UTAH EDUCATION NETWORK
WWW.UEN.ORG

Welcome to UEN

We network for education

The Utah Education Network was established over twenty years ago by the Utah State Legislature to coordinate telecommunications technology for public and higher education. UEN is one of Utah's greatest assets and has become one of the nation's premier research and education networks.

UEN infrastructure serves public education, higher education, applied technology, libraries, government, and other public entities in three main categories:

- Networking Services – Building and maintaining the statewide broadband network through a public/private partnership with local telecommunications companies.
- Application Services – Providing educators, students, and residents throughout the state with valuable online tools; such as interactive video conferencing, library databases, statewide licensed software, and online instructional tools.
- Support Services – Training, technology support, trouble-shooting, filtering, security, and consultation throughout the state.

We pride ourselves on working hard to build partnerships and find efficiencies that stretch every dollar to benefit the citizens we serve. Whether it be in a kindergarten classroom, a college research lab, or a local community library, we provide fast, reliable broadband service and quality resources, serving a vital role in anticipating and meeting the educational needs of our state.

Now, more than ever, UEN is a critical component in Utah's plan to have 66% of our adults earn a college degree or certificate by 2020. With continued support we will aid our partners in reaching this goal, which will empower individuals and bolster the Utah economy now and for decades to come.

Ray Timothy, PhD

CEO and Executive Director
Utah Education Telehealth Network

UEN serves education customers all over Utah

UEN services match the priorities and objectives of the institutions we serve.

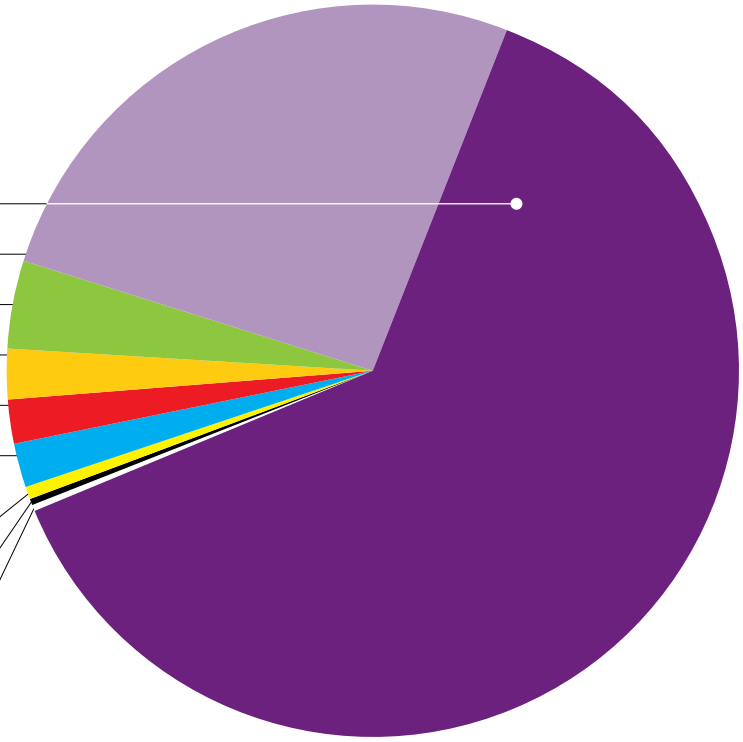
UEN SERVES:	AND ITS:	IN SUPPORT OF THEIR MISSION TO:
Utah Public K-12 Education	612,551 students 32,376 educators 1,044 schools *(USOE Fingertip Facts 2013-2014)*	• Assure literacy and numeracy for all Utah children • Provide high quality instruction for all Utah children • Establish curriculum with high standards and relevance for all Utah children • Require effective assessment to inform high quality instruction and accountability *(Promises to Keep 2009)*
Utah System of Higher Education	177,688 students 34,098 faculty and staff 8 institutions *(USHE Data Book 2014)*	• Increase the rate of student participation in higher education (postsecondary education programs) • Increase the rate of student completion in their chosen field of study or training • Increase the level of economic innovation *(HigherEdUtah2020, 2011 Report)*
Utah College of Applied Technology	34,604 postsecondary students 14,029 trainees *(UCAT Annual Report 2014)*	• Meet the needs of Utah employers for technically-skilled workers • Promote local and statewide economic development • Provide market-driven technical education *(UCAT Annual Report 2014)*
Utah Public Libraries	131 public libraries and branches* Serving 2.9 million Utahns *(Utah State Library 2014)*	• Develop, advance and promote library services and access to information *(Utah State Library Annual Report, 2013)*
Utah Leaders	**66% by 2020 Goal:** By 2020 and thereafter, at least 66% of Utah adults will have a postsecondary degree or certificate, ensuring a well-educated citizenry and workforce, leading to greater economic prosperity and a better quality of life for all Utahns. *(Governor's Education Excellence Commission Vision 2020)*	• **P**repare young learners • **A**ssure access for all students • **C**omplete certificates and degrees • **E**nable economic success *(On PACE to 66% by 2020 Plan)*

**connected directly to the UEN backbone or via DTS*

The route to *66% by 2020* relies on UEN's network, applications, and support infrastructure.

UEN Budget by customer

Public Education	$24,138,036	63.04%
Higher Education	$9,945,998	25.98%
Libraries	$1,496,042	3.91%
General Public	$822,221	2.15%
UCAT	$822,221	2.15%
State Government	$746,016	1.95%
Community Learning Centers	$152,412	0.40%
Private Schools	$104,282	0.27%
Other	$62,999	0.16%
TOTAL	**$38,290,227**	**100%**



Estimates as of June 30, 2014 - FY2014

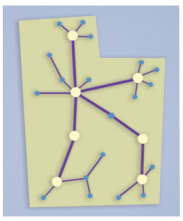
How do we serve them?

UEN infrastructure services include three core areas: *Networking Services, Application Services,* and *Support Services*; while *Operational Services* account for our business functions. These are integral to UEN's mission of networking for education.

1. Networking Services

Networking Services extend and maintain UEN's wide area broadband and digital TV networks. Students, parents, educators and local communities all benefit from these services.

WIDE AREA NETWORK (WAN) – The Network infrastructure carries high speed data and real-time applications including video to communities throughout the state. UEN connects a majority of schools at 100 Mbps and many at 1 Gbps. Network engineers and staff research, design, build, monitor and contract with multiple Utah service providers across the state. This public/private partnership benefits businesses and homeowners who gain increased bandwidth because UEN is the anchor tenant on their local network.



