



August 2025

In this newsletter, you'll find information on California's research and education communities in action via the high-performance network and services CENIC provides; how your colleagues are using these services; and information about networking-related events, funds, new programs, and awards.



# The National Data Platform: Enabling Researchers to Cruise Vast Oceans of Data

Nowadays, fiber-based research and education networks like CENIC's California Research and Education Network (CalREN) are located all over the globe, and focus has shifted to the



services provided over them, including network-enabled services and resources facilitated by networking organizations and created by their member communities. This trend has evolved to include not only compute and storage resources but data itself and the services to make use of it.

Headed by SDSC Chief Data Science Officer İlkay Altıntaş, the <u>National Data Platform</u> makes vast databases available on an ever-growing variety of meteorological, geographic, and geologic sciences, as well as the services needed to make use of them. **READ THE**ARTICLE >



# to California Research and Education Network

In March 2025, CENIC announced that it had achieved a major milestone when it completed an upgrade of the Southern Route of its California Research and Education Network (CalREN) to 800 Gbps capacity using coherent

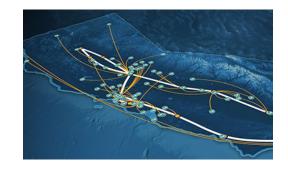
pluggable optics. As promised, the remaining Inland and Coastal Routes, which were marked as "In Progress" in the previous article, have been upgraded, thereby resulting in a full 800 Gbps backbone.

The majority of the CalREN backbone, with the exception of three long segments, now operates with no transponders, with all segments using two pairs of pluggables for a total capacity of 2x400 Gbps. This design allows for significant colocation space and power savings, a greatly simplified network design, and lower backbone router port utilization.

## CENIC Membership Enables San Joaquin Valley Library System's Wi-Fi Revolution

**READ THE ARTICLE >** 

Aaron Lusk began his career with the <u>San</u> <u>Joaquin Valley Library System</u> (SJVLS) at the time of frame relay and T1s. He has seen firsthand how far the system has come in the



last decade thanks to its participation in the Corporation for Education Network Initiatives in California (CENIC). "Ten years later, we have 105 public libraries in the San Joaquin Valley Library System connected to CENIC's California Research and Education Network (CalREN) behind ten main libraries," said Lusk, SJVLS network systems engineer.

High-bandwidth connectivity is now ubiquitous in the SJVLS territory, with most branches at 100 Mbps or 1 Gbps and main libraries at 1 or 10 Gbps—faster connectivity than most houses around the library in some communities. **READ THE ARTICLE** >

## A Decade of Bringing California Public Libraries State-of-the-Art Broadband on the CENIC Network

In 2014, California's Public Libraries embarked on a remarkable journey, joining the vast majority of California's public schools, colleges,



and universities as members of CENIC, with the vision of bringing robust, high-speed broadband to all Californians. By connecting to CENIC's CalREN, public libraries gained access to a world-class network built for California's leading research universities and positioned libraries as critical digital lifelines for the communities they serve.

Today, nearly 1,000 of the state's 1,127 libraries connect to CalREN thanks to ongoing support from the State of California and the sustained leadership of the State Librarian, Greg Lucas, and Governor Gavin Newsom. **READ THE ARTICLE** >



#### The Expanding List of CENIC AIR Participants

Outreach continues apace at institutions seeking to participate in CENIC AIR. While an institution is not required to host equipment for its students and faculty to make use of CENIC AIR, three additional CSU campuses—<u>Cal Poly Pomona</u>, <u>Cal Poly San Luis</u>
<u>Obispo</u>, and <u>Fresno State University</u>—are in discussions with CENIC on setting up
<u>Science DMZs</u> that would make hosting equipment as part of CENIC AIR straightforward.

CSU campuses already hosting equipment include <u>San Diego State University</u>, <u>CSU Fullerton</u>, <u>CSU San Bernardino</u>, <u>Cal Poly Humboldt</u>, <u>Chico State University</u>, <u>CSU Monterey Bay</u>, and <u>Sacramento State University</u>.

In addition to faculty and students at the campuses listed above, those at <u>CSU Bakersfield</u>, <u>CSU Northridge</u>, <u>CSU Stanislaus</u>, and the <u>CSU Chancellor's Office</u> are currently making use of CENIC AIR as well.

Progress also continues at the <u>Los Angeles Community College District</u> (LACCD), the largest community college district in the US. When it connects, LACCD will join the <u>San Diego Community College District</u> (SDCCD), which in August 2024 became the first of California's community college districts to participate in and connect to CENIC AIR.

As CENIC AIR expands to include these and other institutions, we'll provide progress updates to our members, and of course you will find this information on the <u>CENIC AIR Champions Map</u>.



- Some Tribal Nations beat the broadband odds
- NTIA limits community anchor institution BEAD eligibility
- Sonoma County, CA to offer free broadband to low-income residents
- Al tracked down nearly 80,000 'ghost students' trying to enroll in California colleges
- <u>New NSF program offers flexible pathways to transition technologies from the laboratory to practice</u>
- Japan just broke the Internet speed record. How fast Is it? You could download all
  of Netflix in under a minute
- Legal risks and obligations for schools using Al tutors



- NRP Fall Training Series, September 3-30, Zoom
- NORDUnet Community Workshop 2025, September 9-11, Copenhagen

- UbuntuNet Alliance Women's Hackathon 2025, October 27–29, Harare
- JupyterCon 2025, November 3-5, San Diego, CA
- CITE Annual Conference 2025, November 18-20, Sacramento, CA
- SC25: November 16-21, St. Louis, MO

#### About CENIC | www.cenic.org

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 nonprofit 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 others at 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.

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