NSF Program (either CC or CICI): CC

Program Area: Campus Cyberinfrastructure   **Award Number:** 1827186

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Project Title: CC* Networking Infrastructure: Building a high-performance, flexible DMZ backbone at the University of Nevada, Reno

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Quad Chart for: CC* Networking Infrastructure: Building a high-performance, flexible DMZ backbone at the University of Nevada, Reno

Challenges in Nevada:

- Prepare UNR as the CI leadership institution in Nevada higher ed
- Establish a high-speed research network for new campus CI program
- Implement solution for a variety of research traffic profiles

Foundational Deliverables:

- Increase Internet2 connectivity from 10G to 100G
- Extend 40G DMZ network across campus to key facilities
- Implement flexible and cutting edge security for a range of science workflows
- Augment keys areas of rural WAN research connectivity
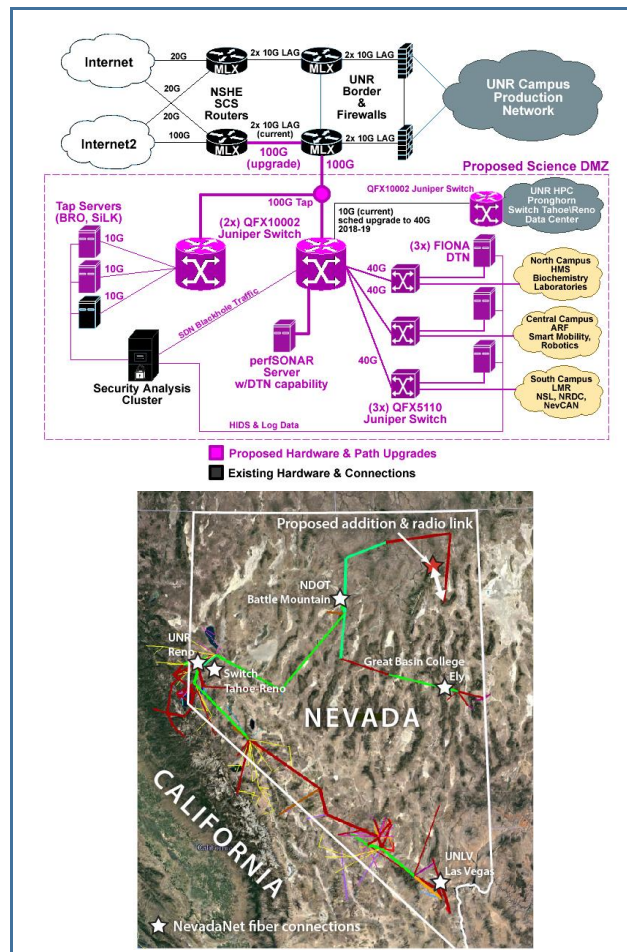
Scientific Impacts:

- Involvement of central IT organization in high-level research CI solutions
- Establish backbone, tools, and workflow for big data transfers targeting new Research Computing facilities
- Dedicated high performance networking environment for regional wildfire, climate, and smart city research sensor networks

Kickstarting institutional CI:

- *Central IT & science partnership*
- *Goal: National Platform ready*
- *New experience for engineers*
- *Consulting w/ LBL IT Security*
- *www.unr.edu/research-computing*
- *Tweet to @ScottySci*
- *www.alertwildfire.org*