eduroam Support Organizations Status Report - 2023

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Overview

What is eduroam? eduroam is the secure, worldwide Wi-Fi access service developed and operated by GÉANT on behalf of the global education and research community. Internet2 serves as the U.S. eduroam Roaming Operator, and its Trust and Identity division operates the service along with the InCommon-related offerings.

What is the eduroam Support Organization Framework? The true value of eduroam increases with its ubiquity. eduroam in every primary and secondary educational institution, library, and public space boosts the value proposition of the service immensely, and regional networks and community anchor institutions present a unique and powerful partner to address this scaling challenge. At the same time, we can help make community services and the community that provides them more sticky. K-12s, as well as libraries and museums that are part of the K-12 ecosystem, have thus far been underserved by eduroam in the U.S. eduroam Support Organizations (eSOs) leverage their existing relationships with K-12s, libraries, and museums to address this need.

To better enable eSOs to serve these communities, this program provides them with a simplified business model, training and resources to build their staff expertise, and ongoing support.

Key responsibilities of eduroam Support Organizations include:

- Provision the service for new K-12, library, and museum constituents, as well as hotspots.
- Manage ongoing first-level support for constituents.
- Publish a list of constituents to promote awareness within their states and the eduroam community at large of the scope of participating institutions.
- Participate in collaborative meetings with other program participants.
- Discuss feedback, requests, and program ideas with their community.

A recently added feature of the eduroam Support Organization Program is the "On-Ramp." The On-Ramp allows prospective eSOs to provide eduroam to a set number of constituents at no charge to lay the groundwork in their states, which will better position them for success when they join the next cohort of eSOs.

Internet2 Goals

As the operator for eduroam in the U.S., Internet2 set the following goals for the eduroam Support Organization Framework:

- Grow the eduroam Support Organization program, both with new eSOs and new On-Ramp organizations.
- Make ongoing improvements to the eFM and reports by engaging with eSO community to gather requirements and feedback on these updates and new features.
- Add to the technical documentation repository that is available to program participants and the eduroam community.
- Create a process for collaboration with multi-state or national ISPs.
- Increase the visibility of the eSOs and their work in the K-12 space.
- Update training materials and deliver training to eSOs and their constituents.

Objective

The report discusses our progress towards achieving these goals and highlights the goals, successes, and areas of improvement for the individual eduroam Support Organizations. In addition, we review key metrics, present a detailed case study report, and identify our goals for 2024.

eduroam Support Organization Goals for 2023

At the close of 2022, Network Nebraska, Sun Corridor Network, Utah Education and Telehealth Network (UETN), and Internet2 identified the following goals for 2023. As part of their proposals for the On-Ramp, Connecticut Education Network (CEN) and Link Oregon stated their goals for 2023 as well.

Link Oregon

1. Complete eduroam deployment in the pilot ESD and its participating school districts.
2. Use the initial pilot deployment process to establish and document procedures to support new subscribers and expand enrollment of ESDs and school districts.
3. Establish an Oregon eduroam user group to provide peer support among participating institutions.
4. Establish an ongoing funding model.
5. Work across eSO organizations to develop mutually beneficial tools (e.g., SP/Hotspot One Pager) and to benefit from best practices.

Network Nebraska

1. Continue expansion to all public/private K-12 schools
2. Increase adoption within community colleges and other post-secondary institutions

3. Continue expansion of hotspots provided in partnership with local businesses

Sun Corridor Network

1. Secure funding to support eduroam from multiple state resources for and related to education.
2. Continue eduroam expansion within current subscribers and other public/private K-12 schools.
3. Develop and deploy eduroam educational materials and marketing display materials for active eduroam locations.
4. Understand and track K-12 eduroam users and data to develop best practices and improve outreach materials.