INTERNET ACCESS – UEN manages a large network used by research institutions in Utah to support the state's science and economic development goals. It also provides the capacity for more than 40 Gbps of Internet traffic from several Internet Service Providers (ISPs) to and from Utah schools, colleges and libraries. The Network saves Utah institutions thousands of dollars per month by purchasing Internet access in bulk from multiple competing ISPs.

NETWORK SUPPORT AND SECURITY MONITORING Network Support continuously tracks, reports and manages Internet, data, and video traffic on UEN's Wide Area Network (WAN). Network security detects attacks on the Network, identifies miscreant tools and trends, and mitigates infrastructure vulnerabilities. UEN provides in-depth leadership in security training and works in partnership with national and global security organizations to avert large threats and incidents. The UEN Network Operations Center (NOC) provides Second Tier help desk functions with UEN's real-time trouble ticket system for problem resolution.

BROADCAST – UEN-TV broadcasts three TV channels through a digital transmitter and statewide translator system: UEN-TV 9.1 provides educational programming to public education, higher education and the general public; MHz Worldview 9.2 carries international news and cultural programs; and UEN's First Nations Experience (FNX) Channel 9.3 carries Native American and Indigenous programming statewide.

INTERNET FILTERING – UEN operates content-control software and hardware on behalf of Utah K-12 public schools, charter schools and public libraries to limit child exposure to harmful content such as violence and pornography. In addition to protecting children, this enables Utah schools and libraries to meet requirements of the Children's Internet Protection Act (CIPA) and maintain eligibility to receive E-Rate funding.

2. Application Services

Working with stakeholders, UEN licenses or develops multiple applications that meet higher education and public education needs. This optimizes cost efficiencies through shared support, infrastructure and procurement processes.

INTERACTIVE VIDEO CONFERENCING (IVC) – UEN IVC is Utah's high quality, high definition, Interactive Video Conferencing system for public education, higher education and many state government offices. Thousands of students and educators use the UEN IVC system every day for live, instructor led courses, collaborative meetings and special educational events. This alternative to in-person instruction and meetings has the ability to connect over 1100 locations throughout Utah, as well as many locations around the globe. In addition to more than 350 daily educational events, UEN IVC also incorporates a robust desktop video conferencing option allowing hundreds of administrators to collaborate and meet from almost anywhere. UEN IVC is a highly effective service that saves time, money and energy.

LEARNING MANAGEMENT SYSTEM (LMS) – Working with other Utah institutions, UEN licenses and supports a software application that manages online components of in-person and online classes; a shared platform for information sharing and collaboration. UEN contracts with Utah-based Instructure for its Canvas LMS. The Network regularly convenes higher and

public education partners who work collaboratively to maximize this service.

PIONEER LIBRARY – Pioneer Library is a statewide service that purchases online library resources from national suppliers at consortium discounts. Pioneer provides access to newspaper articles, magazines, professional journals and eBooks. UEN pays the K-12 portion of the Pioneer Library. Public Libraries and Academic/College Libraries also benefit through this collaboration. Preschool Pioneer provides early childhood resources in English and Spanish to children ages 3-5, their parents and caregivers. This service benefits more than 285,000 Utah children as they prepare for school.

WEB CONFERENCING – UEN licenses and supports Adobe Connect desktop-based conferencing that creates a live, virtual classroom, office or conference room with two-way audio, video, interactive whiteboard, computer desktop sharing, one-on-one interviews and chat. This tool is available statewide for educational use such as meetings, mentoring, virtual office hours, presentations and tutoring. UEN hosts a webinar on education tools in the weekly Faculty Lounge series.

TEACHING AND LEARNING TOOLS – UEN provides Utah's K-12 educators, faculty, and pre-service educators with tools they need to teach effectively. UEN also supports various web projects aligned to state education goals, such as STEM (Science, Technology, Engineering and Math) learning resources, Utah Futures college and career planning courses, Internet Safety and Financial Literacy. UEN's eMedia service includes more than 20,000 digital videos, images and documents for public education and higher education. UEN hosts my.uen, a web tool for teachers to communicate with parents. More than 35,000 Utah educators have my.uen accounts. UEN also works closely with the Utah State Office of Education (USOE) to develop curriculum applications such as the Utah Core Curriculum Database with vetted lesson plans, open educational resources, and links.

3. Support Services

Support Services provides assistance to the users of UEN infrastructure and applications.

TRAINING – UEN provides workshops and presentations to help end-users (teachers, faculty, librarians) use Network infrastructure services effectively. UEN coordinates with K-12 and higher education specialists to provide handouts, videos, and teaching materials to support their educational technology work. UEN offers technology integration support in-person and via UEN-TV, Adobe Connect, and the Canvas LMS. UEN training staff work closely with district and school leaders to provide workshops specific to local school needs including 67 online license endorsements for teachers.

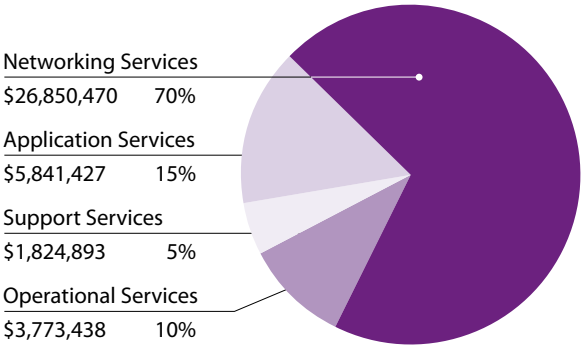
REGIONAL SUPPORT – UEN has regionally located field support that provide 24/7 assistance to UEN's data network and IVC network. UEN helps sustain Utah's four Regional Service Centers with technical support, grant support and personnel funding. The centers are the frontline support for connectivity, training and problem resolution for Utah's rural school districts. The four centers include NUES, Northeastern Utah Educational Services in Heber City; CUES, Central Utah Educational Services in Richfield; SEDC, the Southwest Educational Development Center in Cedar City; and SESC, the Southeastern Educational Service Center in Price.

E-RATE SUPPORT – UEN assists Utah public school districts, charter schools, private schools, libraries and Head Start programs in obtaining E-Rate reimbursements for broadband circuit costs. The E-Rate program is part of the Federal Communication Commission's Universal Service Fund. Consumers, such as cell phone users, pay into this fund as a part of their monthly bills. With UEN's E-Rate support, Utah schools and libraries are laying claim to millions of E-Rate dollars which have been set aside for education.

4. Operational Services

These business functions provide the operational foundation for UEN's networking, application and support services. They include basic operations and maintenance such as administration, accounting, internal telecommunications, utilities, database backups, and internal security tools.

