RHCPP Quarterly Report
Utah Telehealth Network
Q17 – due July 30, 2012

APPENDIX D – Pages 73-75 of Federal Communications Commission FCC 07-198

1. Project Contact and Coordination Information

a. Identify the project leader(s) and respective business affiliations.

Project coordinator: *Deb LaMarche*
Associate Director, Utah Telehealth Network
University of Utah

Co-project manager: *Kyle Andersen*
Director, Enterprise Communications
Intermountain Healthcare

b. Provide a complete address for postal delivery and the telephone, fax, and e-mail address for the responsible administrative official.

Deb LaMarche
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University of Utah
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Salt Lake City UT 84108
801-587-6190 office
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c. Identify the organization that is legally and financially responsible for the conduct of activities supported by the award.

University of Utah, on behalf of the Utah Telehealth Network

d. Explain how project is being coordinated throughout the state or region.

The Utah Telehealth Network (UTN) Advisory Board is responsible for oversight of the project. Board membership is comprised of representatives from the University of Utah, UTN member organizations, rural and state health care leaders.

The Utah ARCHES Management Team was responsible for planning and implementation of the initial project and reports to the UTN Advisory Board. It met every other week until June 2008 and now meets as needed. The Management Team includes representatives from all major constituencies (UTN, Intermountain Healthcare, Community Health Centers, Hospitals, Public Health, etc.) involved in the project.

The project coordinator and co-project manager have continued to meet weekly to ensure coordination among key partners.

2. Identify all health care facilities included in the network.

The health care facility list, which is attached at the end of this report, is divided into three lists. In addition to the specified required information, an additional column has been included to update each site's status listed as approved, in process, or completed.

- *RFP01: The majority of sites have been connected.*
- *RFP02: The majority of sites have been connected.*
- *RFP02 Phase 2: 466A packets were submitted in June 2012 to add 9 additional sites.*

a. Provide address (including county), zip code, Rural Urban Commuting Area (RUCA) code (including primary and secondary), six-digit census tract, and phone number for each health care facility participating in the network.
b. For each participating institution, indicate whether it is:
i. Public or non-public;
ii. Not-for-profit or for-profit;
iii. An eligible health care provider or ineligible health-care provider with an explanation of why the health care facility is eligible under section 254 of the 1996 Act and the Commission's rules or a description of the type of ineligible health care provider entity.

3. Network Narrative: In the first quarterly report following the completion of the competitive bidding process and the selection of vendors, the selected participant must submit an updated technical description of the communications network that it intends to implement, which takes into account the results its network design studies and negotiations with its vendors. This technical description should provide, where applicable:

a. Brief description of the backbone network of the dedicated health care network, e.g., MPLS network, carrier-provided VPN, a SONET ring;

The network is a private Ethernet network utilizing carrier-provided fiber, copper, and microwave connections.

RFP01: Intermountain Healthcare's backbone network is owned and operated completely by Intermountain Healthcare. It is comprised of fiber optic, copper, and microwave connections (point-to-point) to healthcare facilities located throughout Utah.

RFP02: UTN is utilizing carrier-provided dedicated Ethernet services via fiber and, to a limited extent, microwave and/or copper.

b. Explanation of how health care provider sites will connect to (or access) the network, including the access technologies/services and transmission speeds;

The project is a dedicated private network delivered via leased carrier facilities with sites connecting into the network at varying bandwidths from 5 MB to 800 MB.

RFP01: Technologies employed within Intermountain's network for the RHCPP project are: Microwave (registered frequency, registered path), fiber optic, and finished Ethernet at bandwidths ranging from 10 MB up to 800 MB per site. This project will add a 400 MB link between Intermountain and the Utah Telehealth Network core at the University of Utah.

RFP02: UTN sites are being connected into the network most typically via fiber, in a few cases, copper or licensed microwave. Health care facilities have been connected at 5

MB, 10 MB, 20 MB, 50 MB, or 100 MB as selected by each site based upon need. Two health care facilities are also serving as interconnect sites, so have higher bandwidth to support regional network traffic beyond the sites' needs.

c. Explanation of how and where the network will connect to a national backbone such as NLR or Internet2;

The network core for Utah's RHCPP project is located at the Eccles Broadcast Center (EBC) on the University of Utah campus. The University of Utah, through the EBC, currently connects to both NLR and Internet2, which will be available as needed to Utah Telehealth Network and its partners and participants.

d. Number of miles of fiber construction, and whether the fiber is buried or aerial;

Circuits are leased from carriers. This project does not involve direct fiber construction.

e. Special systems or services for network management or maintenance (if applicable) and where such systems reside or are based.