Utah Education and Telehealth Network (UETN)

Establish a new project stage with the following focus:
1. New 2023 Marketing Campaign.
2. New materials to send to new signups and handouts for conferences.
3. Use UETN Advocates to distribute materials and information (Advocates work with various institutions through UEN).
4. Focus on technical and policy solutions that support the continued rollout, expansion, and availability of eduroam with current IDPs in Utah.
   ○ Conversations around K-12 and concurrent enrollment solutions.
5. Increase the number of charter schools with eduroam.
6. Increase the number of SPs (hotspots) in Utah.
7. Identify new project team members who can help move UETN's eduroam program forward.
8. Create a one-pager document to share with companies we would like to sign up as eduroam hotspots.
9. Sign up and work with local ISPs to set up hotspots.

Connecticut Education Network (CEN)

1. Complete new/updated eSO agreement with Internet2.
2. Work with Regional Educational Services Centers (RESC) In CT to adopt and serve as a central resource for districts to also adopt eduroam.
3. Work with the Connecticut State Department of Education (CSDE) to communicate the value of eduroam and enable CSDE to promote adoption.
4. Submit a session proposal and present at the CSDE annual conference.

5. Promote eduroam within existing programs CEN administers for eligible members, such as the ARPA-CPF Community Wi-Fi grant-funded program to install free community Wi-Fi throughout.

On-Ramp Organizations

NSHE (Nevada System of Higher Education)
1. Further develop eduroam technical expertise within SC.
2. Demonstrate and communicate the value of eduroam as it relates to bridging the digital divide, aiding workforce development, and other goals beneficial to Nevada.
   ○ Identify future expansion opportunities, including community non-profit partnerships.
   ○ Develop efficient processes for onboarding and supporting new constituents throughout their eduroam deployment lifecycle.
3. Build a support community for eduroam deployments across Nevada K-20, libraries, and beyond.

Washington K-20 Education Network
1. 25 participating members
   ○ Including all/most ESDs
   ○ Including libraries
2. Broader use (student devices, SPs)
3. Documentation and standardization
4. Define and meet project success criteria

Successes

For 2023, Internet2 and the eduroam Support Organizations sought to build on the successes of 2022, including welcoming two new eSOs to the On-Ramp. The On-Ramp provides a prospective eduroam Support Organization with a way to try out aspects of the program before committing to the financial outlay of becoming a full eSO. This helps "On-Rampers" develop the processes and relationships within their organizations and states to better position themselves for success. Given the success of 2022's On-Rampers, this was the first year that all new cohort members were required to join via the On-Ramp, as Internet2 sought to standardize its processes and provide a consistent experience for all program participants.

The program continued to emphasize collaboration between all participants, with each learning from the other and problem-solving shared issues. Program participants continued to hold bi-weekly coordination calls, which helped drive progress and accountability while allowing time for internal meetings on off-weeks. Internet2 updated the training materials for eduroam Support Organization staff, adding new training on troubleshooting and deeper technical topics. It also worked with the eSOs to identify new varieties of wireless gear that should be covered in the training. The updated training was delivered to all eduroam Support Organizations, and recordings and other documentation are being made available on an ongoing basis.

As of the writing of this report, more than 300 school districts, private schools and academies, and hotspots have been deployed across five states by participants of the eduroam Support Organization program. As in 2022, the eSOs and their constituents continue to represent the fastest-growing segment of the eduroam community.

2023 eduroam Support Organization Cohort

The achievements of the 2023 eduroam Support Organization cohort reflect the uniqueness of the organizations it comprises.

Link Oregon

1. Engaged a technical facilitator for the statewide project from a member Education Service District (ESD) to serve as a technical liaison between Internet2, Link Oregon, and the K12 community.
2. Met biweekly with the pilot team and Internet2 resources to provide support for the pilot eduroam implementation.
3. Members of the pilot ESD participated in the in-depth SO training program in June.
4. Developed a sustainable financial model with a statewide group of ESD technology leaders.

