

Network Modernization Funding Request

- **Andrew Moore, CIO**
- **Kenny Hora, Student Trustee**
- **Kathleen Tomon, Graduate Student Government President**





Colorado School of Mines

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

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

By the numbers

75+

Academic degrees and programs to choose from

8,058

Total enrollment of undergraduate and graduate students as of fall 2024

\$106M

Total research awards during fiscal year 2024

The Why

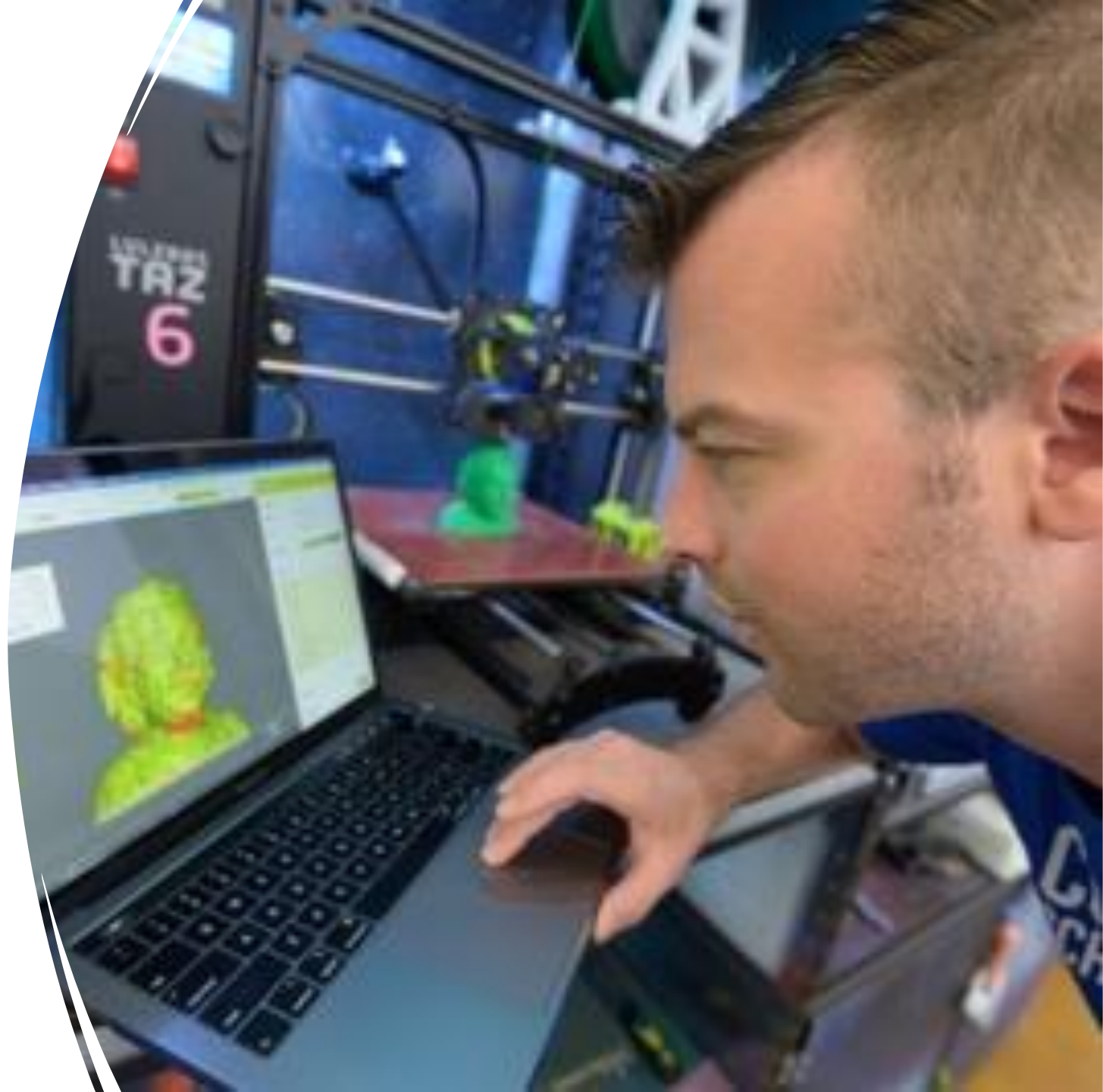
Student Network Experience

- **End of Life/Unsupported equipment**
- **2-4 devices/student - Higher density needed**
- **Older Wifi standards (Moving to Wifi 6)**
- **Constrained bandwidth to the internet 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**



Kenny Hora

- **Current Undergrad at Mines, studying Electrical Engineering**
- **Computers are needed in lectures and labs with high densities of students**
- **Almost all studying and assignments require internet access, outages mean students can lose a week of learning**



Kathleen Tomon



Industry Best Practices

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

Completed

- **Design Work**
- **Ordered Equipment**
- **Border Routers Installed**
- **Network Access Control (NAC) Installed**
- **Upgraded to 100G**
- **Test Building Deployed (1600 Jackson)**
- **Stadium Wireless Deployed**

Ongoing through 2026

- **Outdoor wireless**
- **Wired and wireless**
 - **Academic buildings**
 - **Administrative buildings**
 - **Residential buildings**
 - **Remaining areas**

Request

- **2024 ask was not funded**
 - Capital IT Scoring was 20/20
 - Request: \$7.3M
 - Mines Funded: \$2.7M (partially through student tech fee)
 - Total: \$10M
- **We've delayed other critical projects**
 - Website replacement
 - BlasterCard security and student experience improvements
 - Critical automated device management
- **2025 Ask is reduced**
 - Capital IT Priority score of 100%
 - Request: \$3.6M
 - Mines Funded: \$1.2M (partially through student tech fee)
 - Total: \$4.8M



Q&A



COLORADO SCHOOL OF
MINES

Thank you

→ [MINES.EDU](https://mines.edu)