



# STATE OF UTAH

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Dear Reader,

Utah is home to one of the youngest, most technologically savvy and educated workforces in the United States. Coupled with the state's reputation as a premier global destination for business and high quality of life, Utah will continue to capitalize on its competitive advantages and the use of broadband technologies and infrastructure.

Broadband expansion has been one of my key objectives as Governor. Access to broadband lays the foundation for quality healthcare, educational opportunities and economic growth in all areas of the state. Broadband is especially important for rural Utah, allowing residents of our less populated areas to support their families with the same opportunities that exist along the Wasatch Front.

The Utah Broadband Plan is an initiative of the Utah Broadband Council, which is comprised of and worked with many nonprofit and government agencies, tribal groups, economic development offices, healthcare and educational organizations, broadband and internet service providers and others throughout the state. This Plan sets the course to maintain the Utah broadband availability web maps and guide the efforts of Council members to enhance access and delivery of broadband across the state.

Utah will remain a leader in extending affordable, reliable broadband services that provide a competitive advantage to Utah businesses and the greatest technological opportunities to our institutions and residents.

As Governor of the state of Utah, I endorse the Utah Broadband Plan and the Council's commitment to the future of broadband in Utah.

Sincerely,

Gary R. Herbert  
Utah's 17th Governor

# Utah Broadband Plan – January 14, 2020

## Utah Broadband Advisory Council

Utah is home to one of the youngest, most technologically savvy and educated populations in the United States. To maintain the state's growing reputation as a premier global destination for business and quality of life, Utah must continue to provide leadership and strategic coordination in broadband infrastructure, expansion and adoption.

The Utah Broadband Advisory Council Plan is a joint effort among its members including the Utah Governor's Office of Economic Development (GOED), Utah Education and Telehealth Network (UETN), Utah Department of Transportation (UDOT), Utah Communities Connect (UCC), the Department of Technology Services' Automated Geographic Reference Center (AGRC), along with many Utah community stakeholders and internet service providers.

Since 2010, Utah has developed, maintained and updated a statewide map of available broadband services. It researched broadband adoption and use and coordinated with public and private partners to implement best practices for broadband deployment in the state. This plan outlines strategic goals and initiatives to continue to steer the course of deploying and expanding broadband and making it accessible to all across the state of Utah.

### **Executive Summary**

*Why is broadband development important?*

- Attracts businesses
- Increases graduation rates
- Provides opportunities for higher-paying jobs
- Diversifies exports
- Affords global competitiveness
- Increases revenues

*Utah Broadband Infrastructure and Adoption*

#### **Convene Partners**

Continue the Utah Broadband Advisory Council to develop strategies to deploy broadband infrastructure, including 5G technologies across the state.

#### **Help Communities Deploy and Increase Speeds**

Utilize best practices to encourage continued expansion of broadband deployment and increase speeds for everyone to 25 Mbps or better in communities throughout Utah.

**Market Infrastructure**

Maintain existing Utah Broadband Map and commercial broadband map to market infrastructure of broadband, utilities, transportation, economic development and sure sites.

**Give Utah Students the Tools to Succeed**

Connect and upgrade broadband services to all Utah schools and libraries.

**Enhance Living and Save Lives**

Continue efforts to connect health care sites through the Utah Education and Telehealth Network (UETN). Support public safety, first responders and FirstNet.

**Improve Digital Access for Unserved Communities**

Support public/private organizations and partnerships to increase and improve broadband adoption for Utah's underserved communities.

## Introduction

According to the 2018 United States Telecom Industry Metrics and Trends, broadband providers have invested more than \$1.6 trillion since 1996 into the U.S. economy to modernize and otherwise enhance infrastructure and services.<sup>1</sup> Conservative estimates indicate that the telecommunications industry employs approximately 730,000 workers nationwide.<sup>2</sup>

Broadband is essential for economic success and it's in our best interest to deliver broadband to rural markets that may present higher returns on investment. A recent study from the Purdue Center for Regional Development conservatively calculated that approximately four dollars are returned to the economy for each dollar spent on broadband infrastructure in rural Indiana.<sup>3</sup> Realizing similar returns in Utah, for both businesses and residents, requires addressing both broadband infrastructure and broadband adoption.