We, UTN and our partners, are managing and monitoring our own network, with support from the carriers to troubleshoot their circuits as needed. UTN and Intermountain Healthcare each have a NOC and coordinate services between networks.

RFP01: Intermountain currently manages and monitors their own network of data circuits based out of their NOC at their Lake Park facility. Intermountain owns their microwave connections, however, a third-party provider Great Basin Electronics, maintains the microwave radio equipment and provides support. This has continued as RHCPP-funded circuits have been added to their network

RFP02: UTN is providing comprehensive network and information security management based out of the network core at the University of Utah. Tools include routers, firewalls, intrusion prevention, network management software, security management software, and vulnerability scanning.

4. List of Connected Health Care Providers: Provide information below for all eligible and non-eligible health care provider sites that, as of the close of the most recent reporting period, are connected to the network and operational.

(a) HC Provider Site	(b) Eligible Provider	(c) Type of Connection	(d) How provided	(e) Speed of Connection	(f) Gateway to NLR, I2, or P1	(g) Site Equipment	(h) Provide diagram
American Fork Hospital 17264-01-0001	YES	Microwave	Build	400 Mb/s	NO	YES	See GB diagram
Canyon View Family Practice 17264-01-0003	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Cedar City Instacare 17264-01-0018	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Delta Community Medical Center, 17264-01-0025	YES	Microwave	Build	50 Mb/s	NO	YES	See GB diagram
Dixie Regional Medical Center 17264-01-0030	YES	Fiber	Carrier Provided	200 Mb/s	NO	N/A	See WFN1 diagram
Fillmore Community Medical Center 17264-01-0026	YES	Microwave	Build	50 Mb/s	NO	YES	See GB diagram
Heber Valley Medical Center 17264-01-0006	YES	Fiber	Carrier Provided	100 Mb/s	NO	N/A	See WFN1 diagram
Hurricane Valley Clinic 17264-01-0017	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Logan Instacare 17264-01-0011	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See Qwest1 diagram
Logan Regional Hospital 17264-01-0007	YES	Fiber	Carrier Provided	100 Mb/s	NO	N/A	See Qwest1 diagram
Manti Family Clinic 17264-01-0028	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
McKay Dee Hospital 17264-01-0008	YES	Microwave	Build	400 Mb/s	NO	YES	See GB diagram
Ogden Workmed 17264-01-0012	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See Qwest1 diagram
Orem Community Hospital 17264-01-0009	YES	Microwave	Build	100 Mb/s	NO	YES	See GB diagram
Park City Medical Center 17264-01-0029	YES	Fiber	Carrier Provided	100 Mb/s	NO	N/A	See WFN1 diagram
Richfield Family Practice 17264-01-0016	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Sevier Valley Family Practice 17264-01-00121	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Southern Utah Behavior Health 17264-01-0019	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram
Southern Utah Surgical Associates, 17264-01-0004	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See WFN1 diagram

(a) HC Provider Site	(b) Eligible Provider	(c) Type of Connection	(d) How provided	(e) Speed of Connection	(f) Gateway to NLR, I2, or P1	(g) Site Equipment	(h) Provide diagram
St. George Workmed 17264-01-0020	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See Qwest1 diagram
Summit Clinic 17264-01-0015	YES	Fiber	Carrier Provided	10 Mb/s	NO	N/A	See Qwest1 diagram
The Orthopedic Specialty Hospital, 17264-01-0005	YES	Microwave	Build	100 Mb/s	NO	YES	See GB diagram
Valley View Medical Center 17264-01-0024	YES	Fiber	Carrier Provided	200 Mb/s	NO	N/A	See WFN1 diagram
Altamont Medical Center 17264-02-0002	YEB	Fiber	Carrier Provided	5 mb/s	NO	YES	See WFN2 diagram
Basin Clinic 17264-02-0005	YES	Fiber	Carrier Provided	100 mb/s	NO	YES	See WFN2 diagram
Bear Lake Community Health Center, 17264-02-0006	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Beaver Valley Hospital 17264-02-0012	YES	Fiber	Carrier Provided	100 mb/s	NO	YES	See Qwest2 diagram
Blanding Clinic 17264-02-0013	YES	Fiber	Carrier Provided	10 mb/s	NO	YES	See Frontier diagram
Blanding Family Practice 17264-02-0014	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Frontier diagram
Blue Mountain Hospital 17264-02-0015	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Frontier diagram
Carbon Medical Services Association, 17264-02-0018	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Central Utah Public Health Department, 17264-02-0034	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
Central Valley Medical Center (interconnect site) 17264-02-0040	YES	Fiber	Carrier Provided	500 mb/s (WFN) 500 mb/s (Qwest)	NO	YES	See WFN2 and Qwest2 diagrams
Duchesne Valley Medical Clinic 17264-02-0048	YES	Fiber	Carrier Provided	10 mb/s	NO	YES	See WFN2 diagram
Enterprise Valley Medical Center, 17264-02-0049	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Fountain Green Clinic 17264-02-0051	YES	Fiber	Carrier Provided	10 mb/s	NO	YES	See WFN2 diagram
Fourth Street Clinic 17264-02-0052	YES	Fiber	Carrier Provided	50 mb/s	NO	YES	See Qwest2 diagram
Green River Medical Center 17264-02-0053	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Gunnison Valley Hospital 17264-02-0054	YES	Fiber	Carrier Provided	50 mb/s	NO	YES	See WFN2 diagram
Helper Clinic 17264-02-0055	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram