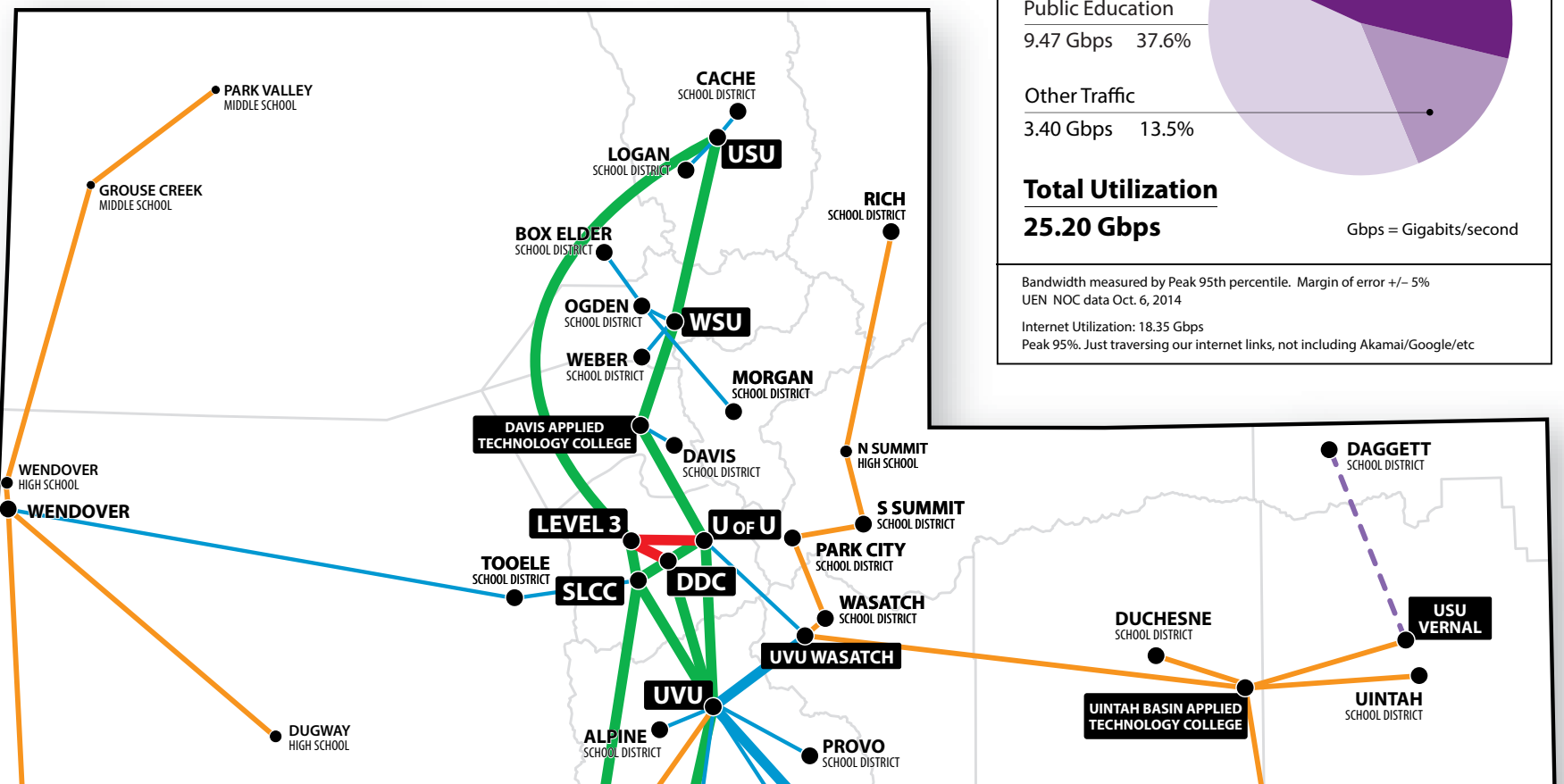
UEN Infrastructure Services



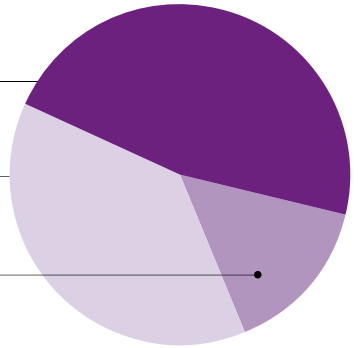
UEN Infrastructure Map

Connecting 1412 locations throughout Utah

- 100 Gigabits/second Backbone
- 10 Gigabits/second Backbone
- 1 Gigabit/second Backbone
- 1 Gigabit/second
- 1 Gigabit/second Ethernet
- 155 Megabits/second Microwave
- 45 Megabits/second Microwave
- NAME Point of Presence (POP)



