CNCC – SOUTH CAMPUS REDUNDANCY UPGRADE

Joint Technology Committee Presentation

Colorado Northwestern Community College

South Campus Redundancy Upgrade

- Why This Project Matters
- Current State
- Scope of Work
- Return on Investment
- Questions

CNCC Spartan – In Front of Hefley Building

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Why This Project Matters

- Educational Impact
- Security Redundancy
- Equipment Protection

Hefley and Weiss Buildings in Background

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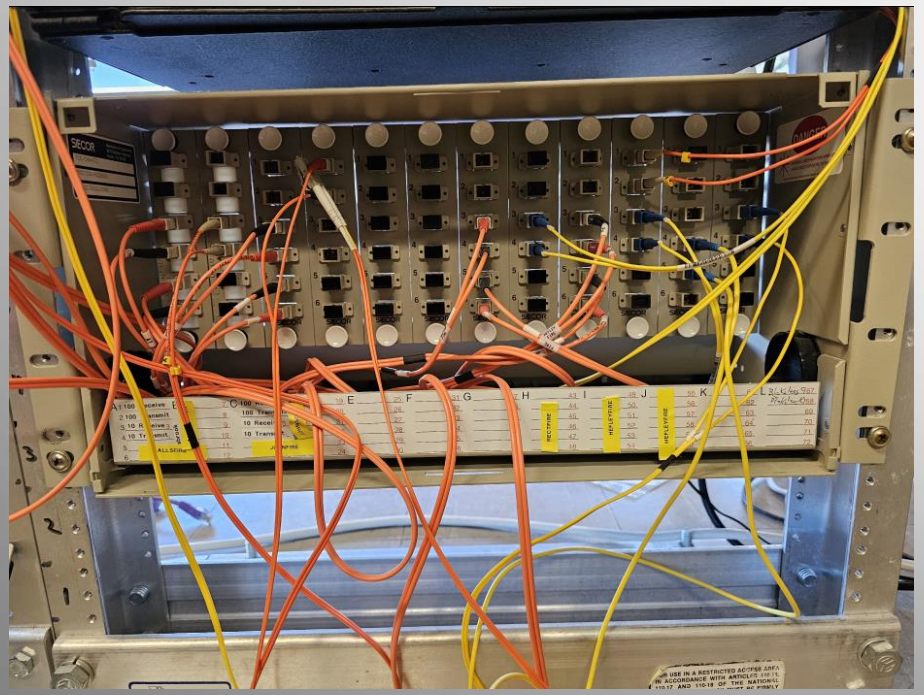
CNCC – South Campus Redundancy Upgrade

Current State



Data Center – Old Fiber Patch Panel

- Original Singlemode fiber line installed in 1993. Diminishing signal strength is requiring the phasing out of individual lines.
- The current network layout provides no redundancy.
- CNCC vulnerable to an interruption of in service to all buildings behind any fiber break.
- Current UPS's installed 10-15 years ago and have failed due to lightening strikes, power surges, etc.
- Currently, equipment is protected by common/basic surge protectors creating probability of future loss of usage, downtime and equipment damage.

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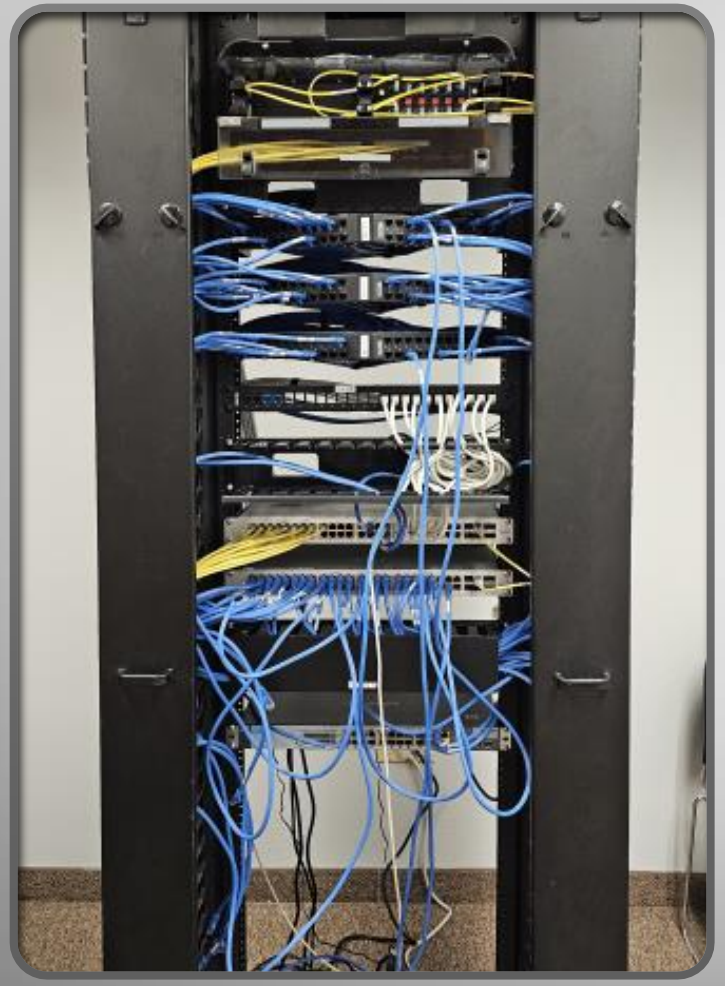

Scope of Work

- Install redundant data lines between CNCC Data Center and CNCC Rangely's south campus buildings.
- Purchase and install new Uninterrupted Power Supplies (UPS) in network closets (IDFs) in each of CNCC's buildings.