**Utah is a national leader in the deployment of broadband infrastructure<sup>4</sup>**

- In 2010, the state of Utah received a five-year grant through the National Telecommunications and Information Administration (NTIA) to develop a statewide map of available broadband services. This grant also included a plan to increase broadband adoption and deployment in the state. The state formed a project team including staff members from the Governor's Office of Economic Development (GOED), the Public Service Commission (PSC) and the Department of Technology

<sup>1</sup> (<https://www.google.com/url?q=https://www.ustelecom.org/wp-content/uploads/2018/12/USTelecom-Industry-Metrics-and-Trends-2018.pdf&sa=D&ust=1564507745393000&usq=AFQjCNG7HHnbiQc35zRY6MoA0JBwiLCaew>)

<sup>2</sup>

<https://www.google.com/url?q=https://www.bls.gov/iag/tgs/iag517.htm%23iag517emp1.f.p&sa=D&ust=1564507745394000&usq=AFQjCNFdRyRaSh5TRZQgdtymPFFy0yxJyq>

<sup>3</sup> <https://pcrd.purdue.edu/files/media/005-RPINsights-Tipmont-Broadband.pdf>

<sup>4</sup> <https://www.usdish.com/resources/top-states-for-connectivity>  
<https://www.usnews.com/news/best-states/slideshows/best-states-for-internet-access?slide=8>

Services' Automated Geographic Reference Center (AGRC) to accomplish this task. The Utah Broadband Advisory Council was formed to facilitate statewide broadband planning and bring stakeholders together and improve infrastructure coordination throughout the state, including urban and rural communities, state lands, as well as on federal and tribal lands.

- The commercial (<https://locate.utah.gov/#>) and residential (<https://broadband.utah.gov/map>) maps continue to serve as valuable economic development tools. Data includes broadband, utilities, economic incentive areas, transportation, business development centers, Economic Development Corporation of Utah (EDC Utah) Sure Sites, and amenities, including the state's world-class outdoor recreation. This tool supports enhanced business recruitment and economic development, as well as coordination and collaboration of public and private sector entities in Utah.
- The Utah Broadband Advisory Council facilitates statewide broadband planning to improve infrastructure installation in unconnected areas of the state, including rural communities and tribal lands.
- Unique barriers to broadband adoption exist for underrepresented populations in Utah. Building a digitally equitable state is essential for the economic success of residents. The National Digital Inclusion Alliance (NDIA) defined digital equity as a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy.<sup>5</sup> Digital equity is necessary for civic and cultural engagement, employment, lifelong learning and access to essential services. With broadband infrastructure and adoption playing an important role, building a digitally equitable Utah includes strategically building partnerships, and simultaneously addressing other factors that contribute to full participation in the digital world.

## **Broadband Powers Utah's Economy**

Utah is an economic leader, in part because of its commitment to broadband infrastructure. Broadband strengthens and grows Utah's businesses. It provides an avenue to be nationally and internationally competitive. Broadband promotes innovation and entrepreneurship, attracts investment and supports workforce development. It also helps improve operational excellence for state and municipal government.

The relationship between broadband and other priorities — such as employment, education, health, civic engagement, digital inclusion, technology innovation and entrepreneurship — will become increasingly important. Broadband infrastructure deployment and adoption is a key component in accomplishing economic growth, four objectives of which are outlined below.

### ***Objective 1: Strengthen the Ecosystem for Utah, National and International Business***

Stakeholders work to increase business opportunities in rural Utah by identifying unserved and underserved high-speed internet service areas and continue to extend broadband service statewide. The success of Utah's urban and rural businesses, and the ability to attract new businesses, depends on reliable and robust broadband infrastructure. Access to reliable and affordable broadband internet access increases business efficiency, opens new markets, promotes entrepreneurship and enhances economic growth.

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<sup>5</sup> <https://www.digitalinclusion.org/definitions/>

In a globally competitive world, access to broadband levels the playing field. Through broadband, Utah's communities and businesses, both urban and rural, have changed the way they communicate, learn and transact business. As a result, they are able to compete more efficiently in markets throughout the world. Fast and reliable broadband infrastructure is critical to allow a business in Scipio to compete with a company in Shanghai.

### ***Objective 2: Increase Innovation, Entrepreneurship and Investment***

Fast, reliable and affordable broadband service is a crucial driver for innovation, entrepreneurship and attracting new investments in Utah's economy. Utah's information technology (IT) sector, a brand known as Silicon Slopes, is built on these factors in part due to the state's dependable broadband infrastructure.

