendor	Housing	No
	Intermedix – Fire/EMS billing system	Agency	Agency / Vendor	Fire	No
	MobileNow! – electronic payment for parking meters	Agency	Agency / Vendor	Parking Utility	No
	CIS Infinity – customer information system	Legacy	Limited	Water Utility	No
	Cmabs911 – ambulance billing	Legacy	Limited	Finance	No
	Cmspchg – special assessments Delq. Personal Property Redpp – delinquent personal property	Legacy	Full	Finance	No
24.8. Control	Brother Scanner Driver	Agency	Agency / Vendor	Health	Yes
	Brady Printer	Agency	Agency / Vendor	Metro	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Dino-Capture 2.0 – loads microscope photos/videos	Agency	Agency / Vendor	Olbrich	No
	Cricut ¹⁹ – manages paper cutting machine	Agency	Agency / Vendor	Police	No
	Access It! Universal.NET ²⁰ – card access system ZEAG – parking ramp access	Agency	Agency / Vendor	Parking Utility	No
	Vcarve Pro – works w/ CNC machine	Agency	Agency / Vendor	Parks	No
	Elum Tools – illumination and lighting	Agency	Agency / Vendor	Engineering	No
	EnergyCAP – energy management	Agency	Agency / Vendor	Engineering	No
	Graphtec – controls street sign making devices	Agency	Agency / Vendor	Traffic Engineering	No
	KEYSCAN – controls the key scan system	Agency	Agency / Vendor	IT	No
24.9. Digital Audio Networking	Audinate	Agency	Agency / Vendor	IT	No
24.10. Document Management	KnowledgeLake	Standard	Full	IT	Yes
24.11. Educational	Linda – used for trainings	Agency	Agency / Vendor	IT	No
	TargetSolutions – organizes trainings and tracks certifications	Agency	Agency / Vendor	Fire	No
24.12. Electronic Plan Review	DigEPlan	Standard	Full	IT	Yes
24.13. Enterprise Digital Signage System	Carousel Brightsign Player Configuration Tool	Standard	Full	IT	No
24.14. Enterprise Streaming Media System	Mediasite Video Platform Mediasite Desktop Editor	Standard	Full	IT	No ²¹

¹⁹ Software not allowed on City-network.

²⁰ Software not allowed on City-network.

²¹ Agencies must access Mediasite via MyMediasite.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
24.15. Event Management	EventBrite ²²	Standard	Limited	IT	Yes
	Meet Manager ²³	Agency	Agency / Vendor	Parks	No
24.16. File Transfer Tools	DHS Title X Data Transfer Application	Agency	Agency / Vendor	Health	No
24.17. Financial Reporting	Munis Cashiering	Standard	Limited	IT / Finance	Yes
	CAFR Builder ²⁴ – compiles the City's Comprehensive Financial Report FH Black ²⁵ – works w/ CAFR Builder Balancing Act ²⁶ – tax bill simulator Sympro – treasury management	Agency	Agency / Vendor	Finance	No
	Caselle – views historical Waunona billing info	Agency	Limited	Water Utility	No
	TR Tax SXD	Legacy	Limited	Finance	No
24.18. Forensics	Oxygen Forensics ²⁷ CDR Device – crash forensics Geotime – analyzes call detail records Amped FIVE Professional ²⁸ – forensic image and video processing software Mideo ²⁹ – web-based access to forensic photos Blacklight ³⁰ – examination of Apple products	Agency	Agency / Vendor	Police	No

²² City-wide purchases cannot exceed \$10,000.

²³ City-wide purchases cannot exceed \$10,000.

²⁴ Adding additional users requires an amendment to the existing contract.

²⁵ Adding additional users requires an amendment to the existing contract.

²⁶ Adding additional users requires an amendment to the existing contract.

²⁷ City-wide purchases cannot exceed \$10,000.

²⁸ City-wide purchases cannot exceed \$10,000.

²⁹ Adding additional users requires an amendment to the existing contract.

