









Research and Education Networks in Colorado and Nevada Join Partner Networks in California, Oregon, and Washington to Support COVID-19 Western States Pact

April 30, 2020 — Statewide research and education networks in Colorado and Nevada have joined partner networks in California, Oregon, and Washington to support the shared approach announced by their states' respective leaders, Governors Jared Polis, Steve Sisolak, Gavin Newsom, Kate Brown, and Jay Inslee, to move toward a reopening of economic activity while safeguarding health outcomes.

The Front Range GigaPoP (FRGP) and NevadaNet join CENIC, Link Oregon, and Pacific Northwest Gigapop (PNWGP) in offering their ultra-broadband research and education telecommunications networks and services to:

- Support continuity of our K-12 schools, community college, and university education and educational services online:
- Support COVID-19 research activities among our universities, supercomputing facilities, and other research sites in our five states, across the US and abroad;
- Support online components of clinical care of COVID-19 patients among our university medical centers and their partners;
- Support COVID-19-related scientific research tied to weather, atmospheric, and climate drivers and impacts; and
- Assist Internet Service Providers and carriers in rural and underserved areas who need additional temporary network capacity and/or network strategies for medical, educational, and other community anchor institutions.

"Our five state networks support collaborations between and among our schools, universities, and health care institutions," said CENIC President and CEO Louis Fox. "Use of R&E networks has increased significantly as our public-serving institutions shift to online learning and community engagement, online clinical care, remote access to research data, and specialized computing facilities on our campuses and in the cloud. Together, we are moving to stay ahead of the demand and help in any way we can."

"Our networks already work together in critical arenas, including wildfire detection, prevention, and situational awareness for first responders and communities," said Dr. Anne Milkovich, chief information officer for the Nevada System of Higher Education,

which operates NevadaNet. "We are building on a foundation of common work in many research areas that respond to environmental and health challenges."

"For over two decades, the Front Range GigaPoP (FRGP) has been advancing educational and research goals in Colorado and Wyoming on behalf of nonprofits, local government agencies, schools, universities, research organizations, and other community institutions," said Antonio Busalacchi, president of the University Corporation for Atmospheric Research, which manages and operates the FRGP. "We are proud to now offer the networking capabilities we have built to enable research to better understand COVID-19 and to keep people in our region connected to their jobs and their classrooms."

"Link Oregon and its founding members are proud to work collaboratively and nimbly with our long-time partners," said Link Oregon Executive Director Steve Corbató. "At the forefront, our joint networking activities support the medical community's collective clinical response to COVID-19 as well as rapidly formed, high-intensity research collaborations to address this pandemic and the dramatically transformed online learning environment within both K-12 and higher education."

"We are seeing extraordinary increases in network traffic among medical and epidemiological researchers and modelers, and especially so among those in the West. By pulling together, we can do even more to help them work faster in order to determine the best treatments and public health responses, and to create and test the needed vaccines sooner," said CEO of Pacific Northwest Gigapop Ron Johnson.

As network leaders and scientists, we are committed to supporting our governors' plans. California Governor Gavin Newsom noted in a recent press conference: "As we contemplate reopening parts of our state, we must be guided by science and data, and we must understand that things will look different than before." Our five Western US state research and education networks support this vision and the plans that all five governors have articulated, and we stand ready to assist our research, education, and medical communities through these difficult times.

The **Front Range GigaPoP** (FRGP) is a consortium of universities, research organizations, non-profit corporations, government agencies, cities, counties, states, and K-12 schools that cooperate to share wide area networking services including Internet2, intra-FRGP, commodity Internet, caching, and peering connectivity. The FRGP is owned and controlled by the FRGP participant research and education community. The **University Corporation for Atmospheric Research (UCAR)** provides the management, engineering, and network operations center support for the FRGP.

NevadaNet is the state's Research & Education Network run by the Nevada System of Higher Education (NSHE). NevadaNet connects the two doctoral-granting universities, one state college, four community colleges, and an environmental research institute as well as hundreds of research, education, healthcare, and state agency sites across Nevada. We deliver highly resilient broadband Internet access and video-conferencing services in support of the state economy and its research and education missions.

CENIC connects California to the world — advancing education and research statewide by providing the world-class network essential for innovation, collaboration, and economic growth. This non-profit organization operates the California Research and Education Network (CalREN), a high-capacity network designed to meet the unique requirements of over 20 million users, including the vast majority of K-20 students together with educators, researchers, and individuals at other vital public-serving institutions. CENIC's Charter Associates are part of the world's largest education system; they include the California K-12 system, California Community Colleges, the California State University system, California's public libraries, the University of California system, Stanford, Caltech, USC, and the Naval Postgraduate School. CENIC also provides connectivity to leading-edge institutions and industry research organizations around the world, serving the public as a catalyst for a vibrant California.

Link Oregon is the non-profit consortium of Oregon's four research universities — OHSU, Oregon State University, Portland State University, and the University of Oregon — and the State of Oregon through its office of Enterprise Information Services. Link Oregon provides high-speed, reliable, cost-effective fiber broadband connectivity to K-12 and higher education institutions, public health facilities, libraries, Tribes, and state government offices statewide.

Pacific Northwest Gigapop (PNWGP) is a non-profit corporation based in Seattle, Washington, that serves research, education, and health care organizations throughout Washington and the greater northwest. PNWGP provides cost-effective, highly resilient, broadband networks to support the missions of these organizations and the needs of researchers, clinicians, faculty, students, and staff. PNWGP designs, implements, and manages a multi-state, high-bandwidth, and high-capacity network specifically designed to meet the unique requirements of research and education communities.

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