

Welcome to UETN We network for education and health care

UETN connects Utah's K-12 schools, technical colleges, institutions of higher education and public libraries, as well as patients and health care providers throughout the state. Whether you're a teacher in Tooele or a physician in Fillmore; a patient in Parowan or a student in San Juan County, UETN provides robust infrastructure, applications, and support for education and health care.

As one of the nation's premiere broadband and educational broadcast networks, UETN's success is based on collaboration with lawmakers, the Governor's office, and education and health care leaders. Teaming up with technology and telecom providers, we deliver cost effective services to Utahns in urban, suburban and rural areas.

Because this critical work is funded by the public, we pride ourselves on building collaborative partnerships and creating cost efficiencies and innovations that stretch every dollar to benefit the people we serve.

Quality education and accessible heath care should be available to everyone, regardless of location or circumstance. Our teamwork and technology serve to meet that vision. UETN empowers educators and learners, providers and patients statewide. We invite you to learn more about us in the following pages.

kay Walker

Ray Walker Chair, UETN Governing Board

Ray Timothy / CEO and Executive Director, UETN

Utah Education and throughout Utah Strategic Plan 2015-2020 Telehealth Network UEN.ORG UTN.ORG We network for education and healthcare Purpose We connect people and technologies to improve **UETN SERVES:** education and healthcare in Utah. Utah Public NETWORK K-12 Education We will administer a secure, advanced, and stable network. Grow capacity > Anticipate and plan for demand > Manage security risk > Support HPC for research > Merge UEN and UTN infrastructure > Leverage peering APPLICATIONS We will curate and support high quality resources and tools. Align to core needs and standards > Support certificate and degree programs of our partners > Maximize cost savings through consortia > Improve accessibility > Foster telehealth Utah System of adoption and deployment Initiatives **Higher Education** SUSTAINABILITY We will secure ongoing funding for our work. Be transparent and efficient > Maximize E-Rate and HealthCare Connect funds > Seek grants and partnerships > Leverage other state and national initiatives BROADCAST We will extend programs and projects to benefit our community. Manage FCC spectrum repack > Leverage the IP network, new technologies and Utah System of applications > Produce new media > Engage with and amplify the work of community partners **Technical Colleges** DEVELOPMENT We will provide excellent professional learning experiences integral to the work of our stakeholders. Support Canvas training > Develop telemedicine resources > Staff adequately to reduce waitlists > Increase support for school administrators, libraries and healthcare community > Serve as a regional telehealth resource and leader **Utah Public Libraries** 1. 100% of sites connected at Service: open, honest, clear and sufficient capacity to meet need respectful 2. Network uptime and availability at Innovation: new ideas and creative 99.9% or greater solutions, a responsible risk-taking Performance culture 3. # of videoconferencing classes Values Indicators Diversity: respect for all 4. Increase in composite # of telehealth Rural and enabled activities Equity: fairness, impartiality, balance Urban Health Care 5. Website utilization metrics Fiscal Responsibility: stewardship, public trust 6. \$ savings through consortia purchasing Empowered Staff: opportunities for 7. # of PD courses and credit hours professional growth completed Communication: seek input, give voice to staff and stakeholders 8. Finances stable and sustainable

Updated by UETN Governing Board, September 2018

9. % of return on E-Rate and Rural

Healthcare funds

Safety: welfare, security, and well-being of staff and constituents

UETN serves customers

UETN services match the priorities and missions of the institutions we serve.

| IN SUPPORT OF: | AND THEIR MISSION TO PROVIDE: |
|---|---|
| | |
| 652,348 students 35,116 educators 1,113 schools (USBE Fingertip Facts, 2017-2018) | Educational Equity Quality Learning System Values |
| | |
| 180,034 students 36,990 faculty and staff 8 institutions (USHE Data Book, 2018) | Affordable Participation Timely Completion Innovative Discovery |
| 12,168 students 8 technical colleges (Annual Report, 2018) | Technically-skilled workers to Utah employers Promotion of local and statewide economic development Market-driven technical education (Annual Report, 2018) |
| 135 public libraries and branches Serving 3 million Utahns (Utah State Library Division, 2018) | Development, leadership and delivery of exceptional services Optimization of Utah's investment (Utah State Library Division, 2018) |
| 70+ rural and critical access hospitals, community health centers, clinics, dialysis centers and local health departments (UTN Site List, 2018) | Access and availability Care, disease prevention and promotion of wellness Efficient use of resources |

How do we serve Utah?

