# Quad Chart for: NDILLI: North Dakota Internet Leadership Level Infrastructure

Challenge: Enhance regional research network to enable North Dakota collaborations with colleagues at other regional, national and international institutions.

- *Design ScienceDMZ* with input from North Dakota stakeholders: UND, NDSU, STAGEnet and NDUS CTS.
- *Synergistically coordinate* efforts with regional & national partners: I2, Northern Tier, SD-REED, and Boreas.

Deliverables: The primary deliverables of NDILLI are:

- *Connect NDSU CCAST* machine room to ScienceDMZ using 100 Gbps Cisco Nexus Switch
- *Connect UND CRC* machine room (located in NDUS Data Center) to ScienceDMZ using 100 Gbps Cisco Nexus Switch
- *Demonstrate network data flows* at rate using SLATE, Globus, and PerfSonar
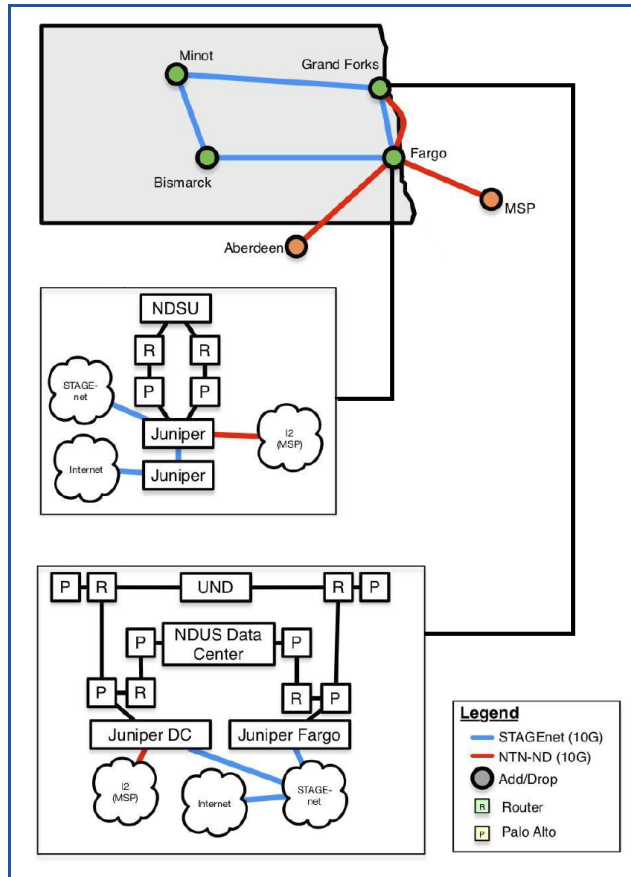
Simplified STAGEnet, UND, NDSU and Internet2 North Dakota connectivity diagram.
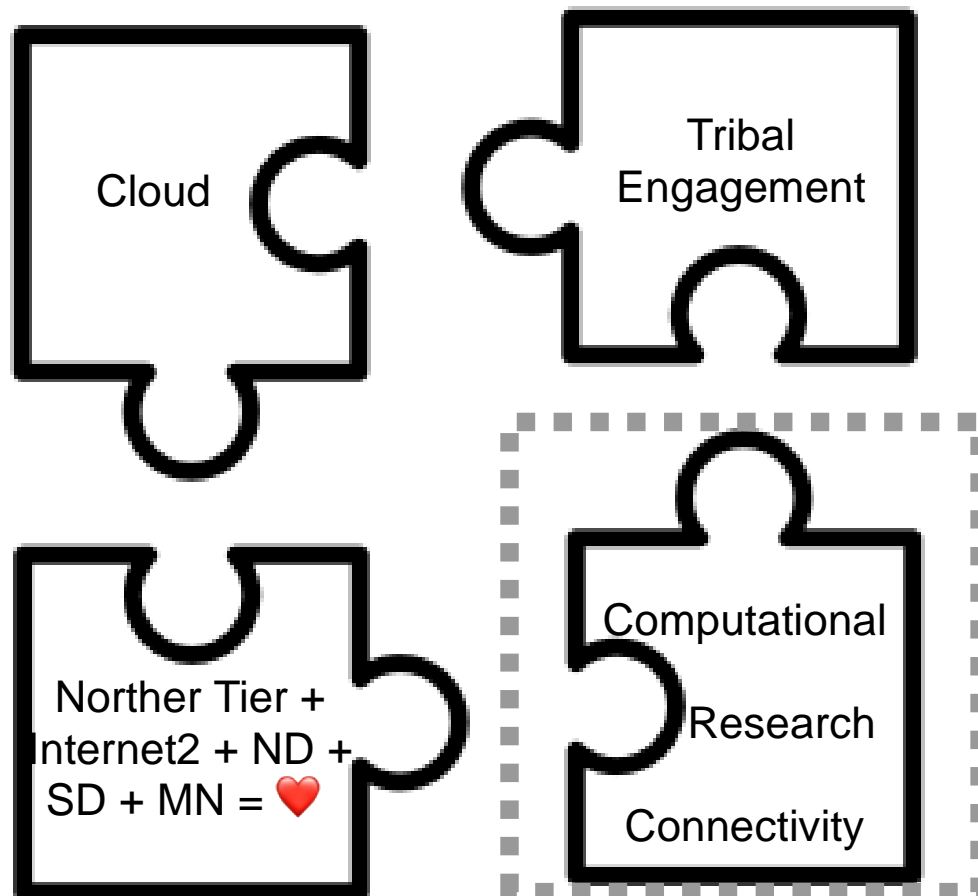
Broader Impacts: NDILLI will enable robust data communication among ND CI stakeholders, both at the main research institutions and the state's primarily undergraduate institutions.