³⁰ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	EnCase Forensics 8 Examiner ³¹ – imaging and examination of evidentiary computer devices STELLAR – data recovery				
24.19. Law Enforcement	LinX Extract – data sharing from police records at a national level GlobalScope – data sharing from police records at a national level	Agency	Agency / Vendor	Police	No
24.20. Legislative Management System	Legistar	Standard	Full	IT	Yes
24.21. Library Management System	Koha	Agency	Agency / Vendor	Library	No
24.22. Lighting	ColorPlay3	Agency	Agency / Vendor	Engineering	No
24.23. Performance Assessment	Performance Assessment Task (PAT) Tool Heartmath ³²	Agency	Agency / Vendor	Police	No
24.24. Photo Library	Emphasys Portfolio	Standard	Full	IT	Yes
	Bulkr Pro	Agency	Agency / Vendor	IT	No
24.25. Plant Inventory	Brahms ³³ Orchidwiz ³⁴	Agency	Agency / Vendor	Olbrich	No
24.26. Property Data	Laredo – Register of Deeds data access	Agency	Agency / Vendor	Assessor	No
	MobileHomes – data on mobile homes	Legacy	Full	Assessor	No
24.27. Purchasing Tool	Bid Express – allows contractors to submit bids	Agency	Limited	Engineering	No
24.28. Records	ReportAProblem – allows users to report when an application is down	Standard	Full	IT	No

³¹ City-wide purchases cannot exceed \$10,000.

³² City-wide purchases cannot exceed \$10,000.

³³ City-wide purchases cannot exceed \$10,000.

³⁴ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Simplifile ³⁵ – records real estate documents	Agency	Agency / Vendor	Attorney	No
	Baker Tilly Civic Systems – historical billing information on Waunona customers	Agency	Agency / Vendor	Water Utility	No
	NEOGOVS – applicant tracking	Agency	Full	Human Resources	No
	Revote – election official management	Agency	Full	Clerk	No
	SMS Backup & Restores – retention of text messages Winscribe – voice dictation	Agency	Agency / Vendor	Police	No
	DEMAND STAR – bids and RFPs VENDOR NET – bids and RFPs	Agency	Agency / Vendor	Finance	No
	Cmhist – financial history	Legacy	Full	Finance	No
	Plcdbg – grant reviews	Legacy	Full	CDBG	No
	Ploba – Office of Business Assistance	Legacy	Full	DPCED	No
	Reroute – contract routing & tracking	Legacy	Full	Clerk	No
24.29. Records Management	Directory Lister ³⁶	Standard	Limited	IT	Yes
	CityLaw	Agency	Agency / Vendor	Attorney / Civil Rights	No
	Lerms Tracs	Agency	Agency / Vendor	Police	No
	AIMS	Agency	Agency / Vendor	Parking Enforcement	No
	Elite	Agency	Agency / Vendor	Housing Authority	No

³⁵ City-wide purchases cannot exceed \$10,000.

³⁶ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Faster	Agency	Agency / Vendor	Water Utility / Fleet Services	No
	HUB Parking	Agency	Agency / Vendor	Parking Utility	No
	PA Bones	Agency	Agency / Vendor	Parks	No
	FuelView	Agency	Agency / Vendor	Fleet Services	No
	Rectrac	Agency	Agency / Vendor	Parks / Senior Center / Olbrich	No
	ImageTrend – collects data for Fire/EMS	Agency	Agency / Vendor	Fire	No
	MuniCode – lists municipal ordinances online	Agency	Agency / Vendor	Attorney	No
	Mycommit – internal city committee center	Legacy	Full	Mayor's Office	No
24.30. SCADA	SolarEdge – solar panel management	Agency	Agency / Vendor	Engineering	No
	Wonderware	Agency	Agency / Vendor	Water Utility / Engineering	No
24.31. Screening Model	EPA CO-Benefits Risk Assessment (COBRA)	Agency	Agency / Vendor	Engineering	No
24.32. Scheduling	Telestaff	Agency	Agency / Vendor	Engineering / Police / Fire / Streets	No
	Volgistics – volunteer scheduling & tracking	Agency	Agency / Vendor	Parks (Olbrich)	No
	VolunteerWorks – volunteer scheduling & tracking	Agency	Agency / Vendor	Senior Center	No
	Mocars – City car/bike reservations	Legacy	Full	Fleet Services	No