Overall Bandwidth Utilization



Higher Education
12.33 Gbps 48.9%

Public Education
9.47 Gbps 37.6%

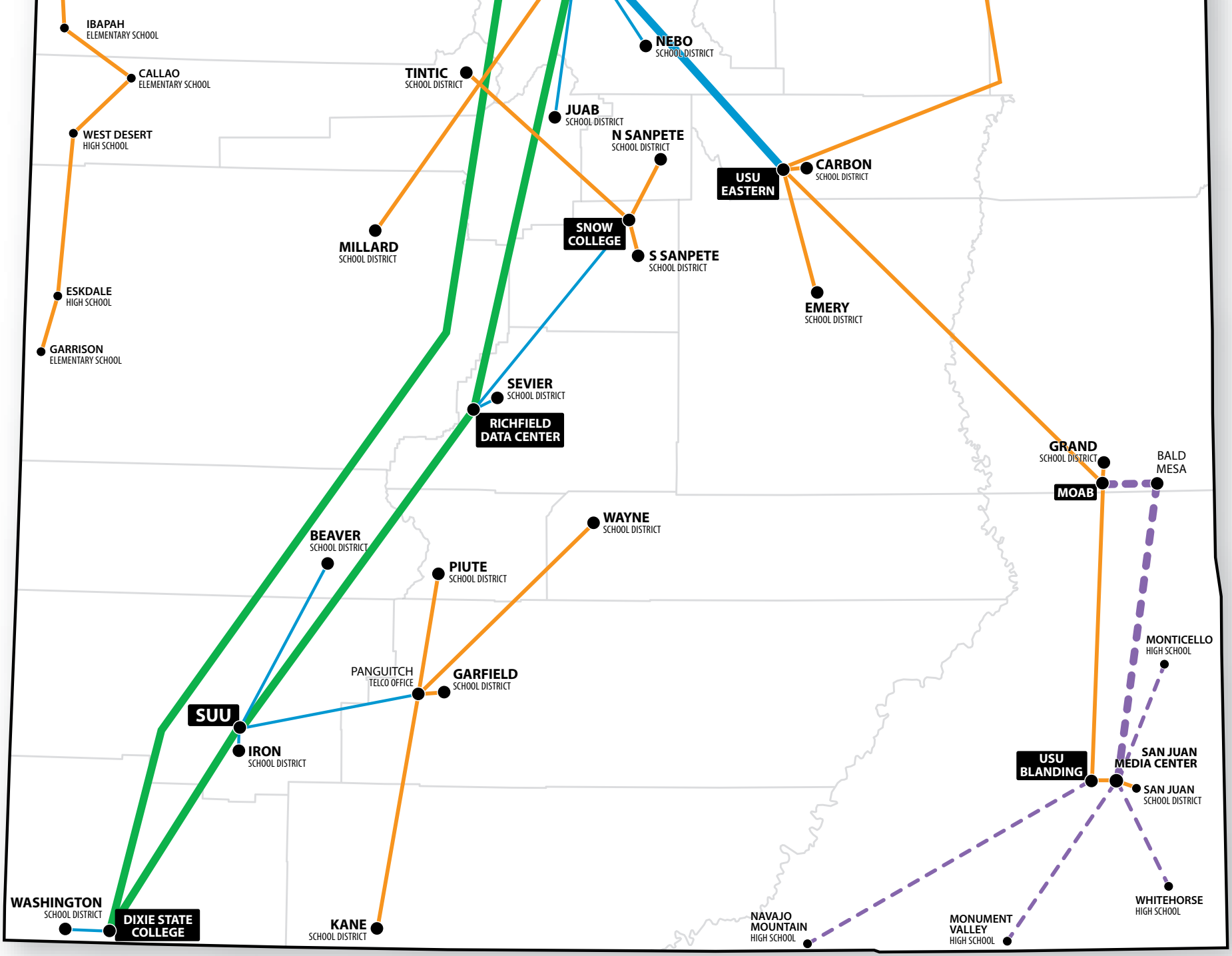
Other Traffic
3.40 Gbps 13.5%

Total Utilization
25.20 Gbps

Gbps = Gigabits/second

Bandwidth measured by Peak 95th percentile. Margin of error +/– 5%
UEN NOC data Oct. 6, 2014

Internet Utilization: 18.35 Gbps
Peak 95%. Just traversing our internet links, not including Akamai/Google/etc


IBAPAH
ELEMENTARY SCHOOL
CALLAO
ELEMENTARY SCHOOL
WEST DESERT
HIGH SCHOOL
ESKDALE
HIGH SCHOOL
GARRISON
ELEMENTARY SCHOOL
TINTIC
SCHOOL DISTRICT
NEBO
SCHOOL DISTRICT
JUAB
SCHOOL DISTRICT
N SANPETE
SCHOOL DISTRICT
CARBON
SCHOOL DISTRICT
USU EASTERN
SNOW COLLEGE
S SANPETE
SCHOOL DISTRICT
MILLARD
SCHOOL DISTRICT
EMERY
SCHOOL DISTRICT
SEVIER
SCHOOL DISTRICT
RICHFIELD DATA CENTER
GRAND
SCHOOL DISTRICT
BALD MESA
MOAB
WAYNE
SCHOOL DISTRICT
BEAVER
SCHOOL DISTRICT
PIUTE
SCHOOL DISTRICT
MONTICELLO
HIGH SCHOOL
PANGUITCH
TELCO OFFICE
GARFIELD
SCHOOL DISTRICT
SUU
IRON
SCHOOL DISTRICT
USU BLANDING
SAN JUAN MEDIA CENTER
SAN JUAN
SCHOOL DISTRICT
WHITEHORSE
HIGH SCHOOL
WASHINGTON
SCHOOL DISTRICT
DIXIE STATE COLLEGE
KANE
SCHOOL DISTRICT
NAVAJO MOUNTAIN
HIGH SCHOOL
MONUMENT VALLEY
HIGH SCHOOL

What are the main sources of UEN funding and how is it allocated?

As of June 30, 2014

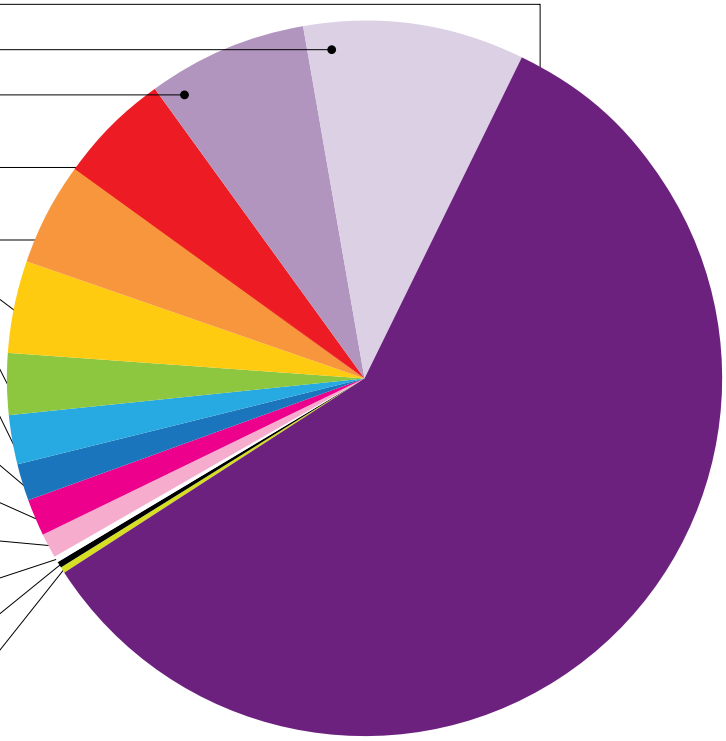
UEN SERVICES	TOTAL	STATE APPROP	KUEN GRANT	FEDERAL E-RATE	OTHER FUNDING*
NETWORKING SERVICES	**$26,850,470**	**$10,761,654**	**$1,517,187**	**$13,786,667**	**$784,962**
Wide Area Network	22,534,268	8,008,214	–	13,786,667	739,387
Internet Access	852,551	827,260	–	–	25,290
Network Support and Security Monitoring	1,837,690	1,825,011	–	–	12,680
Broadcast	1,523,409	–	1,517,187	–	6,222
Internet Filtering	102,552	101,170	–	–	1,383
APPLICATION SERVICES	**$5,841,427**	**$2,977,768**	**$1,120,110**	**–**	**$1,743,549**
Interactive Video Conferencing	1,966,987	1,907,298	–	–	59,689
Learning Management System	591,223	590,539	–	–	684
Teaching and Learning Tools	2,735,765	392,390	662,969	–	1,680,406
Pioneer Library	459,227	–	457,141	–	2,086
Web Conferencing	88,226	87,542	–	–	684
SUPPORT SERVICES	**$1,824,893**	**$1,793,032**	**$21,241**	**–**	**$10,620**
Training	1,062,036	1,030,175	21,241	–	10,620
Regional Support	699,631	699,631	–	–	–
E-Rate Support	63,226	63,226	–	–	–
OPERATIONAL SERVICES	**$3,773,438**	**$3,109,846**	**$588,123**	**–**	**$75,469**
Operational Services	3,773,438	3,109,846	588,123	–	75,469
TOTAL	**$38,290,227**	**$18,642,300**	**$3,246,660**	**$13,786,667**	**$2,614,600**
PERCENTAGE OF TOTAL EXPENSES	**100.00%**	**48.68%**	**8.48%**	**36.01%**	**6.83%**