Network Nebraska

1. Continued to update the Network Nebraska site with progress and information.
2. Created multiple new marketing logos for stickers and window clings.
3. Added 10 more public schools (164 total) and 2 private schools (3 total) in 2023.
4. Inspired multiple community colleges to join eduroam (not directly related to the K-12 program). This helps with high schools that have cross programs with community colleges.
5. Enable Nebraska Department of Education (NDE) as an IDP (not directly related to the K-12 program). This assists NDE employees who are teachers/specialists visiting schools.
6. Ensured eduroam was available at multiple education-related conference venues.
7. Host regular technical successes with ESU partners.
8. Multiple success stories from teachers and students.
9. Multiple endeavors with ISPs – including Cox Communication adding 600 hotspots in Nebraska, making it the state with the most eduroam hotspots.
10. Added Omaha Public Library, which includes 13 branch locations across the Omaha metro area.

Sun Corridor Network (SCN)

1. SCN promoted eduroam and the eduroam program in presentations within the state educational and municipal community.
2. Pinal County Schools, an eduroam pilot participant, advocated for their schools to explore the benefits of eduroam.
3. Southern Arizona district expressed keen interest in eduroam.

Utah Education and Telehealth Network (UETN)

1. Promoted eduroam within Utah and with other interested entities outside of the state.
2. "Eduroam2go" R&D, discussions, and presentations.
3. Talks with local ISPs to stand up eduroam in communities they serve.
4. Continue discussions around K-12 deployments, usage, and methodologies.
5. User group meetings were moved to a quarterly cadence. These continue to hold beneficial discussions around new wireless and other related technologies and standards, communications, issue resolution, and trends.
6. Updated marketing and promotion materials.

Connecticut Education Network (CEN)

1. Completed the transition to full eSO, moving support of existing districts under our team.
2. Continued support of 3 initial school districts, 3 in process, engaging with new schools and other constituents.
3. Promoted eduroam to the community, positioning the service as an important part of equity of access.
4. Added to the project team, bringing in existing networking and wireless experts to help with support and deployment.

On-Ramp Organizations

Nevada System of Higher Education (NSHE)
- Joined the eSO program via the On-Ramp.
- Reboot of 2021 university-led K-12 eduroam pilot.
- Reinvigorating/expanding higher-ed use of eduroam.
- City of Las Vegas early adopter as first municipal SP.
  - 60+ locations, 500+ APs: City Hall, tech centers, community centers, courts, parks, and more.

Washington K-20 Education Network
- eSO pilot program via On-Ramp option.
- Enthusiasm from K-12 leadership and ESD.
- Cooperation with UW-IT Wi-Fi.
- Turned up 4 pilot sites.

Internet2

- Successfully transitioned the first two On-Ramp participants to full eduroam Support Organizations.
- Updated training based on topics requested by eduroam Support Organizations and On-Rampers.
- Created agreement structure to pilot public deployments of eduroam by Internet Service Providers.
- Updated the eduroam Federation Manager, including adding hotspot testing.

Note: Achieving these successes was due in part to having staffing resources allocated appropriately. During 2023, the eduroam Support Organizations estimated a need for approximately 30 hours per month of operations and other support for its eduroam community, which is consistent with findings from last year. Since the program's beginning, we've seen a steady decrease in the hours needed to support a statewide deployment of eduroam for K-12s, libraries, museums, and hotspots. The decrease in time needed for support can be attributed to the increased training and documentation resources available to eSOs and the program participants using their increased skills to assist each other. Internet2 will continue to look for ways to decrease the support burden on program participants.

Areas for Improvement

An essential output from this program was to continue scaling the processes and the resources required to implement eduroam within K-12 and community locations for both Identity Providers (IdPs) and hotspots across multiple eduroam Support Organizations, in addition to detailing project challenges and limitations. This has been a valuable process; however, more work is required. During 2023, the program participants and Internet2 identified a number of areas for improvement.