- *Envision 2030* - Program from the ND University System designed to align the state's institutions with the emerging CI needs of future ND economy – UAS, Cybersecurity, and High-Performance Computing.
- *Emerging Sectors* - Facilitate education and research opportunities to train a CI skilled workforce capable of supporting emerging sectors and diversifying the ND economy beyond the Ag and Energy.

Metadata tags:

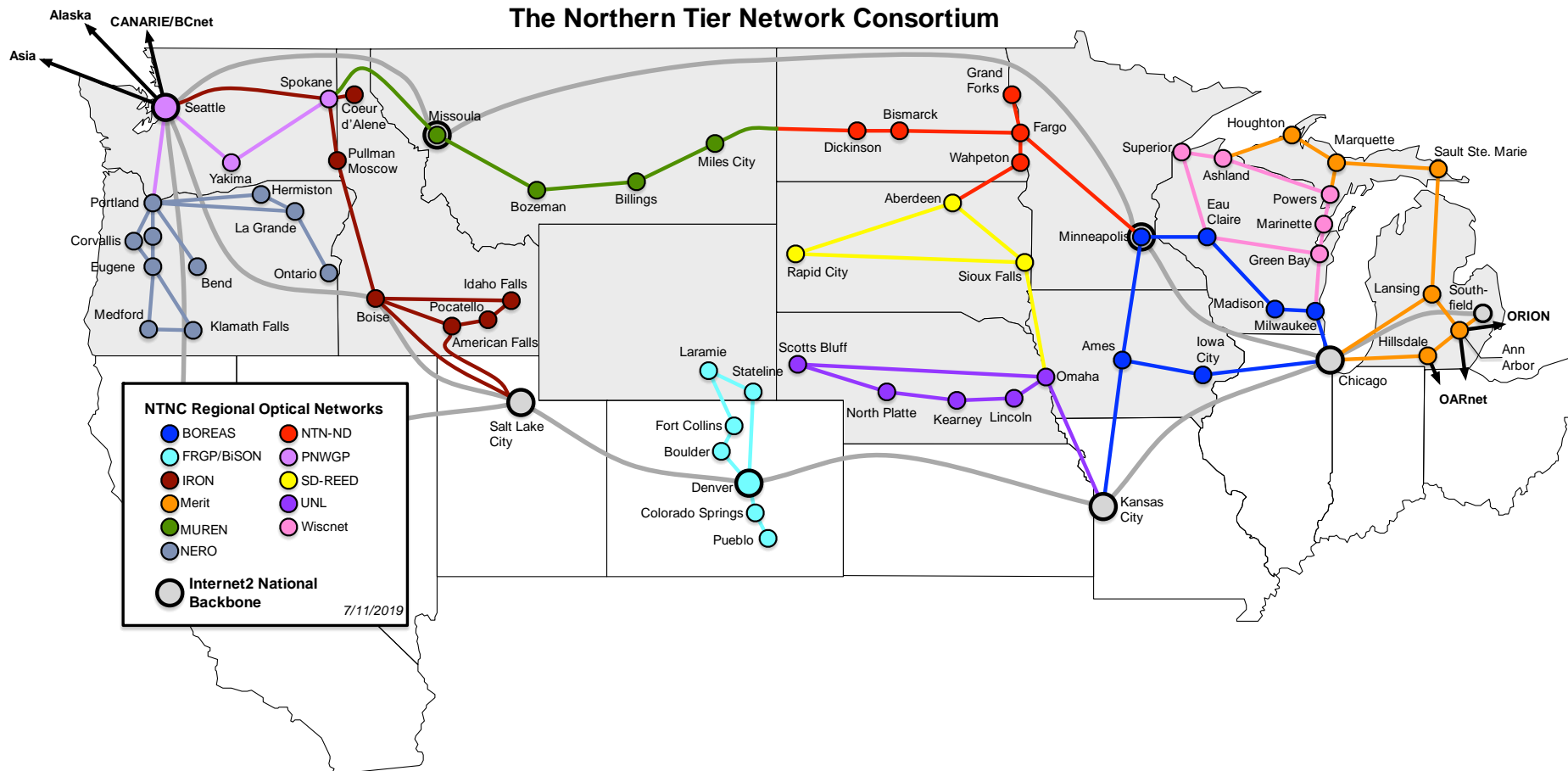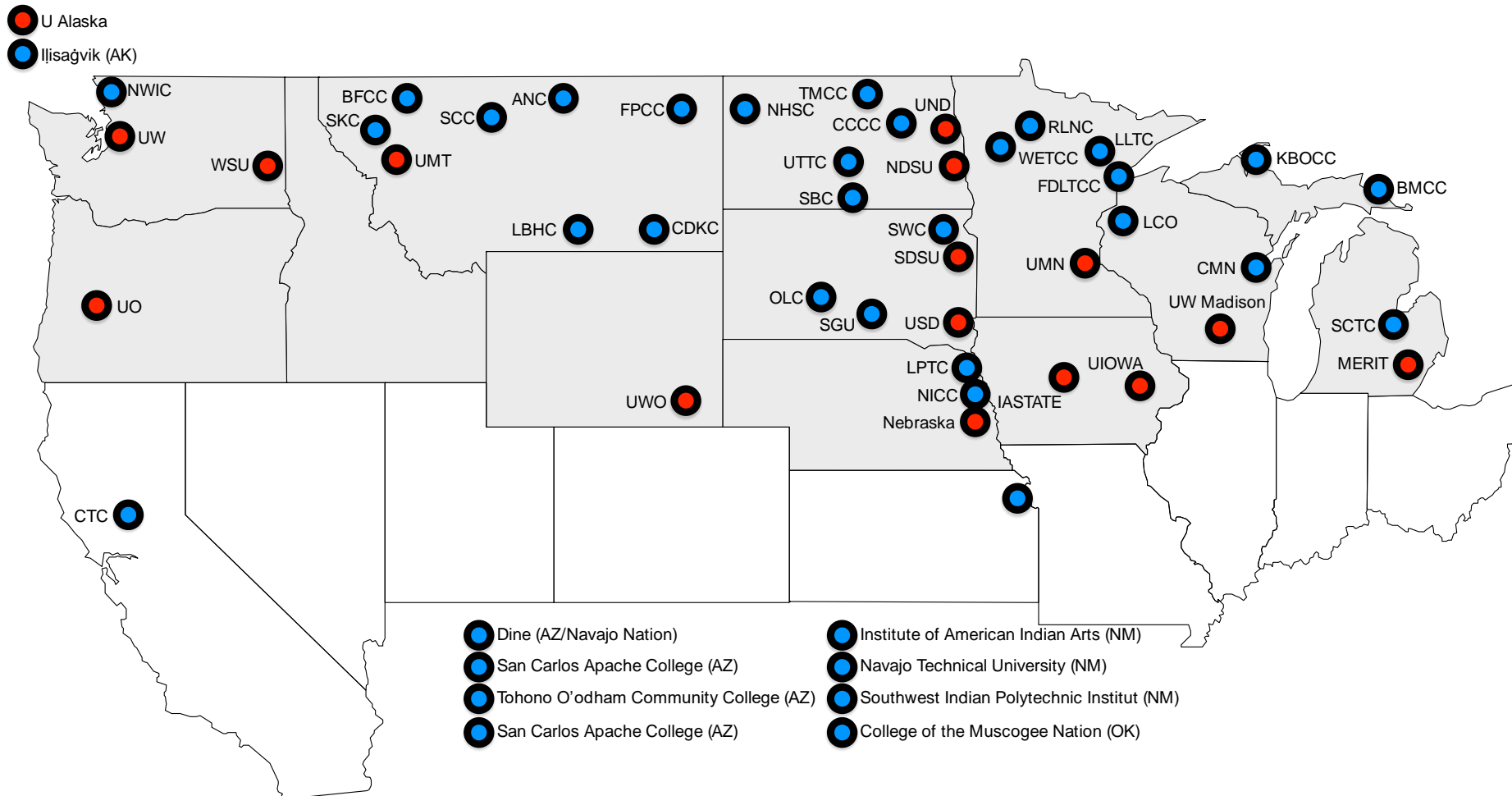- *<ScienceDMZ>*
- *<Research Network>*
- *<Emerging Sectors>*
- *<CI Skills Workforce>*
- *<Enable Collaboration>*
- *<Synergistic Coordination>*