* Note: "Other Funding" is comprised of the BTOP and miscellaneous grants and reimbursements from Public Ed, Higher Ed, and Department of Technology Services.

Totals in this table may not reflect precise summaries of the data since amounts less than one dollar are rounded.

UEN Budget by service

Wide Area Network (WAN)	$22,534,268	58.85%
Operational Services	$3,773,438	9.90%
Teaching and Learning Tools	$2,735,765	7.14%
Interactive Video Conferencing (IVC)	$1,966,987	5.13%
Network Support and Security Monitoring	$1,837,690	4.80%
Broadcast	$1,523,409	3.97%
Training	$1,062,036	2.77%
Internet Access	$852,551	2.22%
Learning Management Systems (LMS)	$699,631	1.82%
Regional Support	$591,223	1.54%
Pioneer Library	$459,227	1.20%
Internet Filtering	$102,552	0.27%
Web Conferencing	$88,226	0.23%
E-Rate Support	$63,226	0.16%
TOTAL	**$38,290,227**	**100%**



UEN services by customer

As of June 30, 2014

UEN SERVICES	TOTAL	PUBLIC EDUCATION	HIGHER EDUCATION	OTHER CUSTOMERS
NETWORKING SERVICES	**$26,850,470**	**$17,345,475**	**$5,972,186**	**$3,532,809**
Wide Area Network (WAN)	22,534,268	15,323,302	4,957,539	2,253,427
Internet Access	852,551	281,342	485,954	85,255
Network Support and Security Monitoring	1,837,690	1,211,724	315,416	310,550
Broadcast	1,523,409	426,554	213,277	883,577
Internet Filtering	102,552	102,552	–	–
APPLICATION SERVICES	**$5,841,427**	**$2,966,980**	**$2,662,361**	**$212,085**
Interactive Video Conferencing (IVC)	1,966,987	413,067	1,494,910	59,010
Learning Management System (LMS)	591,223	195,104	396,119	–
Teaching and Learning Tools	2,735,765	2,161,621	574,144	–
Pioneer Library	459,227	153,076	153,076	153,076
Web Conferencing	88,226	44,113	44,113	–
SUPPORT SERVICES	**$1,824,893**	**$1,486,050**	**$254,889**	**$83,954**
Training	1,062,036	743,425	254,889	63,722
Regional Support	699,631	699,631	–	–
E-Rate Support	63,226	42,994	–	20,232
OPERATIONAL SERVICES	**$3,773,438**	**$2,339,531**	**$1,056,563**	**$377,344**
Operational Services	3,773,438	2,339,531	1,056,563	377,344
TOTAL	**$38,290,227**	**$24,138,036**	**$9,945,998**	**$4,206,193**
PERCENTAGE OF TOTAL EXPENSES	**100.00%**	**63.04%**	**25.98%**	**10.98%**

Totals in this table may not reflect precise summaries of the data since amounts less than one dollar are rounded.

UETN Governing Board

Cindy Nagasawa-Cruz
Jordan School District

Represents: Public Education
Term Through: July 1, 2018

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Ben Dalton
Garfield School District

Represents: Public Education
Term Through: July 1, 2018

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Utah State Office of Education

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Term Through: July 1, 2016

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Stephen Hess
The University of Utah and Utah System of Higher Education

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Term Through: July 1, 2016

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Dixie State University

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Term Through: July 1, 2018

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Represents: Utah Telehealth
Term Through: July 1, 2018

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Utah State Library

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Term Through: July 1, 2018

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Tooele ATC

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Term Through: July 1, 2016

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Represents: Public Education
Term Through: July 1, 2018

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Ray Timothy
UETN Executive Director

(801) 581-6991
rtimothy@uen.org

UEN.org

To learn more visit UEN's award-winning website

Explore UEN's priorities here.

Updated Jan. 12, 2015

UEN Funding Request for FY2016

UTAH EDUCATION NETWORK
WWW.UEN.ORG
We network for education.

UEN FY2016 Total Funding Request		
1	Sustainability – Ongoing	$4.5 Million
2	Equipment – One-time	$6.2 Million

UEN requests funding for Sustainability and Equipment. The demand and cost of UEN services continue to outpace available funds. UEN seeks a $4.5 million increase in ongoing funding to address this shortfall. UEN also seeks a one-time appropriation of $6.2 million to help upgrade or replace aging equipment with newer technology. Both of these requests help address vulnerability in Utah's infrastructure for educational technology.

Priority 1: Sustainability = $4.5 Million ongoing

State Funding for State Resources

While our circuit costs have almost doubled over the past eight years, our annual ongoing legislative appropriation has declined. We have been able to fill a portion of the shortfall by finding additional revenue from grants and E-Rate. We have also postponed essential equipment purchases. We request $4.5 million in ongoing funding to support the ongoing operations and services of UEN.

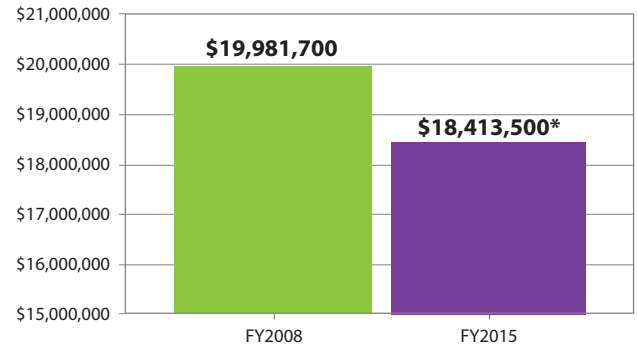
Increased Operational Demand

Utah has more schools, students, devices and apps on the network than ever before, and demand continues to outpace our current infrastructure.

schools + students + devices + (students x apps) = ***demand***

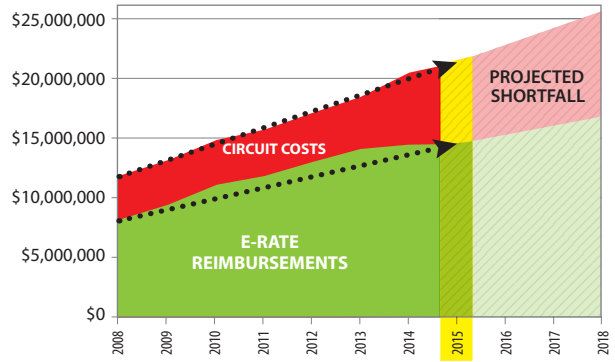
UEN is scheduled to connect an additional 35 K-12 schools in FY2016 to accommodate the growth of the student population. As enrollments increase, so do the costs of licensed applications which are priced on a per student basis.

