NSF Program (either CC or CICI): CC

Program Area: CC-NIE

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Project Title: Rural Connectivity for Research and Teaching on the Prairie

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Quad Chart for:

CC* Network Design and Implementation for Small Institutions:
Rural Campus Connectivity for Research and Teaching on the Prairie
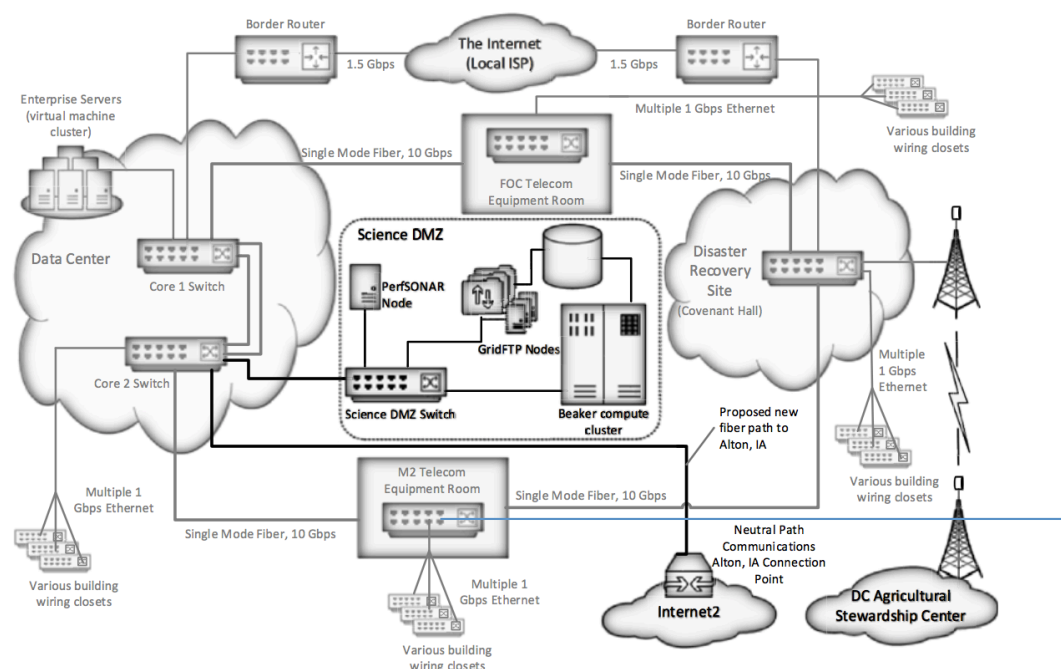
Challenges:
- Rural campus location with increasing collaborative- and research-driven data needs
- Gain access to broader national R&E resources to support research and teaching efforts
- Connect to resources at agricultural satellite campus

Solutions:
- Build fiber connection to access point on nearby Internet2 fiber trunk
- Develop a dedicated 10Gbps science network (connecting compute/storage/instrument resources)
- Extend network connection between main campus and satellite agricultural campus

Broader Impacts:
- Support data-driven research and REU opportunities in statistics, biostatics, genomics, environmental, and agricultural applications
- Enhance new Data Science and Statistic majors and outreach programs
- Expand STEM-ed programs, including NSF-supported STEM teacher training for underserved populations

Metadata tag:
- *planning deployment*
- *#ruralconnectivity*
- *#REU*
- *#dataintheclassroom*
- *#field-to-fabric*
- *#multi-omics*