(a) HC Provider Site	(b) Eligible Provider	(c) Type of Connection	(d) How provided	(e) Speed of Connection	(f) Gateway to NLR, I2, or P1	(g) Site Equipment	(h) Provide diagram
Kane County Hospital 17264-02-0058	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Milford Memorial Hospital 17264-02-0066	YES	Fiber	Carrier Provided	50 mb/s	NO	YES	See WFN2 diagram
Moab Regional Hospital (interconnect site) 17264-02-0001	YES	Fiber	Carrier Provided	200 mb/s (WFN) 100 mb/s (Frontier)	NO	YES	See WFN2 and Frontier diagrams
Salt Lake Valley Health Department, 17264-02-0084	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
Salt Lake Valley Health Department, 17264-02-0087	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
San Juan Hospital 17264-02-0092	YES	Fiber	Carrier Provided	50 mb/s	NO	YES	See Frontier diagram
Southeastern Utah Health Dept. 17264-02-0094	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Southeastern Utah Health Dept. 17264-02-0095	YES	Fiber	Carrier Provided	10 mb/s	NO	YES	See Frontier diagram
Southeastern Utah Health Dept. 17264-02-0096	YES	Fiber	Carrier Provided	10 mb/s	NO	YES	See Frontier diagram
Southwest Utah Community Health Center dba Family Healthcare, 17264-02-0099	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
Southwest Utah Public Health Department, 17264-02-0100	YES	Fiber	Carrier Provided	50 mb/s	NO	YES	See Qwest2 diagram
Southwest Utah Public Health Department, 17264-02-0101	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
Southwest Utah Public Health Department, 17264-02-0102	YES	Fiber	Carrier Provided	5 mb/s	NO	YES	See WFN2 diagram
Southwest Utah Public Health Department, 17264-02-0103	YES	Fiber	Carrier Provided	5 mb/s	NO	YES	See WFN2 diagram
Southwest Utah Public Health Department, 17264-02-0104	YES	Fiber	Carrier Provided	5 mb/s	NO	YES	See WFN2 diagram
Summit County Public Health Department, 17264-02-0106	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See Qwest2 diagram
TriCounty Health Department 17264-02-0112	YES	Fiber	Carrier Provided	5 mb/s	NO	YES	See WFN2 diagram

(a) HC Provider Site	(b) Eligible Provider	(c) Type of Connection	(d) How provided	(e) Speed of Connection	(f) Gateway to NLR, I2, or P1	(g) Site Equipment	(h) Provide diagram
TriCounty Health Department 17264-02-0114	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram
Uintah Basin Medical Center 17264-02-0117	YES	Fiber	Carrier Provided	100 mb/s	NO	YES	See WFN2 diagram
University of Utah Health Sciences Center (network core) 17264-02-0118	YES	Fiber	Carrier Provided	1000 mb/s (WFN) 500 mb/s x 2 (Qwest)	YES	YES	See WFN2 and Qwest2 diagrams
Wayne Community Health Center, 17264-02-0125	YES	Fiber	Carrier Provided	20 mb/s	NO	YES	See WFN2 diagram

5. Identify the following non-recurring and recurring costs, where applicable shown both as budgeted and actually incurred for the applicable quarter and funding year to-date.

a. Network Design – *N/A, done internally by project partners*
b. Network Equipment, including engineering and installation

Time frame	*USAC 85% paid*	*Participant 15% paid*	*Total Actual paid*	*Budget*
Previous YTD	1,235,604.20	218,047.80	1,453,652.00	1,453,652.00
Q17 (current)	303,117.43	53,491.31	356,608.74	356,608.74
Year-to-date	1,538,721.63	271,539.11	1,810,260.74	1,810,260.74

c. Infrastructure Deployment/Outside Plant, including engineering and construction