UEN Ongoing State Appropriations



*Does not include $345,000 for the Utah Data Alliance.

Comparison of E-Rate Funding to Circuit Expenses



	FY 2008	FY 2015	NET INCREASE
Circuit Costs	$11,861,321	$ 21,000,000	$ 9,138,679
Less E-Rate Reimbursements	(8,000,359)	(14,300,000)	(6,299,641)
= Funding Shortfall	$ 3,860,962	$ 6,700,000	$ 2,839,038

We filled a portion of the shortfall with grants (both ongoing and one-time) and by deferring capital equipment purchases, but **this model is not sustainable.** UEN needs ongoing state funding for the ongoing operations of the Network.

Existing schools are also using more bandwidth as students and educators rely on more devices running more applications. Thus far 52 existing schools need additional bandwidth, and two school districts require increased backbone capacity to meet demand.

Last Phase of Elementary Circuit Connectivity

The Utah Legislature increased funding for elementary school circuit connectivity for the past three years. UEN now funds five-sixths of all elementary circuit costs. This will complete the final phase of elementary connectivity at 100% of all elementary circuit costs.

Network Security

Like other large networks in Utah and throughout the world, UEN must be highly secure. Nearly eight percent of our backbone traffic can be attributed to malicious attacks sourced from and targeted at UEN and its connected customers. UEN continuously responds (24 x 7 x 365) to mitigate those attacks and does it with two FTEs. This ongoing funding is needed for two additional FTEs and security monitoring tools.

Priority 2: Equipment = $6.2 Million one-time

UEN manages over $22 million in equipment, with over $14.2 million identified as most critical for our state's educational technology infrastructure. Much of this equipment is more than ten years old, making it incompatible with current systems, prone to failure and obsolete. One-time funding of $6.2 million will address the highest priority, mission-critical items on this list. With this funding UEN would proactively replace outdated equipment before it fails, reducing disruptive Network downtime and costly emergency repairs. It will also enable UEN to upgrade to newer, more efficient protocols that cannot be run on older platforms.

Leaders speak out on how UEN serves education

Technology infrastructure is critical to the success of higher education. UEN plays an important role supporting the network infrastructure of the state's colleges and universities. Institutions within the Utah System of Higher Education are large enterprises serving over 170,000 students a year. The quality of those institutions depends on a solid physical and technological infrastructure–not just in instruction, but also research, campus life, public safety and administration. The Utah System of Higher Education values its partnership with UEN in providing this critical support.

David L. Buhler
Commissioner of Higher Education

The Utah Education Network (UEN) is a longstanding and essential partner to the Utah State Library (USL) and to public libraries all across Utah. Their services ensure that USL can fulfill its mission to improve the quality of public libraries, especially smaller ones, across the state. This partnership has been a crucial catalyst for three major initiatives benefiting Utah's public libraries: first, Pioneer, Utah's Online Library with in-depth educational resources; second, broadband Internet for most of Utah's public libraries; and third, E-Rate assistance that provides broadband access to libraries at substantial savings.

Donna Jones Morris
State Librarian
Director, Utah State Library Division/Department of Heritage and Arts

UEN is essential to the Utah College of Applied Technology in its mission to meet the needs of Utah's employers for technically skilled workers by providing market-driven technical education to both secondary and adult students. UEN provides the technological backbone to our campuses and provides means whereby colleagues can meet over interactive video conferencing cutting down on expensive travel. Campuses also use UEN provided technology to deliver distance education to provide opportunities to students not located near campuses.

Robert O. Brems
President, Utah College of Applied Technology

Modern skyscrapers were made possible because of structural advances in the bundled tube design. Bundled tubes allow hundred-story buildings not only to withstand the stress and strain of their height and weight, but to be built in creative ways to meet the needs of building occupants. UEN supplies the digital version of bundled tube design to 21st century learning in Utah. UEN's statewide digital backbone gives public schools, libraries, and higher education institutions the strength to carry out cutting-edge learning over the vast expanse of Utah and the flexibility to deliver it in ways that best suit the needs of individual teachers and students.

Brad C. Smith
State Superintendent of Public Instruction

Utah Education and Telehealth Network

UETN Overview

UEN and UTN have effectively served the Utah education and healthcare community for many years. Merging them brings together two trusted providers that are committed to robust, reliable and secure networking.

Our diverse team serves public education, higher education, libraries, hospitals and clinics. Whether we're helping a 5th grader with history or connecting a rural clinic to a specialist, our services span three main categories:

- Networking Services – Building and maintaining the statewide broadband network through partnerships with local telecommunications companies.
- Application Services – Providing educators and students, clinicians and patients with tools like interactive video conferencing and library databases.
- Support Services – Training, technology support and trouble shooting from Logan to St. George and from Grouse Creek to Navajo Mountain.

