

Network Modernization Funding Request

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Colorado School of Mines

Colorado's premier engineering and applied science university for 150 years and counting...

Our STEM-focused education and research produces the talent, knowledge and solutions to serve industry and benefit society – all to create a more prosperous future. It's the mission Mines was founded on 150 years ago and where we continue to excel today.

Recognized as an R1 “very high research activity” institution

By the numbers

75+

Academic degrees and programs to choose from

96%

On average, 96% of graduates have positive outcomes, such as securing a job or advancing to graduate school

7,403

Undergraduate, graduate and non-degree students

Why Network Modernization?

It is all about our students



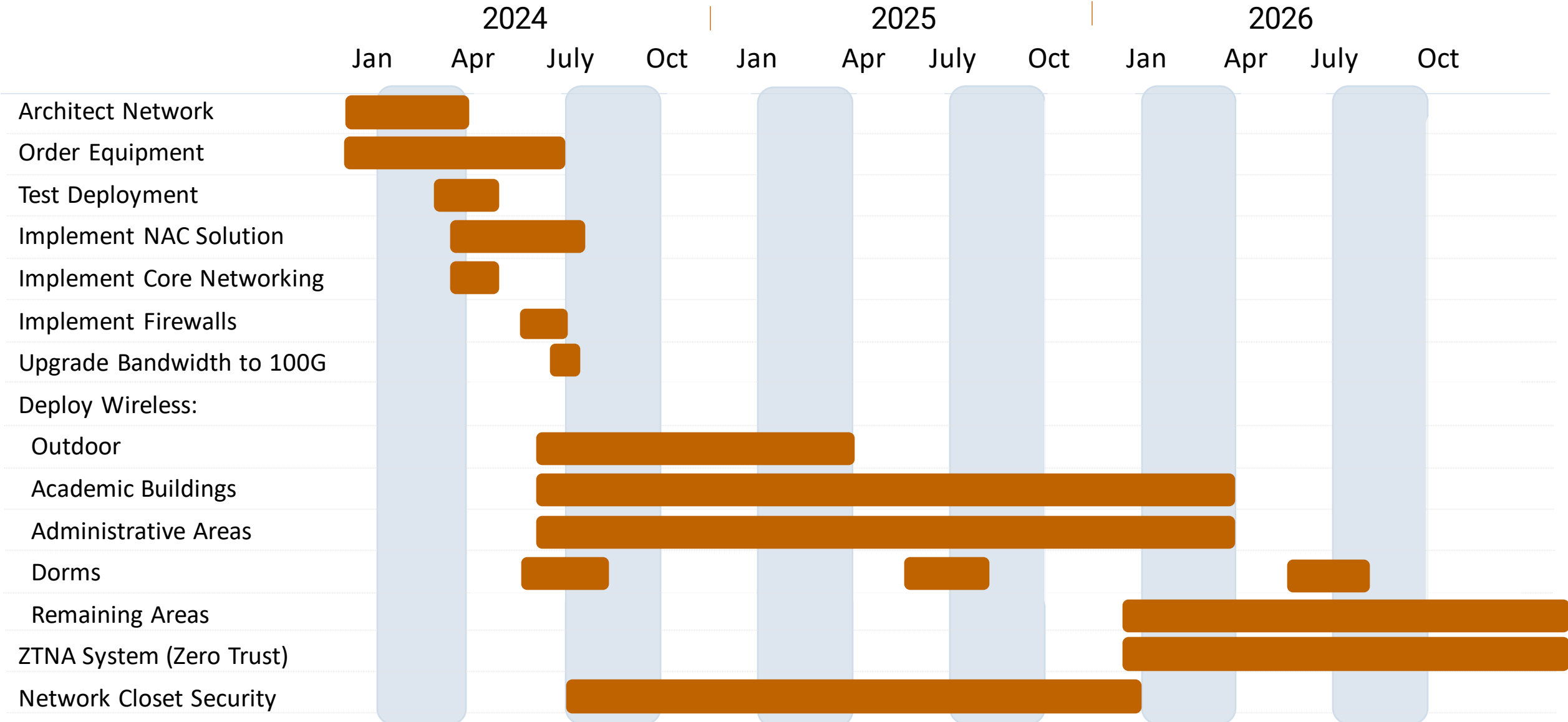
- End of Life/Unsupported equipment
- 2-4 devices/student - Higher density needed
- Older Wifi standards (Moving to Wifi 6)
- Constrained bandwidth for Research/High Performance Computing (HPC) - Moving from 10G->100G
- Network security enhancements across campus
- Wireless network coverage around campus is inconsistent and often inadequate

Scope of Work

Using Industry Best Practices

- Network Switches
- Wireless Access Points
- Border Routers
- Network Access Control (NAC)
- Firewalls
- ZTNA System (Zero Trust)
- Physical Network Closet Security

Network Modernization Project



Phase 1: FY 23-24

- Architect Network
- Order Equipment
- Test Deployment

Phase 2: FY 24-25

- Implement NAC Solution
- Implement Core Networking
- Implement Firewalls
- Coordinate FRGP upgrade to 100G

Phase 3: FY 25-26

- Deploy wired and wireless to:
 - Outdoor Wireless Deployment
 - Stadium Wireless Deployment
 - Academic buildings
 - Administrative buildings
 - Residential buildings
 - Remaining areas
- ZTNA System (Zero Trust)
- Physical Network Closet Security

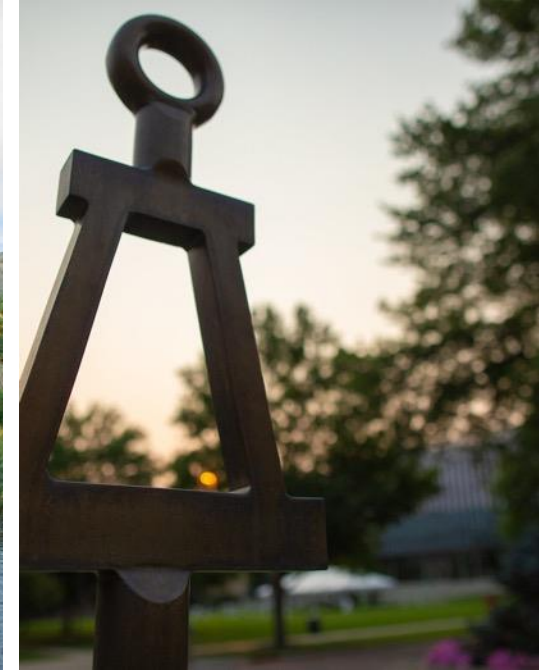
Cost Summary

Project Costs: Total \$10.0M

- Professional Services \$1.6M
- Software \$800k
- Equipment & Misc \$7.6M

Funding: Total \$10.0M

- **Requesting \$7.3M**
 - **Capital Construction Fund (CCF)**
- Mines Funded \$2.7M
 - Cash Funds (CF)



Q&A