Enhancements to the platforms used by eduroam administrators were at the top of the list for program participants. These include improvements on eSO-specific features of the eduroam Federation Manager (eFM), such as the centralization of log viewing functionality for eSO Administrators (eSOAs), the inclusion of alerting and notification features in the log view, and better sorting and searching features in the eSOA dashboard tool.

Informational resources were also identified as an area for improvement. Participants stated that marketing and branding tools, particularly aimed toward K-12 audiences, would be helpful.

Key Metrics of Success

Internet2 and the eduroam Support Organizations have identified the following metrics as important indicators of program success. We believe this information will serve as a foundation for measuring our progress over time.

- Growth in K-12 deployments:

    - 304 constituent organizations

- Guests supported by eduroam Support Organization constituents:

    - 600,000+ authentications

The eduroam Support Organizations program continues to show steady growth, particularly in the number of devices that are being connected.

- Authentications are growing at 11%

- Users are growing at 23%

- Unique device authentications are growing at 38%

Plans for 2024

Based on an analysis and feedback from program participants, Internet2 plans to continue to grow the eSO program and make improvements to program features, tools, and resources. Internet2 will also tune the program timeline and features to align with standard internal practices, such as event registration for training. The On-Ramp will become a mandatory program feature, ensuring a consistent experience for incoming cohort members and providing a repeatable, scalable approach to expanding the program.

Internet2 continues to see eduroam Support Organizations as invaluable partners in scaling eduroam nationally and broadening the eduroam community in the U.S. It looks forward to working with current and future program participants and their communities.

Detailed eduroam Case Study Report

Program Successes

The goals the program participants identified at the outset of the year represent the baseline for success built on the successes of previous years. The following are demonstrations of the successes of the 2023 cohort:

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Additional Areas of Success

There were successes outside of the state program goals, some of which were identified and pursued by the project team to add value to the program, and some of which emerged organically.

Pilots with several Internet Service Providers (ISPs) provided program participants with an opportunity to test large-scale public deployments of eduroam by working with third parties. The ISPs ranged in size from national telecommunications companies (Cox Cable) to smaller, local or regional ISPs (Allo Communications). Making eduroam more ubiquitous makes the service more valuable for communities and enhances the value eSOs can provide to constituents and their state. Internet2 will continue to assess the technical and programmatic updates needed to make these engagements.

Areas for Improvement

During the course of 2023, participants identified aspects of the program that proved challenging for them.

1. Continue to improve the Federation Manager site.
   a. eduroam Support Organization Administrator (eSOA) dashboard doesn't allow searching or sorting. With large numbers of constituents, the dashboard can become confusing and difficult to navigate.
   b. Viewing logs for constituents involves logging into individual organizations and looking at logs one by one. This can make troubleshooting issues affecting multiple constituents difficult.
2. Add error alerting and notification features.
   a. Currently, no ability to set alerting rules and notifications in the log viewer interface. Adding this functionality would make it easier for eSOs and their constituents to be proactive in supporting their service.
3. Improve eduroam map features.

      a. eSOs cannot create dynamic custom maps in the US mapping interface. Can only take screenshots to show all eduroam service locations in a state or region.
4. Improve eduroam branding tools/artifacts for a K-12 audience.
      a. All of the current eduroam marketing materials are geared towards higher education audiences. Having materials aimed at K-12 audiences will help the eSOs and their constituents promote and expand the program in their states.

Internet2 will continue to work with the eduroam team, the eduroam Support Organizations, and advisory bodies like the eAC to address the issues raised here.

Opportunities for Enhancement

The program participants have identified the following as features or aspects that could better position current and future eduroam Support Organizations for greater success.