1. Networking Services

Networking Services extend and maintain UETN's wide area broadband and digital TV networks. Students, parents, educators, patients and health care providers 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. UETN connects the majority of educational institutions at a minimum of 1Gbps and health care sites at 100MB-1Gbps. 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 UETN is the anchor tenant for their local community.

INTERNET ACCESS – UETN 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 170 Gbps of Internet traffic from several Internet Service Providers (ISPs) to and from Utah schools, colleges, libraries, clinics and hospitals. 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 UETN's Wide Area Network (WAN). Security monitoring detects attacks on the Network, identifies miscreant tools and trends, and mitigates infrastructure vulnerabilities. UETN provides in-depth leadership in security training and works in partnership with national and global security organizations to avert large threats and incidents.

BROADCAST – UEN-TV broadcasts four TV channels statewide: UEN-TV 9.1 provides 24/7 programs to

UETN services are integral to our mission of networking for education and health care. They include: Networking, Application, Support, Telehealth and Operational Services.

engage educators and lifelong learners; MHz Worldview 9.2 features global news, mysteries and more; First Nations Experience (FNX) 9.3 shows programs by and about American Indian and Indigenous people; and NHK World-Japan 9.4 offers English-language news and lifestyle programming from Japan.

INTERNET FILTERING – UETN licenses content-control software 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. UETN also provides and coordinates internet filtering with health care facilities.

2. Application Services

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

INTERACTIVE VIDEO CONFERENCING (IVC) – UETN IVC is Utah's high quality, high definition, conferencing system for education, telehealth and government. Thousands of students and educators use it every day for live, instructor led courses, collaborative meetings, training and other special educational events. IVC connects over 1200 locations in Utah through more than 350 daily educational events. UETN IVC also incorporates robust desktop video conferencing options, with over 1700 users, allowing students and administrators to collaborate from almost anywhere.

LEARNING MANAGEMENT SYSTEM (LMS) – Working with other Utah institutions, UETN licenses and supports a software application that manages online components of in-person and online classes; a shared platform for information sharing and collaboration. UETN 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. UTAH'S ONLINE LIBRARY – This statewide service purchases online library resources from national suppliers at consortium discounts. The Library provides Utahns access to research sources such as newspaper articles, magazines, professional journals and eBooks. UETN pays for the K-12 portion of the service, with Public Libraries and Academic/ College Libraries benefiting from consortium pricing. Preschool Pioneer is UETN's online library of resources for young children and their parents and caregivers.

WEB CONFERENCING – UETN licenses and supports 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.

TEACHING AND LEARNING TOOLS – UETN provides Utah's K-12 educators, faculty, and pre-service educators with tools they need to teach effectively. UETN also supports various web projects aligned to state education goals, such as STEM (Science, Technology, Engineering and Math) learning resources, UtahFutures college and career planning, Internet Safety and Financial Literacy. UETN's eMedia service includes more than 20,000 digital videos, images and open educational resources. UETN works closely with the Utah State Board of Education (USBE) to develop curriculum applications such as the Utah Core Curriculum Database with curated lesson plans, open educational resources, and links.

