



K-20 Education Network Services and Benefits for K-12 Schools

The K-20 Education Network is the nation's first high-speed, high-capacity, high-reliability network linking colleges, universities, K-12 school districts and libraries statewide and providing video and data services to education facilities throughout the state. The K-20 Network is specifically designed to meet the broadband needs of Washington State's education community. The K-20 Education Network provides unmatched services and value to its users/customers and is built on a history of success, innovation, and collaboration.

Built for Success

- During the pandemic, K-20 network operations technicians provided continuous 24/7 network support. During the period July 2020 through June 2021, 5,620 tickets were opened while 5,995 were closed
- Cutting edge, high capacity, advanced fiber optic network designed to meet current and future needs of education
- Engineered as a fully redundant network to minimize outages on the backbone
- Data transfer rates "upstream" and "downstream" are guaranteed

Dedicated Technical Support

- 24/7 monitoring and technical support for backbone and district edge routers
- In the last year, K-20 successfully mitigated more than 2,000 Distributed Denial of Service (DDoS) attacks against education institutions. In most cases, the institution was unaware of the attack or the proactive monitoring and mitigation that took place to protect them from these attacks.
- Proactive notification and coordination of planned short-term outages for upgrades or maintenance
- Well-established process for problem resolution using 24/7 Network Operations Center (NOC) and Regional Video and Data Institutional Technical Units (RITU)

Flexible Video Conferencing Services

- K-20 negotiated with Zoom for 100,000 free Pro licenses and 500 Webinar 1000 licenses for K-20 members for March, April, May, and June 2020. When the pandemic continued to rage through the summer, K-20 negotiated for the free licenses to continue through September 2020. Over the summer, K-20 successfully negotiated with Zoom to extend K-20's deeply discounted pricing to all K-20 connected institutions, making Zoom's remote conferencing capability available to customers statewide
- Regional Video and Data Institutional Technical Unit (RITU) support, resources, and expertise is provided at no cost

Essential Protocols and Services

- IPv4 and IPv6 addressing support is provided at no cost (the K-20 network is fully IPv6 compatible – from the core to the edge)
- DNS Hosting, including use of k12.wa.us domain, is provided at no cost
- Statewide Intranet to support video and business applications (including WSIPC services)



Effective and Efficient Financing

- OSPI and K-20 address e-rate eligibility issues and apply on behalf of participating school districts
- E-rate discounts are automatically calculated and applied in total fees
- State revolving fund structure enables network maintenance and upgrades without additional cost to school districts

Low Network Fees with No-Cost Growth

- Lowest possible cost for Internet Service Provider (ISP) services provided through cooperative approach to purchasing and all savings are passed on to users
- Infrastructure and equipment is continuously updated at no additional cost to school districts
- Regular monitoring of district usage to plan proactively for future growth
- No additional fees for bandwidth upgrades

Committed To Educational Excellence and Equity

- School districts throughout the state have equal access to the “carrier-class” network at the same low cost
- Small, remote school districts do not pay for the higher cost often associated with providing broadband connections at their locations
- Direct access to *Internet2* and other higher education research consortiums, services, and networks - regardless of location

Supporting Teachers, Staff, and Administrators

- Promotes partnerships with other schools, higher education, and public libraries
- Enables a more efficient use of teacher resources through the use of technology
- Facilitates professional development for educators through videoconferencing
- Saves time and money for regional and statewide meetings

The K-20 Educational Network was established in State law in 1996 and became operational in 1997. The network uses a shared services governance model whereby the users/customers directly balance and determine the network’s service requirements and costs. Although the K-20 network is a publicly supported entity, approximately 75 percent of the services and equipment are outsourced to the private sector. Today, more than 150 higher education institutions and nearly 300 K-12 School Districts and Educational Service Districts are connected to the network. This encompasses approximately 2,000 K-12 schools and 57,000 classrooms. Over 1.5 million students across the state are the primary beneficiaries of the K-20 Network and the services the network provides and supports.