1. With more schools turning to Google for learning technologies, including better support and tools for integrating with Google IDs will lower the barrier to adoption for those schools.
2. Improving eduroam Support Organizations' reporting will help eSOs communicate the value of their work to their constituents and internal and external stakeholders. The eduroam reports, especially the roll-up reports provided to eSOs, help tell a powerful story.
      a. Move away from PDF delivery. The format can be confusing for eSO roll-up reports, as the template used to create the reports needs modification to reflect the uniquely complex data generated by the eSOs and their constituent organizations.
      b. Add on-demand reporting within Federation Manager. Allowing reports to be generated dynamically will provide more flexibility to eSO staff, reduce the burden on Internet2 to generate PDFs, and prevent report loss or delays due to issues encountered while emailing the reports.
3. Continue to improve troubleshooting tools. This could include adding functionality to the log viewer as well as other enhancements to the eFM.

Goals for 2024

Link Oregon

- Finalize contract and membership agreement with current and new pilot Education Service District(s) (ESDs) and their connected end sites (school districts).
- Extend the pilot to one or more additional Education Service Districts and select connected end sites.

- Develop outreach and communications strategy for expanded rollout based on lessons learned from pilot ESD project(s), including presence on the Link Oregon website.
- Establish an Oregon eduroam user group to provide peer support among participating institutions.

Network Nebraska

- Bringing Network Nebraska into focus. Network Nebraska is the owner of the Network Nebraska program and InCommon contract. Tie the two together better for name recognition.
- Remove the old pilot agreement process for schools, now eduroam will be part of Network Nebraska's MOU. One less hurdle for schools.
- Update the Network Nebraska site to include Network Nebraska program details and improved mapping.
- Continue to encourage schools to participate in the Network Nebraska program.
- Continue to provide technical assistance to Network Nebraska eduroam administrators.
- Work with libraries and private schools to join the Network Nebraska program.
- Discussion on funding to provide basic support/monitor of the eduroam service.
- Work with local businesses and ISPs to continue to add eduroam hotspots.

Sun Corridor Network

- On-board 2 southern Arizona districts.
  - Ask for their support to help drive further interest and eduroam deployment.
- Make eduroam an important, visible component of the SCN - Maricopa County Broadband Initiative.
  - Broad Phoenix metro marketing.
- Yuma and Flagstaff remain key, viable areas where SCN has a significant presence.
- Get presentation/speaking time at key K-12 events.
- Develop and deploy eduroam educational materials and marketing display materials for active eduroam locations.

Utah Education and Telehealth Network (UETN)

- Continue to work with ISPs to promote hotspot locations.
- Transition the eduroam project into a program.
- Eduroam2go Project.

Connecticut Education Network (CEN)

- Establish a standing quarterly member technical workshop for eduroam configuration.
- Reshape marketing materials for administrative leaders
- Promote eduroam within the new grant program.
- Convert existing agreements to the eSO model.

On-Ramp

- **Nevada System of Higher Education (NSHE)**
    - Keep spreading the eduroam love
        - 2 major metro K-12 districts (IdP + SP)
        - 5 smaller/rural K-12 districts (IdP + SP)
        - 2 municipal entities (SP)
        - a library system (SP)
    - Stretch goal SPs (not K-12 / eSO specific)
        - LAS or RNO airport
        - a convention center
        - pilot research station deployment
    - Keep building partnerships with our universities and colleges to reach local communities.
    - Develop a more formal marketing strategy and materials.

- **Washington K-20 Education Network**
    - 25 participating members
    - Including all/most ESDs
    - Including libraries
    - Broader use (student devices, SPs)
    - Documentation & standardization
    - Define & meet project success criteria

Internet2

- Continue growing the eduroam Support Organizations program.
- Improve the tools and resources available to eSOs, including the process of generating and delivering eSO reports.
- Continue to improve the timeline and features of the eSO program based on internal analysis and input from program participants.
- Assess the value of the On-Ramp and plan adjustments based on feedback from On-Rampers.
- Ensure On-Rampers are well-positioned to transition to full participation.