Time frame	*USAC 85% paid*	*Participant 15% paid*	*Total Actual paid*	*Budget*
Previous YTD	102,555.90	18,098.10	120,654.00	120,654.00
Q17 (current)	395,788.73	69,845.07	465,633.80	465,633.80
Year-to-date	498,344.63	87,943.17	586,287.80	586,287.80

d. Internet2, NLR, or Public Internet Connection – *N/A*
e. Leased Facilities or Tariffed Services –

(Leased facilities or Tariffed services – installation of recurring service)

Time frame	*USAC 85% paid*	*Participant 15% paid*	*Total Actual paid*	*Budget*
Previous YTD	0.00	0.00	0.00	0.00
Q17 (current)	378,699.54	66,829.33	445,528.87	445,528.87
Year-to-date	378,699.54	66,829.33	445,528.87	445,528.87

(Leased facilities or Tariffed services – monthly recurring costs)

Time frame	*USAC 85% paid*	*Participant 15% paid*	*Total Actual paid*	*Budget*
Previous YTD	9,812.40	1,731.60	11,544.00	11,544.00
Q17 (current)	430,027.68	75,887.24	505,914.92	505,914.92
Year-to-date	439,840.08	77,618.84	517,458.92	517,458.92

f. Network Management, Maintenance, and Operation Costs (not captured elsewhere)

Time frame	*USAC 85% paid*	*Participant 15% paid*	*Total Actual paid*	*Budget*
Previous YTD	0.00	0.00	0.00	0.00
Q17 (current)	82,079.14	14,484.55	96,563.69	96,563.69
Year-to-date	82,079.14	14,484.55	96,563.69	96,563.69

The vast majority of costs for network management, maintenance, and operations are borne by participating organizations and are not reflected here.

g. Other Non-Recurring and Recurring Costs – N/A

6. Describe how costs have been apportioned and the sources of the funds to pay them:

a. Explain how costs are identified, allocated among, and apportioned to both eligible and ineligible network participants.

This is detailed in the Sustainability Plan. In general, weighted averages are used to postalize fees for 5 MB, 10 MB, 20 MB, 50 MB, and 100 MB sites. Fees for sites connecting at higher bandwidths are based upon actual costs.

b. Describe the source of funds from:
i. Eligible Pilot Program network participants

All but $200,000 (donated by a foundation; see c.i, below) of the required 15% match of $1,596,346, has been obtained or committed by network participants.

$410,000	*Utah Telehealth Network, through its University of Utah state line item*
$582,000	*Intermountain Healthcare*
$404,346	*Individual participating sites*
$1,396,346	*Subtotal*

While it is understood that funds for project administration are outside of the scope of the RHCPP, it should be noted that project administration time and costs have been covered by the University of Utah, the Utah Telehealth Network through membership dues, and Intermountain Healthcare.

ii. Ineligible Pilot Program network participants

There is the possibility of a few ineligible sites participating in the network. It is expected that they will be self-funded and pay their fair share, which has yet to be determined.

c. Show contributions from all other sources (e.g., local, state, and federal sources, and other grants).

i. Identify source of financial support and anticipated revenues that is paying for costs not covered by the fund and by Pilot Program participants.

The George S. and Dolores Dore Eccles Foundation has contributed $200,000 to be used as match for this project.

ii. Identify the respective amounts and remaining time for such assistance.

The Eccles Foundation funds have been donated to the Utah Telehealth Network and are in a restricted fund until needed.

d. Explain how the selected participant's minimum 15 percent contribution is helping to achieve both the selected participant's identified goals and objectives and the overarching goals of the Pilot Program.

The matching funds and contributions, combined with the FCC's 85 percent, are making it possible to create high speed broadband health care network in Utah. This will support the expansion of telehealth and telemedicine, the adoption of health information technology, and the implementation of health information exchange for rural healthcare facilities located throughout Utah.

7. Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.

Not applicable at this time.

8. Provide on update on the project management plan, detailing:

a. The project's current leadership and management structure and any changes to the management structure since the last data report;

See the answer to 1d above. The project's leadership and management structure has not changed and remains consistent with our initial proposal to the FCC.

b. In the first quarterly report, the selected applicant should provide a detailed project plan and schedule. The schedule must provide a list of key project deliverables or tasks, and their anticipated completion dates. Among the deliverables, participants must indicate the dates when each health care provider site is expected to be connected to the network and operational. Subsequent quarterly reports should identify which project deliverables, scheduled for the previous quarter, were met, and which were not met. In the event a project deliverable is not achieved, or the work and deliverables deviate from the work plan, the selected participant must provide an explanation.