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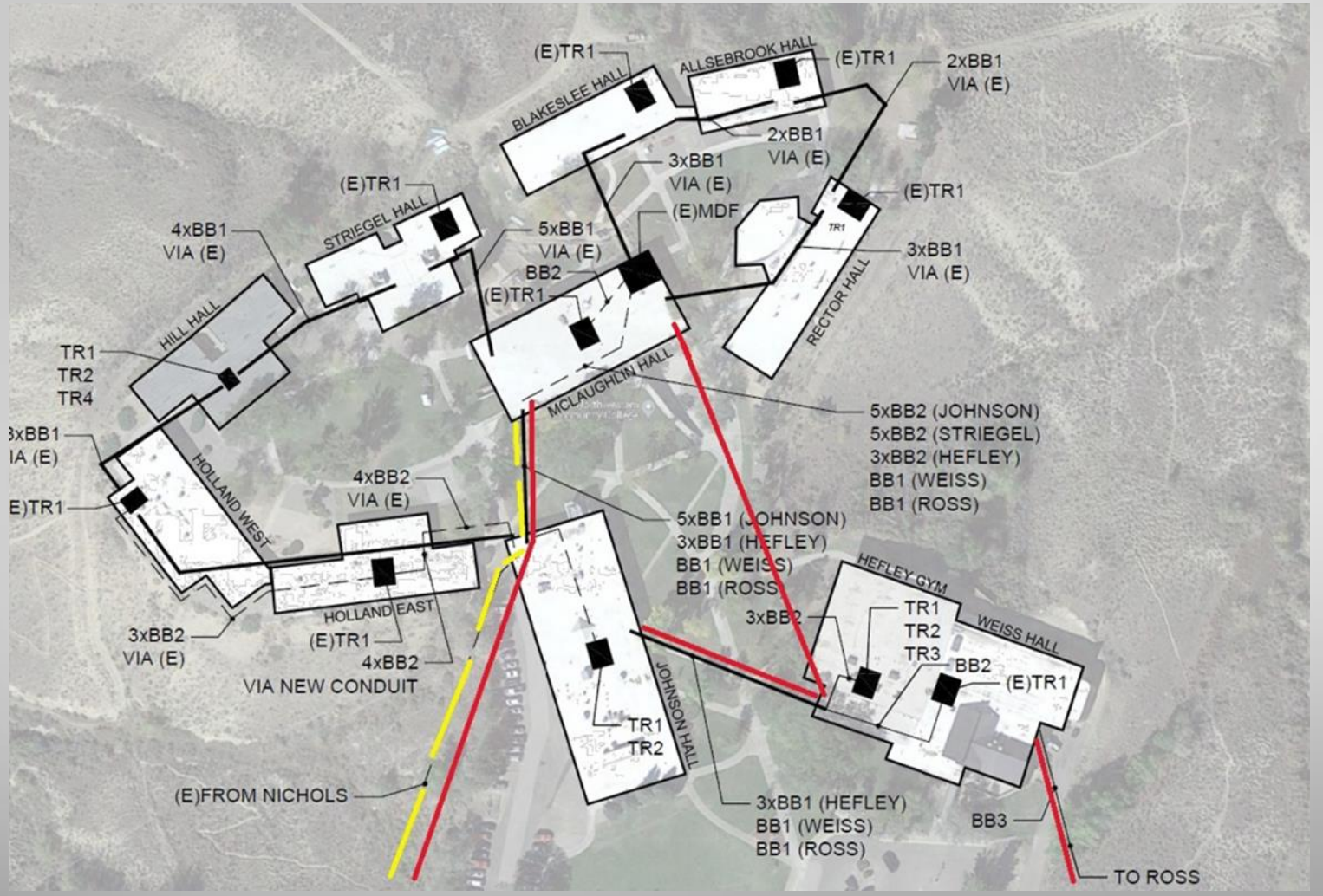