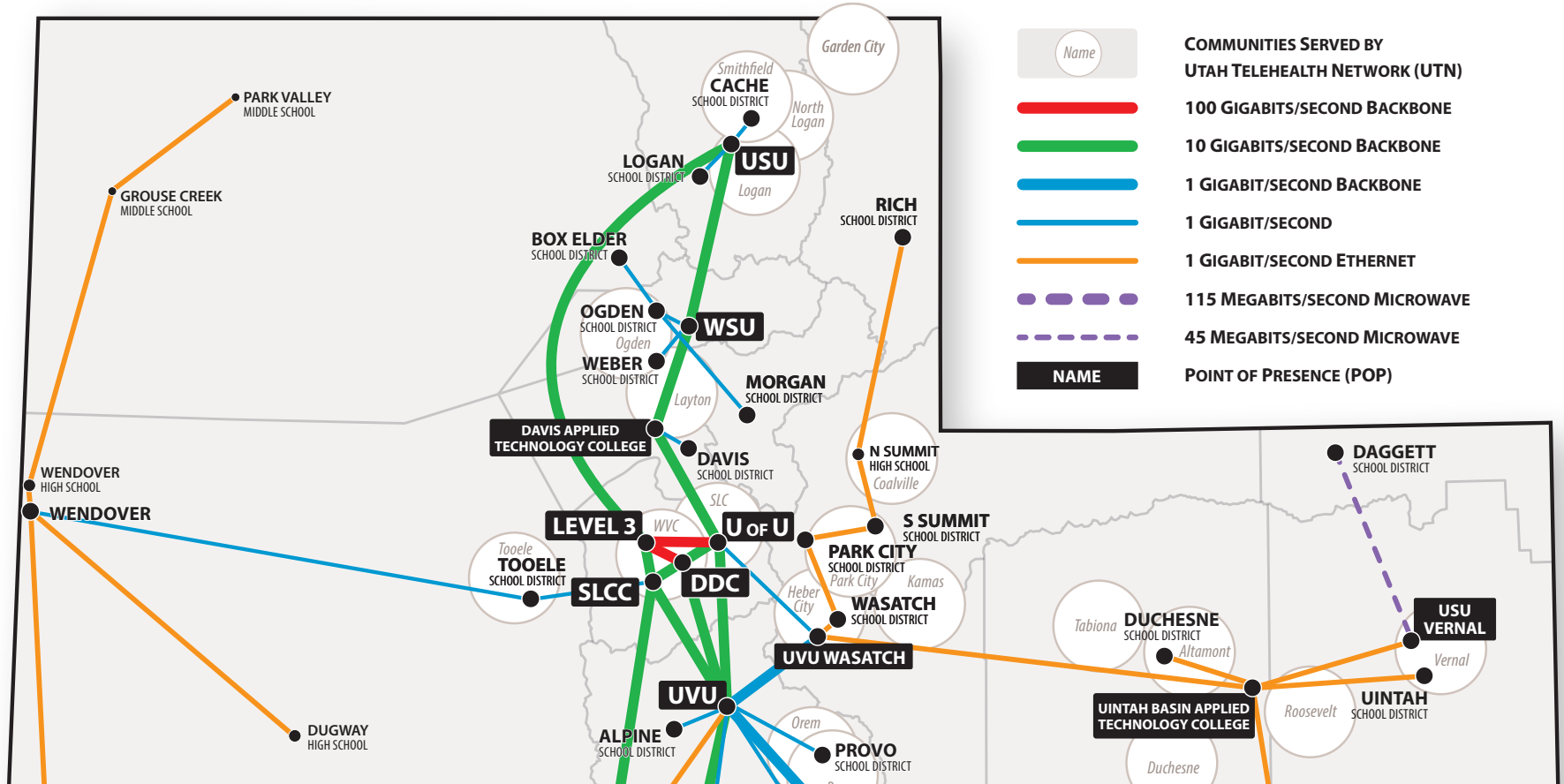
How do we do it? In a word, collaboration. The legislature, the Governor's office, the State Board of Regents, school districts and schools, libraries, clinics, hospitals and providers all work together to provide connectivity and resources. As a result the network is one of Utah's greatest assets and is the envy of many states.

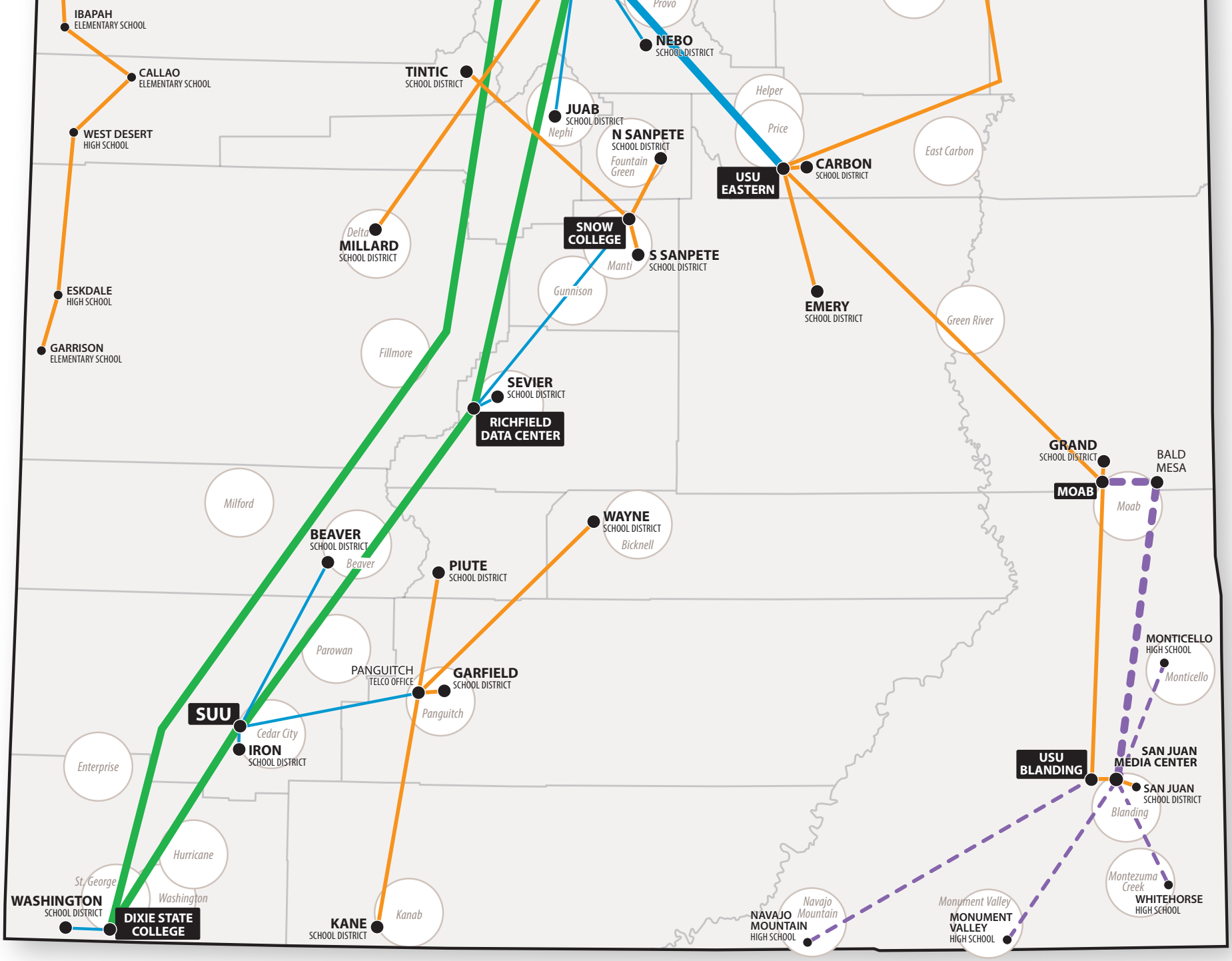
Ray Timothy, PhD

CEO and Executive Director
Utah Education Telehealth Network

UETN Infrastructure Map

UEN and UTN are collaborating to better serve stakeholders throughout the state thanks to legislation passed by the Utah State Legislature in 2014. Utah House Bill 92, sponsored by State Representative Ronda Menlove and Senator Allen Christensen created the Utah Education Telehealth Network. The legislation took effect May 12, 2014. UTN physically moved into the Dolores Doré Eccles Broadcast Center in September. The ongoing process of merging will combine similar functions while maintaining the widely known brands of UEN and UTN.