The project completed two RFPs.

RFP01: Three vendors were selected and the majority of sites have been connected. With the exception of getting caught up with invoicing, the project is in maintenance mode.

RFP02: Four vendors were selected and the majority of sites have been connected. Additional 466A packets were submitted in Q17 to ensure that maximum use of RHCPP funds are committed to the expansion of the Utah Telehealth Network.

9. Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.

The Utah Telehealth Network (UTN), prior to RHCPP implementation, was self-sustaining. It accomplishes this by diversifying its funding sources, which currently

include network member fees, user fees and contracts (including a contract with Intermountain Healthcare), a State of Utah line item, and support from the University of Utah.

In addition, UTN and our project partners are active participants in the regular USAC RHCD program. In transitioning from the RHCPP to self-sustainability, it is our intent to take advantage of the regular USAC RHCD program for any and all eligible HCPs and telecommunications services. It is unclear as to how well the RHCPP-funded network will fit into the existing RHCD program, so we look forward to the FCC order that will outline their new rural health care programs and guidelines.

Maintaining sustainability is imperative as we move forward with RHCPP implementation. Due to unknown future ongoing support (at this time) for RHCPP projects by the FCC and USAC, development of backbone has been minimized. This will ensure sustainability, but may prevent development of some portions of the backbone..

A revised sustainability plan was uploaded to the RHCPP SharePoint site on December 9, 2010. It is also attached to this report.

10. Provide detail on how the supported network has advanced telemedicine benefits:

a. Explain how the supported network has achieved the goals and objectives outlined in selected participant's Pilot Program application;

The four goals outlined in our application included: 1) Foster collaboration between health networks within the state and region; 2) Expand telehealth and telemedicine services; 3) Facilitate the adoption of Health Information Technology; and 4)Increase educational opportunities for health care providers in their communities.

The project itself has fostered collaboration. Since the development of the application, the state's two largest and competing health systems have worked together to build a shared (but secure) physical network to support access to health care services and resources for rural health care facilities, their patients and health care providers. The project has strengthened these collaborations.

Expanded use of telehealth and telemedicine has begun. See b below.

In terms of facilitating the adoption of health information technology, the Utah Telehealth Network has worked closely with other state organizations to ensure that the infrastructure deployed through this project will support their efforts to assist with both the deployment of electronic health records and the exchange of patient information. VPNs have been created between the Utah Telehealth Network and Utah Health Information Network, the Utah organization responsible for clinical health information exchange.

Educational opportunities already exist, but are expanding to new sites as they are connected into this network.

b. Explain how the supported network has brought the benefits of innovative telehealth and, in particular, telemedicine services to those areas of the country where the need for those benefits is most acute;

The initial benefit has been an improvement in the speed of teleradiology transmission, especially for health care facilities too small to have in-house access to radiologists. One critical access hospital reported that large radiology studies that used to take an hour now take two minutes. Since teleradiology is often used, in part, to support rural hospital emergency care, this has made a significant impact on patient care

In addition, University of Utah Health Care and Intermountain Healthcare are each initiating new programs in telehealth (Project ECHO for Hepititus C (UU) and Telepsychiatry (Intermountain) and strategizing on additional applications. Recent grants applications have been submitted to expand telemedicine and telehealth utilization in support of pediatric surgery, eating disorders, adolescent mental health, rheumatoid arthritis, clinical pharmacy, nurse case management, and others.
Many participating rural hospitals and Federally Qualified Health Centers (FQHCs, also known as Community Health Centers) had such slow connections prior to being connected via the RHCPP that they had abandoned most use of videoconferencing due to poor quality. Now that they are connected via RHCPP, most sites are upgrading their videoconferencing capability. Most participating rural hospitals are also part of a USDA Distance Learning & Telemedicine grant and are upgrading their videoconferencing equipment to high definition. Many of the FQHCs are adopting desktop videoconferencing provided by UTN and are also joining a remote monitoring project to better manage patients with diabetes and/or hypertension.

c. Explain how the supported network has allowed patients access to critically needed medical specialists in a variety of practices without leaving their homes or communities;

At this point, the benefit has primarily been to connect the patients' primary care providers to their specialists through the University of Utah's Project ECHO program and Intermountain's Help2 application for sharing patient records. In addition. one of our recently connected sites, Moab Regional Hospital, used their connection to partner with the Grand Junction VA and the Utah Health Information Network's cHIE (Clinical Health Information Exchange) to share patient medical records (with the patients' permission, of course!). Other sites will be following suit.