Conclusion

Based on the successes of the 2023 eduroam Support Organizations Cohort and the On-Ramp Internet2 has decided to continue building the program, and looks forward to adding new organizations to the next eSO cohort. Internet2 will also tune the program timeline and features to align with standard internal practices, such as event registration for training. The On-Ramp will become a mandatory program feature, ensuring a consistent experience for incoming cohort members and providing a repeatable, scalable approach to expanding the program.

Internet2 continues to see eduroam Support Organizations as invaluable partners in scaling eduroam nationally and broadening the community of eduroam in the U.S. and looks forward to working with current and future program participants and their communities.

Project Team

Network Nebraska
- Project Sponsor - Brett Bieber
- Project Director - Neil Brown
- Project Manager - Ben Nelson
- Project Manager - Becca Kingery

Sun Corridor Network
- Project Sponsor - Derek Masseth
- Project Director - Gabriel Lopez
- Project Manager - Laura Etter
- Project Manager - Dennis Kinton

Utah Education and Telehealth Network
- Project Sponsor - Jim Stewart
- Project Director - Jeff Egly
- Project Manager - Amanda Molinari
- Project Team Members - UETN NOC
- UETN stakeholders from LEAs, libraries, colleges, and many other UETN staff

Connecticut Education Network
- Project Sponsor - Ryan Kocsondy
- Project Manager - Paul Tarsa

Link Oregon
- Project Sponsor - Steve Corbató
- Project Manager - Molly Thurston
- Project Team Member - Russell Rubrecht
- Project Team Member - Supriya Venkat

Nevada System of Higher Education
- Project Sponsor - Anne Milkovich
- Project Manager - Derek Eiler
- Project Team Member - Dan Rucker

Washington K-20 Education Network
- Project Sponsor - Noah Pitzer
- Project Manager - Jack Haden-Enneking
- Project Team Member - Amel Caldwell

Internet2
- AVP of Trust and Identity - Ann West
- eduroam Product Manager - Sara Jeanes
- Program Manager - Mike Zawacki
- Project Manager - Romy Bolton
- Subject Matter Experts - Nicole Roy, Margaret Cullen, Johnny Lasker, Mark Donnelly, Josh Howlett

About Us

Link Oregon

The Oregon Fiber Partnership, operating as Link Oregon, is a federally tax-exempt 501(c)(3) Oregon non-profit organization, that provides high-speed, fiber-optic broadband connectivity and shared network services to K-12 and higher education, libraries, Tribes, public health care organizations, remote state offices and other public and non-profit organizations and facilities across Oregon.

Link Oregon is a consortium of the State of Oregon, through its Office of Enterprise Information Services (EIS), and the state's four largest research universities: Oregon Health & Science University (OHSU), Oregon State University (OSU), Portland State University (PSU), and the University of Oregon (UO).

Link Oregon works with an ecosystem of community and commercial collaborators to build and maintain our systems and services. We have engaged with local and national telecommunications companies to operate approximately 2,500 route-miles of dark fiber-optic cable across the state.

Network Nebraska

Network Nebraska is Nebraska's statewide research and education network. Operating a statewide multipurpose backbone and providing statewide internet, peering, related services, and support for eligible participants. Network Nebraska is made possible through a consortium of K-12 and higher education entities working together to provide a scalable, reliable, and affordable suite of services. Participation in Network Nebraska is voluntary and Network Nebraska is 100% self-funded through member fees.

Sun Corridor Network

The SCN is a collaboration, sponsored by the Arizona Board of Regents, of the three state universities – Arizona State University, Northern Arizona University, and The University of Arizona – created to share high-capacity digital communications resources, network services, and applications among eligible users. Sun Corridor Network advances connectivity, research, and education at gigabit speeds for all Arizonians. We join 41 other higher education-based regional research and education networks and Internet2 in extending our mission to K-12 education, libraries, municipalities, and other community anchors.

