

UCFSD Phase 2 - Network Upgrade

Executive Summary

- Project simplifies network management, improves network speed and performance in all buildings, and improves security for staff, student, and guest mobile devices
- Cost is \$100k, funded in the 2019-20 preliminary budget

Current State

- End of life wireless controllers at each elementary school building
- End of life router equipment at all buildings
- No authentication process for our guest user/devices
- A single firewall poses a single point of failure
- Weak WiFi access in specific areas of our elementary buildings
- Weak WiFi signal around perimeter of each school building

Future State

- All elementary school wireless access points will point to our two redundant wireless controllers at UHS
- Cisco network router upgrades at each building
- Second firewall to provide redundancy
- Mobile authentication and security system for staff, student, and guest mobile devices
- External access points installed for internet access at building outside perimeter
- Internal access points upgraded to remediate findings from our wireless assessment

Benefits

- **Improved Redundancy and Access**
 - Elementary building access points will point to two wireless controllers
 - All buildings will have outside perimeter access to extend the classroom and provide access for accountability systems
 - Second firewall will provide failover capabilities
- **Efficient Operations**
 - All wireless equipment will be the same vendor
 - Centralized management systems will be installed to monitor and manage the network
- **Better Network Performance**
 - Installing better technology in areas/schools to reduce oversaturation and dead zones
 - Support future endpoint technology growth and emerging technologies

Financials and Board Action

- Project will upgrade all routers in six buildings and consolidate wireless controllers at each elementary building
- Project will add additional firewall to provide redundancy
- Project will add outside access points at each building to provide WiFi signal
- Project will add additional software for authentication and security for mobile devices
- Total cost is **\$100,000.00** added to the 2019-20 preliminary technology budget

Board Action

- Seeking approval at the March 2019 board meeting to move forward with the commitment to purchase network equipment for Phase 2 of the network upgrade project

Timeline

- **March 11, 2019 - Board presentation**
- **March 18, 2019 - Board Approval**
- **April 2019 - June 2019 - Finish design and implementation plan**
- **July 2019 - Purchase equipment**
- **July 2019 - April 2020 - Install and configure network equipment**
- **May 2020 Close out Project and report to board**