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
24.33. Social Media Management	Hootsuite Agorapulse ³⁷	Standard	Limited	IT	Yes ³⁸
	UCINET	Agency	Agency / Vendor	Health	No
24.34. Social Media Platforms	Facebook Twitter Instagram	Standard	Limited	IT	Yes ³⁹
24.35. Strategic Management	Insight Formation – manages performance standards, measures, & reporting	Agency	Agency / Vendor	Health	No
24.36. Surveys	Survey Monkey	Standard	Limited	IT	Yes ⁴⁰
24.37. Text Messaging Alerts	Wireless Emergency Notifications (WENS)	Standard	Full	IT	Yes
24.38. Time Clock	Timekeeper	Agency	Agency / Vendor	Parks / Engineering / Monona Terrace / Fleet Services	No
24.39. Tracking	Autocite – detects parked cars moving	Agency	Limited	Parking Enforcement	No
	Acclaim – nurse tracking	Legacy	Limited	Health	No

³⁷ City-wide purchases cannot exceed \$10,000.

³⁸ IT must create accounts; may not purchase/create new accounts.

³⁹ IT must create accounts; may not purchase/create new accounts.

⁴⁰ Agencies must purchase and support their own accounts.

25. Operational Support Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
25.1. [ADA] Video Remote Interpreting Services	Insight VRI ⁴¹	Agency	Agency / Vendor	Civil Rights	No
25.2. Data Analysis	Google Analytics -- analyzes website trends	Standard	Limited	IT	No
	GTVIEWER – underground infrastructure	Standard	Limited	Engineering	No
	NFORS ⁴² – fire and rescue data	Agency	Agency / Vendor	Fire	No
	SPSS ⁴³ – provides current health outcomes MAXQDA ⁴⁴ – holistic data analysis software solution	Agency	Agency / Vendor	Health	Yes
	Insightvision ⁴⁵ – analyzes performance standards, measures & reporting JoinPoint – data analysis tool for COVID-19 items SPSS / PSPP – statistical analysis	Agency	Agency / Vendor	Health	No
	Wanco Traffic Analyzer	Agency	Agency / Vendor	Traffic Engineering	No
	Oracle ⁴⁶ – visualizes water usage Itron ⁴⁷ PARRE ⁴⁸ – risk assessment tool MeterSense – collects & analysis for water meters	Agency	Agency / Vendor	Water Utility	No
	Bosch Crash Data Recorder – analyzes crash data	Agency	Limited	Police	No

⁴¹ Adding additional users requires an amendment to the existing contract.

⁴² Adding additional users requires an amendment to the existing contract.

⁴³ City-wide purchases cannot exceed \$10,000.

⁴⁴ City-wide purchases cannot exceed \$10,000.

⁴⁵ Adding additional users requires an amendment to the existing contract.

⁴⁶ Adding additional users requires an amendment to the existing contract.

⁴⁷ Adding additional users requires an amendment to the existing contract.