3. Support Services

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

PROFESSIONAL DEVELOPMENT – UETN provides courses, workshops and presentations to help end-users (teachers, faculty, librarians, principals and clinicians) use Network infrastructure services effectively. We coordinate with K-12 and higher education specialists, then provide courses, workshops, and teaching materials to support their educational technology work. UETN offers technology integration support in-person and via Canvas LMS, online streaming and podcasts. Our professionals work closely with district and school leaders to provide workshops specific to local school needs including license endorsements and technology credentials for teachers. **REGIONAL SUPPORT** – UETN's regionally located field support centers provide 24/7 assistance to the data and IVC network. UETN helps sustain these four Regional Service Centers with technical support, grant support and personnel funding. The 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 – UETN assists Utah public school districts, charter schools, private schools, libraries, Head Start programs and health care providers in obtaining E-Rate and Healthcare Connect Fund reimbursements for broadband circuit costs. The programs are 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 UETN's E-Rate and Healthcare Connect Fund support, Utah schools, libraries and health care facilities are laying claim to millions of reimbursement dollars set aside for education and health care.

4. Telehealth Services

UETN links rural health care providers and their patients with services generally available only in more populated urban areas. Whether live-streaming surgery grand rounds, transmitting radiology images, or linking behavioral health providers to patients in their homes, the telehealth network helps deliver health care to rural and underserved populations throughout the state. UETN provides high quality broadband to rural health care providers and collaborates with their IT staff on cyber security initiatives to maintain patient confidentiality and privacy. UETN supports patient care, provides continuing education to health professionals, and facilitates administrative meetings. The network also offers telehealth applications for primary care providers to their patients providing greater access in homes, nursing homes and other locations.

5. Operational Services

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





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

As of June 30, 2018

| UETN SERVICES | TOTAL | STATE APPROP | KUEN GRANT | FEDERAL E-RATE | OTHER FUNDING* |
|--|--------------|-----------------|---------------|-------------------|-------------------|
| NETWORKING SERVICES | \$28 839 942 | \$10,379,034 | \$2 368 374 | \$15,597,959 | \$494,575 |
| Wide Area Network (WAN) | 23.551.520 | 7,283,275 | 505,142 | 15,363,577 | 399.527 |
| Internet Access | | | 505,142 | | 599,527 |
| | 587,114 | 352,732 | - | 234,382 | - |
| Network Support and Security Monitoring | 2,376,520 | 2,376,520 | _ | _ | _ |
| Broadcast | 2,035,890 | 77.609 | 1,863,232 | _ | 95,049 |
| Internet Filtering | 288,898 | 288,898 | | - | |
| | \$9,167,850 | \$8,979,140 | \$34,967 | - | \$153,742 |
| Interactive Video Conferencing (IVC) | 2,282,301 | 2,282,301 | _ | _ | _ |
| Learning Management Systems (LMS) | 811,468 | 811,468 | _ | _ | - |
| Teaching and Learning Tools | 5,423,012 | 5,245,238 | 24,522 | - | 153,252 |
| Utah's Online Library | 644,963 | 634,028 | 10,445 | - | 490 |
| Web Conferencing | 6,106 | 6,106 | - | - | - |
| SUPPORT SERVICES | \$2,192,125 | \$2,058,358 | \$100,152 | - | \$33,615 |
| Professional Development | 1,263,712 | 1,143,158 | 86,939 | _ | 33,615 |
| Regional Support | 829,907 | 829,907 | - | - | _ |
| E-Rate Support | 98,506 | 85,293 | 13,213 | - | - |
| OPERATIONAL SERVICES | \$3,701,688 | \$2,515,287 | \$1,159,403 | - | \$26,998 |
| Operational Services | 3,701,688 | 2,515,287 | 1,159,403 | - | 26,998 |
| TELEHEALTH SERVICES | \$2,067,254 | \$880,461 | \$215,388 | - | \$971,405 |
| Telehealth Services | 2,067,254 | 880,461 | 215,388 | - | 971,405 |
| TOTAL | \$45,968,859 | \$24,812,279 | \$3,878,286 | \$15,597,959 | \$1,680,336 |
| PERCENTAGE OF TOTAL REVENUE | 100% | 53.98% | 8.44% | 33.93% | 3.65% |