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MOUNTAIN
HIGH SCHOOL
MONUMENT
VALLEY
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WHITEHORSE
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Provo
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East Carbon
Nephi
Fountain
Green
Delta
Manti
Gunnison
Fillmore
Green River
Milford
Beaver
Bicknell
Parowan
Panguitch
Cedar City
Enterprise
Hurricane
St. George
Washington
Kanab
Navajo
Mountain
Monument Valley
Moab
Monticello
Blanding
Montezuma
Creek

Utah Telehealth Network

Connecting hospitals, clinics and health departments in Utah and the Intermountain West

Utah Telehealth Network:

- ***Connects*** hospitals, clinics, and health departments via a secure high speed broadband network.
- ***Links*** patients and health professionals to multiple resources and specialists.
- ***Keeps*** patients (and health care) in local communities, saving time and travel costs.

Our Core Services include:

- **NETWORKING–** private high speed broadband network, 24/7 management and support
- **SECURITY–** HIPAA compliant security; monitoring & management; secure remote access
- **VIDEOCONFERENCING AND LIVE STREAMING–** bridging, training, technical support and consultation
- **TELEHEALTH APPLICATION DEVELOPMENT–** guide implementation of patient care services and educational programs

"Our health department serves a population of 203,000 residents dispersed throughout five counties in a 17,000 square mile region. The Utah Telehealth Network (UTN) has been of great benefit to our department by overcoming distance issues and providing excellent service."

Chris White, *Deputy Health Officer*
Southwest Utah Public Health Department

801-585-2426 www.utahtelehealth.net

Utah Education and Telehealth Network
Dolores Doré Eccles Broadcast Center The University of Utah
101 Wasatch Drive Salt Lake City UT 84112

UTN Funding Request for FY2016

UTN
UTAH TELEHEALTH NETWORK
www.utahtelehealth.net

UTN Operational Priorities – Ongoing	
Operational support to manage increased growth – Ongoing	$105,000
Telecom costs for growing core network infrastructure – Ongoing	$37,000
Total UTN request – Ongoing	$142,000

UTN Network Refresh and Expansion – One-time	
Upgrade core network equipment, w/ maintenance	$243,300
Strengthen reliability and functionality of network	$108,500
Connect rural healthcare facilities	$150,000
Total UTN request – One-time	$501,800

Operational Need

Utah Telehealth Network (UTN) has tripled in recent years, from <20 sites in 2007 to 58 healthcare facilities today. UTN is expected to grow by an additional ten sites in the coming year. Since 2007, UTN's two engineers have managed network and security for its member sites and provide IT assistance to sites in an increasingly complex healthcare IT environment.

Bandwidth needs are increasing too. At the same time, Universal Service (USAC) discounts are moving in the wrong direction, from today's Rural Healthcare Pilot Program (85% discount) to the Healthcare Connect Fund (65% discounts).

This is the first request for operational funding by UTN since 2007, when the Utah Legislature awarded a $500,000 annual line item to UTN. Reduced during the economic downturn, it is currently at $459,600. This new request would bring UTN's ongoing state line item total to $601,600 per year.

UTN serves 110 hospitals, clinics and health departments, 58 of which rely on UTN for network connectivity and support.

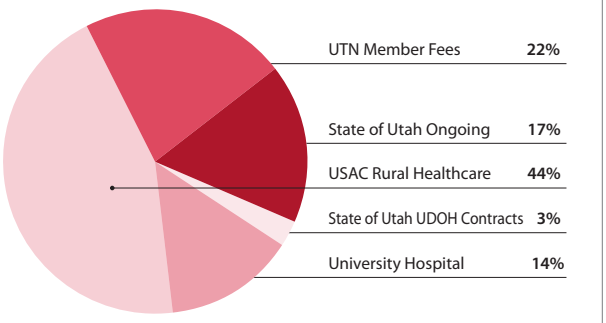
Infrastructure Need

UTN created its current fiber and microwave-based Ethernet network in 2011-12. By 2016, it will be in need of enhancements and upgrades as well as expansion to new sites.

UTN provides the only access to critical patient information for many of its member healthcare facilities. This has increased the need for a reliable and redundant network.

One-time last-mile costs to connect rural healthcare facilities can be substantial. This will stretch Healthcare Connect Fund dollars and healthcare facility funds to add more sites.

UTN Operating Budget - FY2015



UTAH DATA ALLIANCE

LOOKING BACK, MOVING FORWARD.

Sustainability Budget

Overall Utah Data Alliance Budget

Wages	$	980,000.00
Benefits	$	451,000.00
Travel, Training & Equip	$	91,000.00
Contracts	$	316,706.68
Total	**$**	**1,838,706.68**

Budget by Agency

Utah State Office of Education

Salaries (3 FTE)	$	220,000.00
Includes Project Director		
Benefits	$	120,000.00
Travel, Training & Equip	$	15,000.00
Total	**$**	**355,000.00**

Utah Department of Workforce Services

DTS Contract	$	7,860.00
Total	**$**	**7,860.00**

Utah College of Applied Technology

Salaries (2 FTE)	$	150,000.00
Benefits	$	80,000.00
Travel, Training & Equip	$	15,000.00
Total	**$**	**245,000.00**

Utah Education Policy Center

Salaries (3 FTE)	$	220,000.00
Benefits	$	75,000.00
Travel, Training & Equip	$	15,000.00
Total	**$**	**310,000.00**

Utah System of Higher Education

Salaries (2 FTE)	$	150,000.00
Benefits	$	80,000.00
Travel, Training & Equip	$	15,000.00
Total	**$**	**245,000.00**

Utah Education Network

Salaries (3 FTE)	$	240,000.00
Benefits	$	96,000.00
Travel, Training & Equip	$	31,000.00
Contracts	$	316,706.68
Total	**$**	**683,706.68**