d. Explain how the supported network has allowed health care providers access to government research institutions, and/or academic, public, and private health care institutions that are repositories of medical expertise and information;

See 10b. As health care facilities that serve rural and underserved populations get connected, the University of Utah Health Care and Intermountain Healthcare are both working hard to develop strategies to reach out to these facilities via telehealth. The University of Utah Health Sciences Center is the only academic medical center for a large multistate region, while Intermountain Healthcare is nationally recognized for their leadership in quality healthcare initiatives. Both organizations partnered to implement this project. Each is providing distant continuing education and are rapidly developing clinical telemedicine applications as well.

e. Explain how the supported network has allowed health care professional to monitor critically ill patients at multiple locations around the clock, provide access to advanced applications in continuing education and research, and/or enhanced the health care community's ability to provide a rapid and coordinated response in the event of a national crisis.

Both of the lead organizations for this project (the University of Utah and Intermountain Healthcare) as well as the Utah Telehealth Network Advisory Board, have have embarked on strategic planning efforts to address these questions in light of this new and growing network capacity. The Utah Telehealth Network has a pilot program and research project through the HRSA Office for the Advancement of Telehealth to remotely manage patients with diabetes and hypertension through remote monitoring technology. The rural FQHCs are joining this project now that they have a high speed and secure connection into UTN.

11. Provide detail on how the supported network has complied with HHS health IT initiatives:

a. Explain how the supported network has used health IT systems and products that meet interoperability standards recognized by the HHS Secretary;

Selection of HIT systems and products is a complex challenge for health care providers. It is beyond the scope of this network to implement EMRs and other HIT tools. However, we take an active role within the state of Utah to see that these needs are addressed.

To assist Utah health care facilities with these challenges, Utah enjoys a collaborative environment when it comes to health care policy, initiatives, and resources. Intermountain Healthcare CIO, Mark Probst, serves at the national level on the HHS Health Information Technology Policy Committee and chairs the Certification / Adoption Workgroup, which is addressing interoperability standards from a national perspective. He reports back to, and coordinates with, Utah's HIT Governance Committee (funded by HHS), and its HIT Task Force. HHS also funds a Regional Extension Center (REC) to assist physicians and health care facilities with the adoption of HIT and meaningful use of those tools. Participating RHCPP sites have access to, and are encouraged to use, these resources.

b. Explain how the supported network has used health IT products certified by the Certification Commission for Healthcare Information Technology;

Intermountain Healthcare sites which have been connected to date use GE Healthcare, a CCHIT certified product. In addition, all project sites will participate in Utah's clinical Health Information Exchange project, the vendor of which is Axolotl, also CCHIT certified.

c. Explain how the supported network has supported the Nationwide Health Information Network (NHIN) architecture by coordinating activities with organizations performing NHIN trial implementations;

There are no Utah health care organizations participating as named trial participants

d. Explain how the supported network has used resources available at HHS's Agency for Healthcare Research and Quality (AHRQ) National Resource Center for Health Information Technology;

The AHRQ website has been viewed for relevant technical assessments when researching potential new telemedicine services.

e. Explain how the selected participant has educated themselves concerning the Pandemic and All Hazards Preparedness Act and coordinated with the HHS Assistant Secretary for

Public Response as a resource for telehealth inventory and for the implementation of other preparedness and response initiatives; and

The Utah Telehealth Network works closely with Utah's Bureau of EMS and Preparedness, the Utah Department of Health, and Utah's local health departments.

f. Explain how the supported network has used resources available through HHS's Centers for Disease Control and Prevention (CDC) Public Health Information Network (PHIN) to facilitate interoperability with public health and emergency organizations.

We have not utilized PHIN in a formal way but intend to explore its resources.

12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies (e.g., pandemics, bioterrorism). In such instances, where feasible, explain how selected participants provided access to their supported networks to HHS, including CDC, and other public health officials.

The Utah Telehealth Network bridges videoconferences for HHS and CDC funded programs in Utah and would welcome the opportunity to connect sites at the local, regional, or national level in the event of a public health emergency.