Old Singlemode Fiber that needs replaced

New Singlemode Fiber to be installed

New Singlemode Fiber already installed

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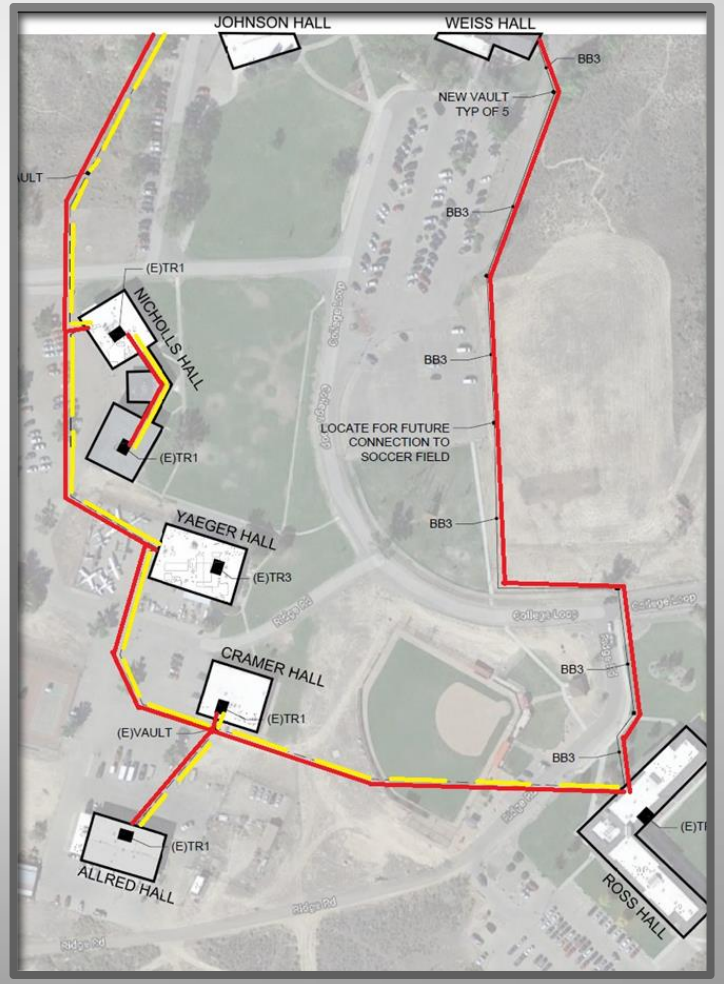
New Singlemode Fiber

***Access point to Rio Blanco County Fiber for offsite data center and Airport network connection.**

Old Singlemode Fiber that needs replaced

New Singlemode Fiber to be installed



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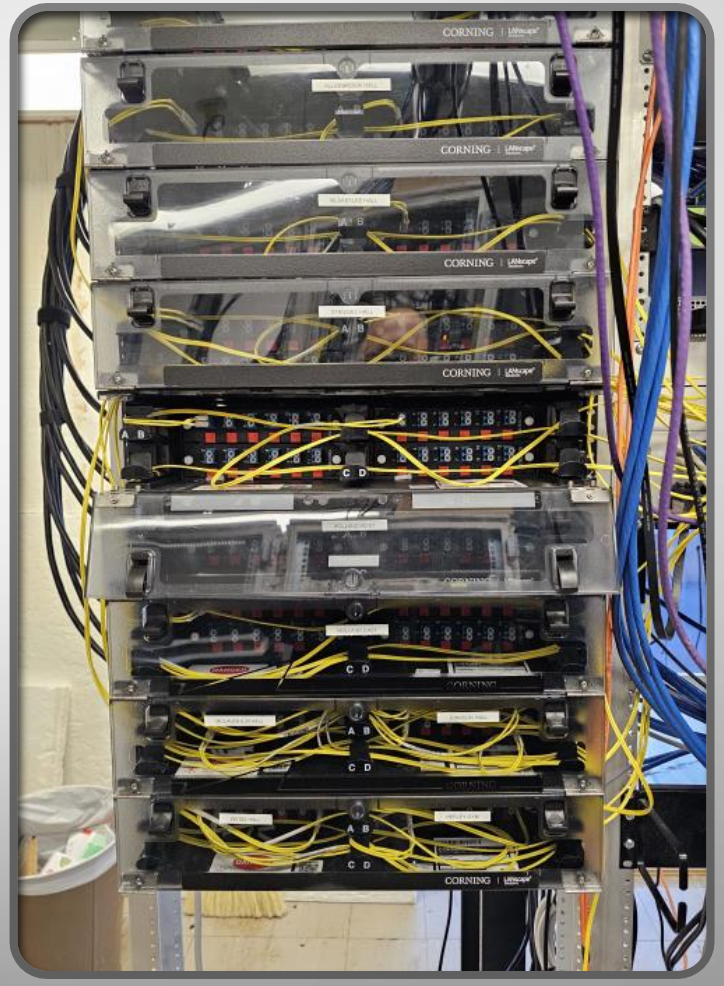
Return on Investment

- **Prevent Catastrophic System Outage**:
  - One (1) fiber pathway for all Academic, Student Service and Administrative functions
  - Prevent loss due to decrease in student recruitment, retention and persistence, financial stability of the college, and ensure safety/security of students
- **Equipment Damage**:
  - Over last three (3) years, CNCC has invested over $1 million in new servers, switches, phones, cameras and Wi-Fi.
  - Essential, costly equipment could be damaged or destroyed if not properly protected by Uninterrupted Power Supplies.
  - Reduce service downtime in event of lightening strike or power surge.



CNCC Data Center – New Fiber Installation

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IT Capital Project

QUESTIONS?

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