Programs developed by local universities, such as the University of Utah's 5G Platform for Open Wireless Data-driven Experimental Research (POWDER), support further development and growth of broadband infrastructure and service in Utah and look for new and exciting ways to partner industry with the rural communities through wireless technology.

Continued deployment of broadband infrastructure must continue to be a priority to maintain growth and stimulate innovation, entrepreneurship and investment in other sectors to further economic development.

### ***Objective 3: Prioritize Education to Develop the Workforce of the Future***

Robust broadband produces and attracts a highly-educated workforce that is the backbone for a strong economy. Access to broadband services enables improvements in public education through e-learning and online courses. Broadband service facilitates the flow of information between teachers, parents, schools and other organizations, allowing for more individualized decisions that can be tied to each student's particular needs and abilities.

Increasing broadband access also improves academic performance. The push to further integrate technology into classrooms will be heavily reliant on broadband access and capacity. A study, "Home Computers and Educational Outcomes," by the Board of Governors of the Federal Reserve System determined high school graduation rates for students with home broadband access are six to eight percent higher than students without access.<sup>6</sup>

Broadband adoption has and will continue to play a critical role in providing a foundation to enhance and expand science, technology, engineering and math (STEM) education across the state.

### ***Objective 4: Improve Operational Excellence for State Government***

Promoting broadband adoption must remain an essential priority to improve operational excellence across Utah. State agencies utilize digital transformation tools to reduce costs, decrease wait times, increase employee productivity and improve the level of service they provide to their constituents.

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[https://www.researchgate.net/publication/227372216\\_Home\\_Computers\\_and\\_Educational\\_Outcomes\\_Evidence\\_from\\_the\\_NLSY97\\_and\\_CPS](https://www.researchgate.net/publication/227372216_Home_Computers_and_Educational_Outcomes_Evidence_from_the_NLSY97_and_CPS)

The state of Utah received several national recognitions for its commitment to e-government services including a grade A rating from the Center for Digital Government in the 2018 Digital States survey, and for the second year in a row The Center for Digital Government named Utah.gov first in the overall state government experience category. Utah.gov services won an additional award for notary services and for using artificial intelligence (AI) to analyze resident feedback providing more efficient online services and saving the state money.<sup>7</sup>

Moving forward, scaling government performance efforts like the state of Utah Teleworking Initiative provide many benefits including reduced facility costs, increased employee retention, improved air quality and additional work opportunities in rural Utah.<sup>8</sup> “With the onset of virtualization and cloud technologies, the traditional office workspace is undergoing a paradigm shift from a location-centric computing model to a user-centric computing model, and the State of Utah is at the forefront.”<sup>9</sup> Private companies and others can model this initiative to help fill workforce demand on the Wasatch Front with rural Utah employees.

UDOT has a much better traffic system today because of its success in working with telecoms. Transportation highways in Utah equate to digital highways. At any point in time, anyone can know what traffic is like because of the connections that exist along the highways (e.g., mobile app: <http://udottraffic.utah.gov/mobile.aspx>). These connections opened doors for economic development in the state.

The UDOT model has given the state a competitive advantage by enabling development of next-generation broadband services in both urban and rural areas at a reduced cost. In recognition of this, UDOT won the Quality of Life/Community Development Category with Western Association of State Highway and Transportation Officials (WASHTO) for its public/private partnership to bring fiber to cities, businesses, customers and residents in the Big and Little Cottonwood Canyons.<sup>10</sup>

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<https://drive.google.com/file/d/1wn35x1cCh641194MoUs8QmKJZNCqc-b0/view>

<https://dts.utah.gov/news/utah-receives-grade-a-rating-in-digital-states-survey>

<https://dts.utah.gov/news/utah-wins-first-place-in-government-experience-awards>

<sup>8</sup> <https://gomb.utah.gov/2018/11/15/state-of-utah-telework-initiative/>  
<https://governor.utah.gov/2019/07/16/state-of-utah-introduces-teleworking-program-for-employees/>

<sup>9</sup> <https://dts.utah.gov/news/state-of-utah-teleworking-initiative>

<sup>10</sup> <https://americatransportationawards.org/2018-washto-projects/> <https://americatransportationawards.org/utah-department-of-transportation-cottonwood-canyons-public-private-partnership-fiber-deployment/>

# UTAH BROADBAND PLAN

## 1. Convene Partners to Increase Deployment

*Continue the Utah Broadband Advisory Council*

### **Cooperation and Collaboration**

In 2011, the Utah Broadband Project convened the Utah Broadband Advisory Council. This was the first time broadband providers had the opportunity to meet together with state and local government officials and their industry competitors to discuss the most efficient ways to deploy broadband infrastructure in Utah. The Utah Broadband Advisory Council quickly determined when broadband providers coordinate and collaborate with government entities, broadband infrastructure can be deployed more efficiently and inexpensively.