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

UETN services by customer

As of June 30, 2018

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| UETN SERVICES | TOTAL | PUBLIC EDUCATION | HIGHER EDUCATION | OTHER CUSTOMERS |
|--|--------------|---------------------|---------------------|--------------------|
| | £20.020.042 | 610 624 742 | ¢< 200.012 | <u> </u> |
| NETWORKING SERVICES | \$28,839,942 | \$18,634,742 | \$6,208,913 | \$3,996,287 |
| Wide Area Network (WAN) | 23,551,520 | 16,015,034 | 5,181,334 | 2,355,152 |
| Internet Access | 587,114 | 193,748 | 334,655 | 58,711 |
| Network Support and Security Monitoring | 2,376,520 | 1,567,014 | 407,899 | 401,607 |
| Broadcast | 2,035,890 | 570,049 | 285,025 | 1,180,816 |
| Internet Filtering | 288,898 | 288,898 | - | - |
| APPLICATION SERVICES | \$9,167,850 | \$5,250,016 | \$3,634,378 | \$283,457 |
| Interactive Video Conferencing (IVC) | 2,282,301 | 479,283 | 1,734,549 | 68,469 |
| Learning Management Systems (LMS) | 811,468 | 267,784 | 543,683 | - |
| Teaching and Learning Tools | 5,423,012 | 4,284,907 | 1,138,105 | - |
| Utah's Online Library | 644,963 | 214,988 | 214,988 | 214,988 |
| Web Conferencing | 6,106 | 3,053 | 3,053 | - |
| SUPPORT SERVICES | \$2,192,125 | \$1,781,489 | \$303,291 | \$107,345 |
| Professional Development | 1,263,712 | 884,598 | 303,291 | 75,823 |
| Regional Support | 829,907 | 829,907 | - | - |
| E-Rate Support | 98,506 | 66,984 | - | 31,522 |
| OPERATIONAL SERVICES | \$3,701,688 | \$2,295,047 | \$1,036,473 | \$370,169 |
| Operational Services | 3,701,688 | 2,295,047 | 1,036,473 | 370,169 |
| TELEHEALTH SERVICES | \$2,067,254 | - | - | \$2,067,254 |
| Telehealth Services | 2,067,254 | - | - | 2,067,254 |
| TOTAL | \$45,968,859 | \$27,961,294 | \$11,183,055 | \$6,824,511 |
| PERCENTAGE OF TOTAL EXPENSES | 100% | 60.83% | 24.33% | 14.84% |

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

UETN Budget by service

| Security Monitoring | \$2,376,520 | 5.17% |
|--|-------------------------------------|-------------------------|
| Interactive Video Conferencing (IVC) | \$2,282,301 | 4.97% |
| Telehealth Services | \$2,067,254 | 4.50% |
| Broadcast | \$2,035,890 | 4.43% |
| Professional Development | \$1,263,712 | 2.75% |
| Regional Support | \$829,907 | 1.80% |
| Learning Management System (LMS) | \$811,468 | 1.77% |
| | 3011,400 | 1.77% |
| Utah's Online Library | \$644,963 | 1.40% |
| Utah's Online Library Internet Access | | |
| | \$644,963 | 1.40% |
| Internet Access | \$644,963 \$587,114 | 1.40% 1.28% |
| Internet Access Internet Filtering | \$644,963 \$587,114 \$288,898 | 1.40% 1.28% 0.63% |

Estimates as of June 30, 2018

UETN Budget by customer

| TOTAL | \$45,968,859 | 100% |
|-------------------------------|--------------|--------|
| Other | \$71,253 | 0.16% |
| Private Schools | \$117,944 | 0.26% |
| Community Learning Centers | \$172,380 | 0.37% |
| State Government | \$843,753 | 1.84% |
| Technical Colleges | \$929,943 | 2.02% |
| General Public | \$929,943 | 2.02% |
| Libraries | \$1,692,042 | 3.67% |
| Telehealth | \$2,067,254 | 4.50% |
| Higher Education | \$11,183,055 | 24.33% |
| Public Education | \$27,961,294 | 60.83% |
| Public Education | \$27,961,294 | |

