



Metropolitan Regional Career And Technical Center

Technology Plan **rev. September 1, 2022** **2022-2027**

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The Metropolitan Regional Career and Technical Center

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Plan Duration

The Metropolitan Regional Career and Technical Center technology plan is designed to address the technology needs for the next five (5) years, FYs 2022-2027. This plan is a working document subject to modification and additions as needs and evaluation dictate.

Goals, Objectives, and Strategies

The Met relies heavily on technology to execute its curriculum. All phases of this plan focus on working closely with various departments to implement technologies that are customized for fundamental and unique activities of The Met such as internships, exhibitions, advisory activities, and daily administrative tasks.

Of equal importance is the maintenance and scalability of existing systems while looking for new technologies that fit the needs of the Met environment. These needs include web-based collaborative student data, technological delivery of exhibitions, video conferencing, digital portfolios, and online LTI projects.

Our ongoing goal is to proactively minimize downtime and provide a stable environment that can allow for new initiatives. User confidence is of primary importance as it directly translates to productivity and a higher quality educational experience.

Current Technology, Resources and Needs

Currently The Met provides one computer for each of its students. File and print services, e-mail, video conferencing, remote access, mobile computing, and a state-of-the-art audio/visual department are all functioning as desired. There is a standard yearly retirement of 25% of the oldest computers in order to keep the network current and functioning properly.

In 2021 and early 2022, the WIFI system, firewall, printing systems, messaging security software, and content filtering have all been upgraded and migrated to cloud-based SaaS systems which also protect students when off-campus. Campus Alert Systems have also been implemented with the use of analog and digital technologies. Still, further upgrade and maintenance will be required within the time to which this technology plan applies. There is a continuous focus on reducing operational costs, community safety, energy efficient technologies, and cloud-based software platforms.

Although our messaging systems are provided through Google Workspace for Education Plus, third party SaaS licensing will be a continued need to complement the core messaging system. The goal is to be prepared to support the technology initiatives that are a mainstay of the school's curriculum and raise the standard of available technologies.

Ongoing goals include 24/7 Internet access for students and staff using mobile hotspots and low-cost home internet access.

Priority Infrastructure Needs

Current priorities and needs include network switching upgrades, deeper security capabilities (especially regarding student messaging), improved disaster recovery tools, and an improved approach to campus lockdown technologies using displays with a managed alerting and notification system.

Solutions

The recommendations for implementing the above would be to replace all infrastructure switching, purchase messaging system security to scale our current Google services, harden security for our existing on-premises servers, and purchase displays and a management system to improve our in-classroom emergency alert capabilities.

Evaluation

This technology plan will be evaluated and updated annually by a technology committee consisting of the Co-Directors of the MET, Media Coordinator, Business Manager, Director of Curriculum Development, and the seven small school managers. The composition of this review committee will help to ensure that all areas of site operation are involved in planning, implementation, and review of the Metropolitan Regional Career and Technical Center technology plan.

Attachments/Appendices

Attached are recommendations for FY 2022-27 that provide a general outline of maintenance, upgrades, and initiatives for the Met.

Budgets for FY 2022-23 are included.

PRIORITY	ITEM	REASON
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High Priority	<p>Replace current Aruba switching</p> <p>Add displays to each classroom, staff office and common area as an upgrade to our current campus alerting and communication system.</p>	<p>Current switching was implemented in 2013 and has reached EOL.</p> <p>Although we have current analog and digital alerting in place, the displays would be a more effective and scalable technology for the increased safety of our students.</p>
Medium	Add 3 rd party messaging security tools and capabilities to our Google Workspace Ed Plus environment	Malicious messaging is an increasing issue in all areas of student life. Creating a more manageable and transparent messaging and data sharing environment will help the Met community continue to maintain its standards of educational and social welfare.
Low	Upgrade current SD Wan Fortinet firewall system to a more robust performance level.	A higher performance firewall would allow for the addition of services within the firewall system allowing for more efficient filtering and internet delivery.

FY 2022 / 2023

- Infrastructure Upgrades
Replace existing switching environment. Current switches have reached EOL
- Server Software Upgrades
Purchase necessary licensing

- Servers transitioned to VMs
Continue to build virtual machines to replace physical server systems
I.e., door security, webserver, data storage
Implement SAN to house virtual machines and archived data
- Increase cloud backup and archive capability
- Continue to provide Chromebooks for students and staff.
Maintain and improve quality of 1:1 environment
Continue policy of in-house technology hardware repairs
Provide staff with more robust devices
- Add DNS filtering layer for BYOD for students and guests
Build CIPA based content filter for students
- Implement security analysis and mitigation technologies for Google Workspace
Add Security Tool to manage malicious messaging
Add reporting tools suite
- Review effectiveness of IT department and policies

FYS 2023 / 2027

- Install Emergency Alert displays
Replace analog Campus Alert system
- Upgrade SolarWinds database software for reporting and outage alerting
- Provide more robust devices for student population
Begin rotation of higher performance Chromebooks for students
Increased media and bandwidth usage require better performance capabilities
- Rebuild internal data access website
Website needed to provide remote access to staff drives and confidential data
- Security upgrades
Implement Two-factor authentication for staff and students
Ongoing revisions of GoGuardian content filtering

METROPOLITAN REGIONAL CAREER AND TECHNICAL CENTER									
BEN #16037857									
TECHNOLOGY BUDGET July 1, 2023-June 30, 2024									

Telephone service:								
	Verizon local lines							
	Quest long distance service							
		Total phone service						
Cell phones:								
	Verizon Wireless - up to 25							
	Blackberries - up to 10							
Internet access								
	Cox Communications							
	RINET							
Video/media production								
Desktop software								
Electrical systems - new or upgrade								
	Lighting control upgrade							
	Expanded architecture Heating controls							
Computers								
Computer hardware maintenance								
Staff development								
	TOTAL BUDGET							