⁴⁸ Adding additional users requires an amendment to the existing contract.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	CoStar – commercial real estate research & listing	Agency	Agency / Vendor	Assessor	No
	Homeless Management Information System (HMIS)	Agency	Agency / Vendor	Community Development	No
	IAPro – analyzes professional standards Lexis Nexis – crime analysis	Agency	Agency / Vendor	Police	No
25.3. Fleet Management	EJ Ward – controls fuel pump system Gas Boy – fuel management	Agency	Agency / Vendor	Fleet Services	No
25.4. Media Team Database Applications	Filemaker Server Filemaker Pro Filemaker Advanced	Standard	Full	IT	No
25.5. Monitoring	MSA Link – gas monitors	Agency	Agency / Vendor	Engineering	No
	TrackPro – stores, organizes, generates graphs, and creates reports	Agency	Agency / Vendor	Finance	No
	Tile App – tracks where keys are located	Agency	Agency / Vendor	Fire	No
	HomeAgain Microchip Scanner	Agency	Agency / Vendor	Health	No
	Profile 5 – diagnostics for brake meters on buses ReAX Diagnostics – analyzes steering components on buses EcoTemp CoolVu – diagnostics for bus mechanics	Agency	Agency / Vendor	Metro	No
	StarNext – processes traffic counts for counters TAPCO Controller – program & bug fix driver feedback & flashing beacon crossing control equipment	Agency	Agency / Vendor	Traffic Engineering	No
	Claros Collect ⁴⁹ – create reports w/ WIMS WIMS ⁵⁰ – reporting software interfaced with the SCADA	Agency	Agency / Vendor	Water Utility	No

⁴⁹ City-wide purchases cannot exceed \$10,000.

⁵⁰ City-wide purchases cannot exceed \$10,000.

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
25.6. Safety	Material Safety Data Sheets Online	Agency	Agency / Vendor	Finance	No
	QCPR Instructor and Learner ⁵¹	Agency	Agency / Vendor	Fire	No
25.7. SharePoint Site Management	Sharegate ⁵²	Agency	Agency / Vendor	IT	No
25.8. Video, Audio, and Audiovisual Control and Monitoring	Crestron Xpanel Dante Controller Dante Digital Soundcard Newtek NDI Tools DJI Assistant GoPro Quik	Standard	Full	IT	Yes
	Crestron Fusion Crestron Studio Crestron VisionTools Crestron Toolbox Crestron SIMPL Crestron SmartGraphics Crestron SIMPLE+ Cross Compiler Dante Domain Manage Dante Via Biamp Tesira Biamp Canvas Newtek Tricaster TC-1 Newtek LivePanel Newtek LiveText Blackmagic Teranex Control Blackmagic Videohub Control Blackmagic Multiviewer Control Shure Device Discovery Panasonic P2 Viewer Plus ETC Gateway Configuration Editor Lumix Tether Atlona Management System	Standard	Full	IT	No

⁵¹ Software not allowed on the City-network.

⁵² City-wide purchases cannot exceed \$10,000.

26. Project Management Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
26.1. Project Management Software	Microsoft Project 2016	Standard	Full	IT	Yes
26.2. Project Portfolio Management (PPM) Software	SharePoint	Standard	Full	IT	Yes

27. Surveillance

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
27.1. Enterprise Camera Management System	Exacq	Standard	Agency / Vendor	IT	Yes

28. Web Tools

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
28.1. Content Management and Page Development Tools	Adobe Contribute Drupal Content Management System	Standard	Full	IT	Yes
28.2. Runtime Environment Tools	ColdFusion Server	Standard	Full	IT	No
	Java	Standard	Limited	IT	No
28.3. Scripting Languages	ColdFusion JavaScript	Standard	Full	IT	No

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	PHP				
28.4. Web Application Development	Adobe Dreamweaver PHPStorm Prepros	Standard	Full	IT	No
28.5. Web Browser	Microsoft Internet Explorer 11	Standard	Full	IT	Yes
	Chrome Firefox Edge	Standard	Limited	IT	Yes
28.6. Web Server	Microsoft IIS	Standard	Full	IT	No
	Apache Tomcat	Standard	Limited	IT	No
28.7. Web Browser	Microsoft Internet Explorer 11	Standard	Full	IT	Yes
	Chrome Firefox Edge	Standard	Limited	IT	Yes

29. Workstation Software

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
29.1. Power Management	Verdiem Surveyor	Standard	Full	IT	Yes
29.2. Productivity	Microsoft Office 2016 Professional Plus Veritas Enterprise Vault Outlook Add-in Adobe Reader DC	Standard	Full	IT	Yes
	Classic Shell for Windows VLC Media Player	Standard	Limited	IT	Yes

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
	Westlaw Drafting Assistant ⁵³	Agency	Agency / Vendor	Attorney	No

30. Workflow Software

Sub-Category	Standard Description	Standard Classification	Support Model	Agency Standard Owner(s)	Permitted Outside Agency
30.1. Document Routing	Contract Routing	Legacy	Full	IT	No
30.2. Permitting & Licensing	Accela Accela Mobile Office Accela Apps	Standard	Full	IT	Yes
30.3. Process Management & Workflow Automation	Nintex	Standard	Full	IT	No

⁵³ Adding additional users requires an amendment to the existing contract.