Immediately following are these attachments:

- *Health Care Facility Site List, see #2 above, updated 7-2012.*
- *RFP01 Qwest diagram, see #4 above*
- *RFP01 Great Basin Electronics diagram, see #4 above*
- *RFP01 Western FiberNet diagram, see #4 above*
- *RFP02 UTN general network diagram, see #4 above*
- *RFP02 Qwest diagram, see #4 above*
- *RFP02 Western FiberNet diagram, see #4 above*
- *RFP02 Frontier diagram, see #4 above*
- *RFP04 Conterra diagram(no sites connected yet), see #4 above*
- *RFP01 project plan, see #8 above*
- *RFP02 project plan, see #8 above*
- *Utah Telehealth Network – Sustainability Plan, updated and uploaded to RHCPP SharePoint on 12-9-2010, see #9 above*

Status as of 7/30/2012	RFP01 Health Care Facilities	Address Line	County	City	State	ZIP	Phone #
completed	American Fork Hospital	170 North 1100 East	Utah	American Fork	UT	84003	801-357-3971
completed	Canyon View Family Practice	15 East 400 North	Iron	Parowan	UT	84761	435-477-3317
completed	Cedar City Instacare	962 Sage Drive	Iron	Cedar	UT	84720	435-865-3440
completed	Delta Community Medical Center	128 S. White Sage Ave.	Millard	Delta	UT	84624	435-864-5591
completed	Dixie Regional Medical Center	544 South 400 East	Washington	St. George	UT	84060	435-688-4000
completed	Fillmore Community Medical Center	674 South Highway 99	Millard	Filmore	UT	84631	435-743-5591
completed	Heber Valley Medical Center	1485 South Highway 40	Wasatch	Heber City	UT	84082	435-654-2500
completed	Hurricane Valley Clinic	75 North 2260 West	Washington	Hurricane	UT	84737	435-635-6400
completed	Logan Instacare	235 East 400 North	Cache	Logan	UT	84321	435-713-2710
completed	Logan Regional Hospital	1400 North 500 East	Cache	Logan	UT	84341	435-716-1000
completed	Manti Family Clinic	159 N. Main	Sanpete	Manti	UT	84642	435-835-3344
completed	McKay-Dee Hospital	4401 Harrison Blvd	Weber	Ogden	UT	84403	801-387-2800
completed	Ogden Workmed	1355 West 3400 South	Weber	Ogden	UT	84401	801-387-6150
completed	Orem Community Hospital	331 North 400 West	Utah	Orem	UT	84057	801-224-4080
completed	Park City Hospital	900 Round Valley Drive	Summit	Park City	UT	84060	435-647-9100
completed	Richfield Family Practice	460 North Main	Sevier	Richfield	UT	84701	435-865-3440
completed	Sevier Valley Medical Center	1000 North Main	Sevier	Richfield	UT	84701-1843	435-893-4100
completed	South Cache Valley Clinic	191 South Highway 165	Cache	Providence	UT	84332	435-752-6105
completed	Southern Utah Behavioral Health	515 S. 300 E. Suite 109	Washington	St. George	UT	84770	435-688-5588
completed	Southern Utah Surgical Associates	166 West 1325 North #350	Iron	Cedar City	UT	84720	435-586-8192
completed	St. George Workmed	385 North 3050 East	Washington	St. George	UT	84790	435-251-2630
completed	Summit Clinic (Smithfield)	502 South Main	Cache	Smithfield	UT	84335	435-563-3222
completed	The Orthopedic Specialty Hospital (TOSH)	5848 South Fashion Blvd	Salt Lake	Murray	UT	84107-6186	801-314-4100
in process	University of Utah Health Sciences Center (listed on both RFP01 and RFP02; serves as health care facility **and** network core)	50 North Medical Drive	Salt Lake	Salt Lake City	UT	84112	801-585-9675
completed	Valley View Medical Center	1303 North Main Street	Iron	Cedar City	UT	84720	435-586-6587

RFP01 Health Care Facilities	RUCA (Pri)	RUCA (Sec)	Census Tract	Public or Non-public	For Profit / Not For Profit	Eligible entity?	Eligible Entity Type
American Fork Hospital	1	1.0	0102.06	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Canyon View Family Practice	10	10.2	1101.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Cedar City Instacare	4	4.0	1107.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Delta Community Medical Center	7	7.0	9741.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Dixie Regional Medical Center	1	1.0	2713.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Fillmore Community Medical Center	10	10.6	9743.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Heber Valley Medical Center	7	7.0	9924.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Hurricane Valley Clinic	7	7.1	2709.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Logan Instacare	1	1.0	0008.00	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Logan Regional Hospital	1	1.0	0006.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Manti Family Clinic	7	7.0	9725.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
McKay-Dee Hospital	1	1.0	2020.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Ogden Workmed	1	1.0	2009.00	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Orem Community Hospital	1	1.0	0008.02	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Park City Hospital	7	7.3	9944.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Richfield Family Practice	7	7.0	9754.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Sevier Valley Medical Center	7	7.0	9754.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
South Cache Valley Clinic	1	1.0	0012.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Southern Utah Behavioral Health	1	1.0	2713.00	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Southern Utah Surgical Associates	4	4.0	1105.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
St. George Workmed	1	1.0	2711.00	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Summit Clinic (Smithfield)	1	1.0	0002.02	Non-public	Not-for-profit	Yes	6: Rural health clinic
The Orthopedic Specialty Hospital (TOSH)	1	1.0	1123.01	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
University of Utah Health Sciences Center (listed on both RFP01 and RFP02; serves as health care facility **and** network core)	1	1.0	1014.00	Public	Not-for-profit	Yes	1: Post-secondary educational institution offering health care instruction, teaching hospital or medical school
Valley View Medical Center	4	4.0	1105.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital

