Northern Tier Network Consortium

NTNC Steering and Planning Committees
Winter 2021 meeting
Date: Tuesday, March 16
Time: 3:00 – 6:00 pm *(all times central)*
Via Zoom

Participants: Marc Wallman, Ryan Adams, Al Anderson, Seth Arndorfer, Robert Aylward, Kevin Brandt, Andrew Buker, Steve Corbato, Paul Demi, Nancy DiGitio Glenn Fishbine (sp), Steve Fleagle, Scott Francis, Alex Grandin, Greg Gray, Bernie Gulachek, Jonah Keough, Paul Kern, David Lois, Madhavi Marasinghe, Kim Owen, Sasi Pillay, Matt Riley, Linda Roos, Bob Stovall, Nathan Zacharias

1. **Introductions were conducted**

2. **NTNC broadband map project** *(Bernie/Marc)*
    *   MN broadband project group, *Nathan Zacharias*, President, Zacharias Government Relations Nathan introduced Paul Demi and Glenn Fishbine. Their company, Geopartners, offers policy solutions based on broadband studies, the only statistically valid broadband mapping provider (95% confidence level). They can distinguish between cellular and non-cellular devices, and that information can be included in the reports. Digital inequity is noted as mapping is done (broadband service may be available, but not at a feasible cost). Such maps can be useful to state leaders as they consider applying for grants. The cost of the service varies by township, county or state.
        Madhavi asked how these mappings are done for online students who reside outside the university area. Providing the analytics is a licensing issue; in that respect, it would be advantageous to consider this service on a consortium perspective.
    *   Discussion: NTNC consortium project or individual states? Our current balance is apprx. $230K. This information would be helpful to the Tribal Colleges and communities, and it would be good use of grant funds that is being made available to them. Sasi suggested that each institution work with its state government for funding, as there is federal money currently available, including specifically for broadband connectivity. Michigan does not have a state broadband office yet. U of MN is interested in where its students and remote employees are working from: providing them a laptop without them having network connectivity, does not help them much. It's not for us to provide the broadband connectivity, but to exemplify to our state governments the specific needs. In some states, broadband mapping is a political issue.
    *   Action items by NTNC: it would be helpful to have an estimate of the cost to our consortium; it was suggested that we should get a general idea of the price (number of counties in our states @ $850). It would be good to identify the NTNC states that are interested. Marc, Berniey, Sasi and Matt will then discuss approaching Geopartners re a quote; consideration will be given into including the Geopartners service cost in the grant application that would follow.

3. **State reports:**
   - Illinois, Matt, U of IL-Chicago: they got connected with the Mayor's office in Chicago in the Chicago Connected project. There are many students involved, and the Mayor's office is in real need of broadband mapping data.
   - Nebraska, Andrew Bruker: $2.5M went to a statewide LMS; Canvas was purchased for K-12. The dept. of Education paid for a broadband mapping project. They're piloting Eduroam, with CARES Act funds financing the first year.
   - Sasi: most CARES Act funds were spent on the lower grades (hot spots). They also supported student experiences.
   - ND, Madhavi, UND: there was a laptops for learners program, giving away 3,000 laptops to financially in-need students who were enrolled in the fall semester.
   - SD, Paul Kern, Kevin Brandt: $2.5M was used on wireless expansion, and to support remote learning and enhance security controls around that. Funds were also used for classroom technologies, when instruction was done remotely.
   - Merit, Bob Stovall: they were able to leverage grants and investments and installed outdoor wireless facilities at libraries and schools. Northern Michigan received funds for more access in the Upper Peninsula to students and the general community. VPNs were upgraded with CARES Act funds, too.
   - ND, Marc Wallman, NDSU: tracking the CARES Act projects was a challenge; a lot of classroom technology components were purchased and installed, and it will be interesting to see how they will be utilized post-pandemic.
   - Salish Kootenai, Al Anderson: the COVID response pulled a lot of processes out of the dark ages, such as implementing Docusign. Laptops were purchased with CARES Act funds, too.
   - Minnesota, Bernie Gulachek, U of MN: very few laptops and hot spots were distributed. Most CARES Act funds were spent on classroom technologies to support hybrid learning environments.
   - When we return to "normal," how many remote workers will we have? For example, U of MI closed down two buildings permanently, as they don't see a need for the employees to stop working from home. A number recently shared in Educause was that 60% of university IT folks will expect to be remote 50% of the time.

4. **Federal funding opportunities coming:** no report.

5. **Cyber challenge**
   - Bob Stovall discussed the continuation of our plans for NTNC to host this event. Merit has staff that can coordinate this – it would take about six months to prepare. An AIHEC meeting may be a better venue for an NTNC meeting, as there are more students in attendance at AIHEC meetings.
   - Action items by NTNC: we'll plan for this to be a virtual event to be held this summer; an in-person cyber challenge can be planned for 2022, for both NTNC and AIHEC, around spring break. We may try to get student teams from other NTNC universities, too.

6. **Insights from the FCC Rural Broadband Committee**
   - *Mike Adelaine*, CIO Emerita and Special Advisor to the President, South Dakota State University: he is the chair of the map working group for this group. The pandemic has made Congress members understand that business cannot be conducted without broadband connectivity anymore, and they are pressuring USDA and FCC to provide broadband connectivity to all who

need it. Precision Agriculture is the focus of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States; Mike presented information on this from the FCC website, www.fcc.gov/task-force-reviewing-connectivity-and-technology-needs-precision-agriculture-united-states . Mike also shared and reviewed BroadbndUSA, the National Broadband Availability Map, a platform for the geospatial analysis of broadband data.

- *Seth Arndorfer*, CEO of Dakota Carrier Network (DCN), North Dakota, said that the DCN owners have been able to use federal funds to build out connectivity in the state, though there are still areas that need to get broadband access. Such access is needed not only in farm homes, but also in the barns, at the water tanks, fields, etc. – all areas involved in the farm operation. A challenge is how to become a trusted third party for performance testing. Seth shared a USDA FCC broadband map
- 5G technology is a broad term, Seth said – there will be 5G deployments in NDUS campuses, but the radios installed may still need to be upgraded to truly deliver 5G service in the various areas. Private 5G may be deployed in ranches or farms of any size. Currently, the capability of true 5G is 1,000 feet, and it is a fixed wireless solution.

7. **Announcements / Other business**
- WHPC chapter: Kim Owen reported that a Women in HPC organization is supported by GPN, and a chapter has been approved in our area, with a session scheduled for next Wednesday. Kim Owen is the contact person, and she will share next week's specifics with this group.
- Next meeting: a virtual meeting of the full membership will be held in late June. An in-person meeting will perhaps be planned for the next academic year.