Utah Education and Telehealth Network

Utah Educational and Telehealth Network (UETN) connects all Utah school districts, schools, higher education institutions, libraries and telehealth organizations to a robust network and quality educational and telehealth resources. UETN is one of the nation's premier education networks providing Internet and Internet2 access to its stakeholders throughout Utah. UETN's role is to work and support the Local Educational Agencies (LEAs), healthcare, libraries and universities in all aspects of the educational network and Internet access. UETN works with each connected organization in the state to help stand up and provide eduroam service that will be reliable, robust and filtered for teachers and students as they travel throughout the state, nation and world.

Connecticut Education Network

Connecticut Education Network (CEN) is part of the State's secure "Nutmeg Network," whose purpose is to deliver reliable, high-speed internet access, data transport, and value-added services to its members throughout Connecticut. Established in 2000 to integrate high speed fiber optics networks into institutions of education statewide, CEN is governed by the Commission for Education Technology. CEN helps deliver on the promise of equality in education by providing access to technology that schools and libraries would not be able to afford on their own. This investment is supported by the State of Connecticut, private schools, nonprofit organizations and institutions of higher education that are committed to the idea of overall improvement in education and broad support for access to technology.

In an effort to remove barriers to technology, CEN supports "Open Access" use of the network, which allows any entity to join the network at a fair price. "Open Access" provides greater access for areas of the state from where it has been prohibitively expensive to obtain high-speed internet access and could include town-to-town sharing of databases and remote access to municipal applications.

Nevada System of Higher Education

Student Success is the Nevada System of Higher Education's top priority. To support Nevada students NSHE System Administration and the Board of Regents lead initiatives to provide direct aid where it is most needed.The connected higher education system in Nevada allows all institutions to benefit from each other. When one of our great eight institutions in Nevada succeeds, it translates into success for all of the institutions.

In any complex system there are many moving parts. In our case, we have a publicly elected Board of Regents that oversee the system, makes budgetary decisions, and enact system-wide policies. NSHE's System Administration office carries out state-wide initiatives to ensure the Board of Regents policies are implemented throughout the system. The system is connected and supported with a technological backbone of shared digital services provided by SCS.

SCS is the shared digital services provider for Nevada's public higher education and research community. We are Nevada's Internet2 Connector and the internet service provider for NSHE and most of Nevada's K-12 school districts. In addition to core business critical services such as NSHE's enterprise resource planning and student information system platforms, SCS maintains NevadaNet: Nevada's trusted high speed research and education network. NevadaNet forms the network backbone for NSHE and numerous state and regional public entities.

Washington K-20 Education Network

Washington State's K-20 Education Network (K-20) is the only high-speed, high-capacity network entirely dedicated to meeting the unique needs and diverse interests of Washington State's educational community.

Established by state law in 1996, K-20 was the first statewide, broadband education network in the nation. For over 25 years, it has served nearly all of Washington's public school districts and Educational Service Districts, community and technical colleges, tribal colleges, and public universities, plus many public libraries, private colleges, museums, and more. It provides all members—now numbering almost 400—with a reliable, business-class intranet and high-speed access to commodity internet and Internet2. University of Washington Information Technology (UW-IT), in partnership with the Pacific Northwest Gigapop, operates the K-20 network with a high-bandwidth backbone, high availability, and dedicated technical support.

Internet2

Internet2® is a non-profit, member-driven advanced technology community founded by the nation's leading higher education institutions in 1996. Internet2 serves 336 U.S. universities, 58 government agencies, 46 regional and state education networks and through them supports more than 80,000 community anchor institutions, over 1,000 InCommon participants, 63 leading corporations working with our community, and 70 national research and education network operators that represent more than 100 countries.

Internet2 delivers a diverse portfolio of technology solutions that leverages, integrates, and amplifies the strengths of its members and helps support their educational, research, and community service missions. Internet2's core infrastructure components include the nation's largest and fastest research and education network that was built to deliver advanced, customized services that are accessed and secured by the community-developed trust and identity framework.

For more information, visit https://internet2.edu.