### **Learn Best Practices From Experts**

Despite the sunset of the Utah Broadband Center in 2018, the Broadband Advisory Council continues to convene and is facilitated by GOED. Its purpose is to continue communication among broadband providers throughout the state, to promote best practices for infrastructure deployment, to stay current on the latest broadband technologies and support digital equity.

## 2. Maintain a Business-Friendly Environment

*Maintain Web Maps: [Locate.utah.gov](http://Locate.utah.gov) and [Broadband.utah.gov/map/](http://Broadband.utah.gov/map/)*

### **Attract More Businesses to Utah**

Utah's global competitiveness, particularly within the state's targeted business clusters, relies on the quality, access and speed of broadband infrastructure. These business clusters include aerospace and defense, financial services, IT and software development, outdoor recreation, life sciences and energy development. Each cluster uses technology at an accelerated rate. These business clusters drive Utah's economy forward by increasing exports and encouraging foreign direct investment. A robust and effective broadband network helps Utah businesses compete globally and increase their market share.

### **Keeping Current the Utah Broadband Web Maps**

Working with the state AGRC office, GOED facilitates and funds the biannual update of the Utah Broadband and Commercial web maps. Broadband providers voluntarily respond by submitting updated maps and broadband speeds in their service areas. These maps allow consumers and broadband providers to access commercial and residential broadband data.

### **Encourage Local Communities to Market Existing Infrastructure**

[Locate.utah.gov](http://Locate.utah.gov) provides businesses interested in relocating or expanding in Utah robust economic development and recruitment tools including information on transportation, lifestyle, utilities, economic incentives and the Economic Development Corporation of Utah (EDCUtah) "SureSites." GOED's corporate recruitment and incentives team, EDCUtah and statewide economic development organizations use [locate.utah.gov](http://locate.utah.gov) to help fulfill requests from businesses and other site selection entities.

A link to the up-to-date economic development maps can be added to county and city economic development websites. This data tool gives Utah a competitive advantage over other states in recruiting

businesses, including broadband dependent businesses. Providing information on commercial broadband access is critical to the economic development of both rural and urban communities.

### **Support Communities Economic Development Efforts**

The Broadband Advisory Council supports recent legislation to establish Rural Coworking Centers funding the building, renovation and infrastructure including broadband to locations in rural communities.

Entrepreneurs, freelance or remote workers can have established workspace and broadband connectivity to build their businesses, to work remotely and globally.

### **3. Lower Barriers to Broadband Deployment**

*Help communities increase access and speeds*

**Lower Barriers to Access Locally** — Deployment of broadband infrastructure is facilitated when communities utilize best practices while granting access to rights of way, permitting and collocation. GOED convenes resources to support local communities' broadband efforts included in their strategic plans and economic development.

**Promote Cost-Saving Best Practices** — Implementing best practices in local communities can help providers deploy infrastructure at much lower costs, thus encouraging investment. Some of these best practices include:

- Streamlining and standardizing access to rights-of-way and permitting process to reduce costs and delay.
  - Creating best practices and checklists for cities and towns to ensure consistency, certainty and adherence to a process for the review and approval of permits or other required documents, including timelines and deadlines.
  - Simplifying the permit applications process.
  - Considering online portals and applications to increase efficiency and reduce paperwork.
- Creating an electronic list of broadband providers to notify them of construction projects where broadband infrastructure can be installed, coordinating efforts and minimizing construction costs.
- Implementing a practice of laying empty conduit during road construction projects, which would allow multiple providers to install infrastructure at a much lower cost.
- Encouraging cities and counties to adopt ordinances that promote deployment of wireless infrastructures to increase both mobile and fixed wireless broadband access.
- Requiring developers to employ open trench periods or installing conduit to connect new developments, allowing multiple providers to service communities and thus encouraging a more competitive marketplace.