Commodity Hardware

This section describes hardware and software that may be purchased directly by City staff from the City's recommended suppliers without intervention from IT (unless stated otherwise).

Some items have conditions attached in order for them to function more effectively within the City's infrastructure.

31. General USB Device Guidance

- Plug and Play only (PnP).
- Any new software installation required must comply with the software approval process outlined in APM 3-20.

32. General Bluetooth Device Guidance

- Plug and Play only (PnP).
- Any new software installation required must comply with the software approval process outlined in APM 3-20.

33. Computer Mice / Trackballs

- Plug and Play only (PnP).
- Any new software required must comply with the software approval process outlined in APM 3-20.

34. Computer Speakers

- Plug and Play only (PnP).

35. Digital Cameras

- See standards section 14.17.

36. Fax Machines

- Requires IT approval.

37. Headphones

- Plug and Play only (PnP).
- Any new software installation required must comply with the software approval process outlined in APM 3-20.

38. Keyboards

- Plug and Play only (PnP).
- Any new software installation required must comply with the software approval process outlined in APM 3-20.

39. Laser Print Toner Cartridges

- No IT approval needed.

40. Locally Connected USB Printers

- Plug and Play only (PnP).
- Any new software required must comply with the software approval process outlined in APM 3-20.

41. Removable Media (USB storage devices, CDs, DVDs, flash / compact media cards, etc.)

- Plug and Play only (PnP).

Technology Specifications

This section documents the minimum specification used to select the approved standards.

42. Workstation Standard Criteria

The base component criteria for standard desktop and laptop workstations is as follows:

42.1. Standard Desktop Workstation: Dell OptiPlex 3080

- See current desktop hardware specifications and price quotes on the City website: <https://www.cityofmadison.com/employeeenet/information-technology/price-quotes>

42.2. Standard Desktop Workstation (CAD): Dell Precision Tower 5820

- See current desktop (CAD) hardware specifications and price quotes on the City website: <https://www.cityofmadison.com/employeeenet/information-technology/price-quotes>

42.3. Standard Laptop Criteria: Dell Latitude 14" 5420 Laptop

- See current laptop hardware specification and price quote on the City website: <https://www.cityofmadison.com/employeeenet/information-technology/price-quotes>

42.4. Standard Laptop Criteria (CAD): Dell Precision 7550

- See current laptop (CAD) hardware specification and price quote on the City website: <https://www.cityofmadison.com/employeeenet/information-technology/price-quotes>

43. Structured Cabling Specifications

[City of Madison 2013-2014 – Structured Cabling Specification](#)

Appendix A

Online References

City of Madison Website: <https://www.cityofmadison.com/>

IT Intranet Page: <https://www.cityofmadison.com/employeeenet/information-technology>

IT Hardware Purchase Request Page: <https://www.cityofmadison.com/employeeenet/information-technology/it-hardware-purchase-request>

New Software Request Page: <https://www.cityofmadison.com/employeeenet/information-technology/policies-apms/new-software-request>

IT Project Request Page: <https://www.cityofmadison.com/employeeenet/information-technology/project-request>

IT HelpDesk Page: <https://www.cityofmadison.com/employeeenet/information-technology/helpdesk>

Price Quotes: <https://www.cityofmadison.com/employeeenet/information-technology/price-quotes>

IT Training & Support: <https://www.cityofmadison.com/employeeenet/information-technology/training-support>

IT Policies & APMs: <https://www.cityofmadison.com/employeeenet/information-technology/policies-apms>

Appendix B

Revision History

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