Estimates as of June 30, 2018





Advisory Councils



Kimberley Bartel, MPA Utah Department of Workforce Services UtahFutures

Tim Benson Iron School District High School CTE Teachers or Specialists

Katie Blunt, MEd **Canyons School District** Public Educators

Anthony Booyse Department of Technology Services State Information Technology

Tyler Brinkerhoff, MBA Utah System of Technical Colleges Utah System of Technical Colleges – Office

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Dan Compton, MLS Summit County Library Public Libraries

Kevin Cummings, MA Davis Technical College Utah System of Technical Colleges – Campus

Jeremy Ferkin CenturyLink Interactive Urban Telecommunications

Rick Gaisford, BA Utah State Board of Education USBE and TCC

Tiffany Hall, EdD Salt Lake School District K-12 Professional Development

Ryan Hobbs, MS Dixie State University Utah Teaching Technologies Council

Through November 2018

Roderic Land, PhD Salt Lake Community College USHE Chief Diversity Officers

> Brad Last, MBA Representative Utah State Legislature Utah Legislature (House)

> Madonne Miner. PhD Weber State University Chief Academic Officers

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Tony Pellearini. EdD Southern Utah University Teacher Education Faculty

Hal Raymond, MS Weber School District Online Schools

Diena Simmons, MA KBYU Utah Public Media

Clint Stephens, MSSE Southwest Educational **Development Center** Tech Trainers and C-Forum

Todd Weiler, JD **Utah State Senate** Utah Legislature (Senate)

Brad Welch CentraCom Interactive Rural Telecommunications

Open Position Charter School Administrator

Public Health Department Member Hospital, Clinic, Health Department John Bramble, MLIS

Associate Director, National Network of Libraries of Medicine MidContinental Region and Spencer S. Eccles Health Sciences Library The University of Utah Health

Brenda Bartholomew, RN

Chief Nursing Officer, Gunnison

Health Officer, Southwest Utah

David Blodgett, MD

Valley Hospital

Rural Representative

Sciences Center Evan Christensen, MBA Executive Director, Wayne Community Health Centers, Inc.

Rural Representative Libbey Chuy, MPH

Telehealth Program Coordinator, Association for Utah Community Health Partner Organizations

Nate Creer, MBA Product Manager, University of Utah Health

The University of Utah Health Sciences Center

Peter Hannon. MD The University of Utah Stroke Center

Education and Research Robert Jex, RN, MHA,

FACHE Former chair, UTN Advisory Council At-Large

Preston Marx. MMIS

VP. Information Systems and Support Services Uintah Basin Medical Center Member Hospital, Clinic, Health

Michelle McOmber, MBA, CAE

Partner Oraanizations

Rita Osborn, MBA Director, Utah Center for Rural Health, Southern Utah University Rural Representative

UTN.ORG

Eric Packer, MBA Administrator. Cedar City Hospital Rural Representative

Dermatologist and founder, UTN The University of Utah Health Sciences Center and VA Medical Center Ex-officio

IT, Utah Navajo Health System and Blue Mountain Hospital Member Hospital, Clinic, Health Department

Assistant VP Telehealth, Intermountain Healthcare Member Hospital, Clinic, Health

Sarah Woolsey, MD, FAAFP

Open Position At-Large

Vice-Chair

Department

CEO, Utah Medical Association

Marta Petersen, MD

Donna Singer, MS Consultant At-Large

Anthony Torres

Brian Wayling, MBA . Department

Chair

Medical Director, HealthInsight Partner Organizations

UETN Governing Board 2018-2019



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UETN by the numbers



As of November 2018