**Railroad Crossing Policy** — The Broadband Advisory Council would like to see the railroads develop standards and guidelines for access to railroad rights-of-way and for crossing railroads. These standards should contemplate reasonable costs for traversing areas owned by railroads. Uniform set of protocols should be agreed upon and followed when a provider makes a request. If a voluntary agreement cannot be reached, the council would encourage state legislation to mandate reasonable procedures, timelines and fees.

**Permitting** — The Broadband Advisory Council applauds expedited handling of easements and rights-of-way access by state and federal agencies eliminating multiple layers of required easements when the



broadband infrastructure is serving a school on SITLA property. The council supports the elimination of SITLA easement fees when the broadband facilities are serving a school.

The Utah State Historic Preservation Office (SHPO) has legally executed streamlining agreements in place with many agencies that would interact/permit/authorize future broadband right-of-way or encroachment applications in rural areas including, but not limited to, Utah Department of Transportation (UDOT), Bureau of Land Management, and Utah School and Institutional Trust Lands Administration. Further, the Utah SHPO has established an online submission system for all compliance cases which has removed the time barriers for mailing and also the extra costs and handling of preparing paper materials.

The Utah Environmental Office of the USDA actively coordinates permitting requirements with federal and state agencies for projects seeking USDA grant funds.

R907-65-1: Rights-of-Way for Installation of Telecommunications Facilities, updated March 1, 2019, is “established to encourage the deployment of digital infrastructure within the state” and “to promote access by multiple telecommunication facility providers” with the Utah Department of Transportation which promotes dig-once procedures.

***Work with Public Entities and Providers to Increase Statewide Coverage*** — Collaboration between public and private partners is vital to deploying broadband infrastructure throughout Utah at reduced costs. These practices have extensively expanded the state’s communications infrastructure without major capital investment, resulting in real cost-savings for Utah taxpayers.

UDOT offered the following recommendations on deploying broadband:

- *Make Access to ROW Easier:* It may take up to five years to complete the permitting processes of various state and federal agencies (i.e., Forest Service, BLM, School Land Trust, State Parks, and National Parks), whereas telecoms need connectivity quickly when they have a customer. Utah has a policy that the ROW is open at all times, allowing for easy access to complete continuous build-outs, and ensuring that no single company has exclusive access.
- *Serving Underserved Areas:* UDOT installs empty conduit during highway construction. The agency found that if the state installs small sections of conduit, telecoms have cooperated in helping to extend the infrastructure and provide services to rural communities. By using this approach, the state has been able to provide most of their regions with a connection. In addition, UDOT has been able to leverage their infrastructure by trading it for fiber that has been used to connect state-operated facilities such ITS, cameras, weather stations, etc.; trading assets with the telecoms has resulted in significant payback for the state. UDOT helps communities understand how to attract telecoms by working with them to learn how to install their own conduit, providing construction standards and contact information.
- *UDOT Trade and Sharing of Conduit and Fiber Optics:* UDOT trades existing or planned conduit and fiber on a foot-by-foot basis, and trades fiber optic on a foot-by-foot strand basis. Trade agreements are for 30 years with automatic five-year renewals. Telecoms are responsible for maintenance of all fiber lines and conduit.

- *ROW Valuing:* The fair market value or rent of highway ROW is calculated per mile. The land is surveyed and an average is taken from an upper- bound and lower- bound estimate. A discount rate is applied to 30-year leases.
- *Policy on Monetary Damages:* If a construction company hits a fiber optic line, monetary damages imposed by the telecom should be reasonable.<sup>11</sup>

#### **4. Give Utah Students the Tools to Succeed**

*Continue to Connect Utah's Schools and Libraries to Broadband Networks to Provide Quality Educational Resources*

##### **Improving Access for Education**

Utah must remain at the forefront of technology by working with vested partners to ensure the highest speeds available and the latest technology are part of every school's curriculum.

As Utah's schools prepare students for careers in science, technology, manufacturing, aerospace, engineering and other industries that rely on connectivity, broadband access is essential to education both in the classroom and at home. Utah's Master Plan: Essential Elements for Technology Powered Learning depends on technology availability to improve the culture of public education, classroom instruction, student and parent engagement throughout the teaching and learning process.<sup>12</sup> The State of Utah must work with its partners to ensure students and their parents have the tools and internet access they need to excel in an increasingly digital world.