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The Larger Picture in ND

Northern Tier Network Consortium

The Northern Tier Network Consortium

Tribal Colleges + NTNC Institutions

U Alaska
Iḷisaġvik (AK)
NWIC
UW
WSU
BFCC
SKC
SCC
ANC
UMT
FPCC
TMCC
NHSC
UND
CCCC
RLNC
LLTC
KBOCC
UTTC
NDSU
WETCC
BMCC
SBC
FDLTCC
LBHC
CDKC
SWC
LCO
SDSU
UMN
CMN
OLC
SCTC
SGU
USD
UW Madison
MERIT
UO
LPTC
UIOWA
NICC
IASTATE
UWO
Nebraska
CTC

Dine (AZ/Navajo Nation)
San Carlos Apache College (AZ)
Tohono O'odham Community College (AZ)
San Carlos Apache College (AZ)

Institute of American Indian Arts (NM)
Navajo Technical University (NM)
Southwest Indian Polytechnic Institut (NM)
College of the Muscogee Nation (OK)

Recent Topics on Cybersecurity & Infrastructure at NTNC Meetings

Year	Speaker	Topic
2019	Sidney Pearl, Chief Intelligence Officer for Global Situational Awareness Center, NASA Kennedy Space Center	Cyber Resilience Intelligence
2019	Dave Froslie, Microsoft	Cloud Services Deployment Strategies
2019	Jared Ribble, Assistant Director of IT, Navajo Tech; Joe Johnson, Director of Cloud Strategy, Univ Wisconsin-Madison	Best Practices and Challenges Moving to the Cloud.
2019	Al Anderson, CIO, Salish Kootenai College; Chad Davis, IT Director, Turtle Mountain Community College; Matt Riley, CTO, Univ OR; eff Gimbel, Senior IT Security Analyst, NDSU	Data Management and the Cloud: Security Practices of Data Management when using Cloud Services.
2019	Various	Compute, Storage, and Networking- the view from HPC Centers.
2018	Jim Bottum (AIHEC?)	Building a Cyberinfrastructure Plan at a TCU
2018	Jacob Brabbs, MERIT	Security Workshop