The Utah Education and Telehealth Network (UETN) is both a public broadcaster and statewide consortium providing essential education services. UETN plays a key role in providing broadband access to Utah's schools. UETN was established to coordinate and support the telecommunications needs of public and higher education, public libraries, healthcare facilities and other entities affiliated with the state systems of public and higher education as approved by the Utah Education and Telehealth Network Board. UETN helps schools and libraries apply for discounts on broadband services through the National Schools and Libraries Program (E-Rate), which is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC), utilizing Universal Service Funds which are collected through fees on consumers' phone bills. Through its broadband and broadcast infrastructure, UETN works with private providers to provide equal access for all Utahns to essential content and services.

##### **Connectivity in Schools**

Although most schools in Utah have achieved a minimum connectivity level of 1 Gbps, UETN is working with its partners to ensure these services are scalable for the future to meet increasing capacity demands. The following actions will help ensure UETN can keep pace with the need:

- State support is sought for UETN to evaluate the broadband usage of districts, schools and the research network for higher education to recommend service upgrades to both facilities and their supporting backbone. UETN should then work with state officials and the legislature to ensure appropriations requests align with these needs. Schools that have high enrollment numbers, are

<sup>11</sup> <https://www.fhwa.dot.gov/policy/otps/successprac.cfm>

<sup>12</sup> [https://www.uen.org/digital-learning/downloads/Utah\\_Essential\\_Elements\\_Technology\\_Powered\\_Learning.pdf#a=](https://www.uen.org/digital-learning/downloads/Utah_Essential_Elements_Technology_Powered_Learning.pdf#a=)

implementing larger technology initiatives, or are serving as network aggregation sites may need higher bandwidth than their counterparts. UETN should also work with schools and districts to help them upgrade Wi-Fi facilities to ensure the best learning experience possible.

- UETN strives to work with national partners, including the FCC and USAC to encourage national policies and funding mechanisms that support broadband in schools. Schools, libraries and other E-Rate eligible entities connecting to UETN may receive E-Rate discounts ranging from 20 to 90% for broadband services. Providing feedback to the FCC and USAC on these programs will help UETN continue to provide exceptional services to Utah's stakeholders.

### **Connectivity after Hours**

Students and parents who lack broadband connectivity at home are at a disadvantage to their peers. Students without home access are often unable to complete homework, conduct research and study for tests and their parents cannot effectively participate in learning. The following actions will help decrease this problem:

- The Broadband Advisory Council seeks state support of innovative developments in broadband and broadcast technologies to make services more readily available to homes and mobile devices in high usage and remote areas.
- State support is sought by UETN and the Utah State Library's efforts to work with city and county library systems, individual libraries, federal partners and the Utah State Legislature to secure broadband funding (E-Rate applications, grants, legislative appropriations) for libraries so they can meet the needs of students and parents. Libraries are a vital community resource for students who lack sufficient broadband access at home, but many libraries in Utah cannot afford to purchase adequate bandwidth. Libraries should have a minimum connection of 1 Gbps (where available) and this capacity should be scaled up as utilization increases.
- The Broadband Advisory Council supports state efforts to work with UETN, local municipalities, tribal nations and Utah's broadband providers to develop programs and funding mechanisms to assist students and parents who lack broadband access in their homes. The Council supports efforts to help educate students and parents who lack broadband access at home about existing resources from the private sector for free and discounted internet services.

## **5. Connect Health Care Sites and First Responders**

### *Connectivity Reduces Costs and Saves Lives*

UETN will continue to connect health care sites. In addition to schools and libraries, UETN also connects hospitals, clinics and health departments into a secure healthcare network. Connecting rural communities is often challenging because of the costs associated with deploying infrastructure across large distances in often remote areas.

- Through UETN's partnership with telecommunications providers, and participation in USAC Rural Health Care Pilot Program, eligible healthcare facilities have received broadband services at a discounted rate of 65 through USAC's Healthcare Connect Fund. Connecting these institutions is often a vital first step in introducing high-speed broadband service into rural areas

- This public/private partnership model will help Utah’s healthcare providers to service residents in both urban and rural communities. UETN’s higher broadband speeds allowed for the widespread adoption and use of electronic health records and other information technology by healthcare facilities throughout Utah. The network provides a platform for the secure exchange of clinical health information among healthcare providers and facilitates the deployment of telehealth and telemedicine. As access expands, patients will have more options to meet with their doctors remotely, which is critical for residents with mobility issues.
- The Broadband Advisory Council supports public safety and encourages the utilization of public-private partnerships like FirstNet that focus on the connectivity needs of first responders. The Utah Communications Authority maintains the statewide public safety radio system and active engagement and coordination with the private sector will continue to improve communications for our public safety ecosystem throughout the state. Newer broadband technologies can also improve outcomes during emergencies through advanced 911 services such as a coordinated ESINet system, text to 911 and real-time video communications for EMTs and other first responders.

## **6. Improve Digital Access for Unconnected Communities**

### *Liberty and Access for All*

In addition to increasing broadband internet access for residents, digital equity includes: the widespread accessibility of current, innovative hardware and software; relevant content and services; and education to develop digital literacy skills necessary for the effective use of information and communication technologies.<sup>13</sup> To improve economic mobility and quality of life, the Broadband Advisory Council is committed to a vision of digital equity and development of a state strategy to provide affordable and reliable access for all residents for the needed equipment, information, education and support to fully engage in the digital world.

### ***Connect Utah’s Most Underrepresented Communities***

Over 145,000<sup>14</sup> of Utah households (15 percent) do not have an internet subscription, and over 120,000 of households (13 percent) do not have desktop or laptop computers. These unconnected households include the state’s most vulnerable populations, including rural residents, refugees, immigrants, older and aging adults, homeless persons, single-parent households, low-income families, emphasized ability needs, and tribal communities.

Continuing efforts to improve broadband infrastructure can address affordability and coverage issues, which are respectively the second and third reason for Utah residents not adopting high-speed internet. However, based on the 2014 Utah Broadband Nonadopters Final Report, the primary reason for nonadopters in Utah is lack of interest and need.<sup>15</sup> The report found that 44% of nonadopters are not subscribing to home internet service because they believe they don’t need it or are not interested in having internet access at home, even though many of them are accessing the internet at another location. About 27% of respondents said they would be more likely to subscribe to internet services if they received some type of computer training. Developing strategies and interventions that help nonadopters recognize the personal relevance of

<sup>13</sup> <http://slcdocs.com/council/agendas/AdministrativeTransmittal/2019/SLCDigitalEquityPolicy.pdf>

<sup>14</sup> [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_17\\_5YR\\_S2801&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S2801&prodType=table)

<sup>15</sup> <https://broadband.utah.gov/wp-content/uploads/2014/08/FINAL.pdf>

broadband and computers will vary based on residents' diverse needs, identities and experiences, languages, disabilities abilities and life stages.

### ***Engage Utah Communities Connect: Utah's Digital Alliance***

In 2017, when Salt Lake City was selected as a ConnectHomeUSA community, local governments, libraries, housing authorities, academics, nonprofit organizations and private industry stakeholders formed Utah Communities Connect: Utah's Digital Alliance. Launched after a series of meetings convened by the Salt Lake City Public Library, the alliance engages cross-sector community stakeholders including private industry, education, nonprofits, and government.

Utah Communities Connect demonstrates the need for collaborative and strategic planning to address digital equity on a statewide level. The alliance draws on the skills and resources of various individuals and agencies to:

- Create a network for greater collaboration and coordination.
- Bring awareness to community members and stakeholders.
- Support digital equity community programs.
- Identify opportunities for access to broadband, devices, and digital literacy training, and address those needs.

This volunteer-led alliance has been instrumental in supporting new strategic program alignments, providing updates on digital equity efforts from other alliance members and national network partners. It also led to the discovery of opportunities for collaborative project proposals with other members and gaining a more factual understanding of the community's digital equity needs and resources. The Alliance, community members, and cross-sector community stakeholders will strategize and work together on the common goal of addressing full participation in the digital society and economy on a statewide level.

### ***Develop the Nation's First Statewide Digital Equity Plan***

The Broadband Advisory Council encourages creating a plan that supports all state residents' full participation in today's digital society, democracy and economy. It should also address broadband infrastructure and adoption, including device access, digital literacy training and support, and digital safety. While major metropolitan cities across the United States, including Salt Lake City, have developed digital equity plans, Utah has the opportunity to become the first state in the nation to develop such a plan and serve as a model for other states.

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The Utah Broadband Plan is a collaborative effort of key stakeholders and the Governor's Office of Economic Development. The plan has been reviewed by the Utah Broadband Advisory Council and their recommendations are incorporated into the final document. Utah chooses to remain a national leader in broadband deployment and up-to-date technology and services for health, education and economic development with access for all.