Status as of 7/30/2012	17264 RFP02 Health care facilities	Address Line	County	City	State	ZIP	Phone #
complete	Altamont Medical Center	15548 West 4000 North	Duchesne	Altamont	UT	84001	435-454-3173
complete	Basin Clinic	379 North 500 West	Uintah	Vernal	UT	84078	435-789-0870
complete	Bear Lake Community Health Center	325 West Logan Highway	Rich	Garden City	UT	84028	435-946-3660
complete	Beaver Valley Hospital	1109 North 100 West	Beaver	Beaver	UT	84713	435-438-7100
complete	Blanding Clinic	804 North 400 West	San Juan	Blanding	UT	84511	435-678-3434
complete	Blanding Family Practice	799 South 200 West	San Juan	Blanding	UT	84511	435-678-3601
complete	Blue Mountain Hospital	850 South 100 West	San Juan	Blanding	UT	84511	435-000-0000
complete	Carbon Medical Services Association	305 Center Street	Carbon	East Carbon	UT	84520	435-888-4411
complete	Central Utah Public Health Department	70 Westview Drive	Sevier	Richfield	UT	84701	435-896-5451
complete	Central Valley Medical Center	48 West 1500 North	Juab	Nephi	UT	84648	435-623-3000
complete	Duchesne Valley Medical Clinic	50 East 200 South	Duchesne	Duchesne	UT	84021	435-738-2426
complete	Enterprise Valley Medical Clinic	223 South 200 East	Washington	Enterprise	UT	84725	435-878-2281
complete	Fountain Green Clinic	275 West 300 South	Sanpete	Fountain Green	UT	84632	435-445-3301
complete	Fourth Street Clinic	404 South 400 West	Salt Lake	Salt Lake City	UT	84101	801-364-0058
complete	Green River Medical Center	305 West Main	Emery	Green River	UT	84525	435-564-3434
complete	Gunnison Valley Hospital	64 East 100 North	Sanpete	Gunnison	UT	84634	435-528-2146
complete	Helper Clinic	125 South Main	Carbon	Helper	UT	84526	435-472-7000
complete	Kane County Hospital	355 North Main	Kane	Kanab	UT	84741	435-644-5811
complete	Milford Memorial Hospital	451 North Main Street	Beaver	Milford	UT	84751	435-387-2411
complete	Moab Regional Hospital	450 West Williams Way	Grand	Moab	UT	84532	435-259-7191
in process	Monument Valley Health Center	30 West Medical Drive	San Juan	Monument Valley	UT	84536	435-727-3000
in process	Navajo Mountain Community Health Clinic	2 Rainbow Road	San Juan	Navajo Mountain	UT	86044	928-672-2498
complete	Salt Lake Valley Health Department	788 East Woodoak Lane	Salt Lake	Murray	UT	84107	801-313-6600
complete	Salt Lake Valley Health Department	2001 South State Street, S-2400	Salt Lake	Salt Lake City	UT	84190	801-468-2800
complete	San Juan Hospital	380 West 100 North	San Juan	Monticello	UT	84535	435-587-2116
complete	Southeastern Utah Health Department	28 South 100 East	Carbon	Price	UT	84501	435-637-3671
complete	Southeastern Utah Health Department	193 East Center Street	San Juan	Blanding	UT	84511	435-678-2723
complete	Southeastern Utah Health Department	471 South Main Street, Suite 4	Grand	Moab	UT	84532	435-259-5602
complete	Southwest Utah Community Health Center	168 North 100 East, Suite 101	Washington	St.George	UT	84770	435-986-2565
complete	Southwest Utah Public Health Department	620 South 400 East, Suite 400	Washington	St.George	UT	84770	435-673-3528
complete	Southwest Utah Public Health Department	260 East DL Sargent Drive	Iron	Cedar City	UT	84720	435-586-2437
complete	Southwest Utah Public Health Department	75 West 1175 North	Beaver	Beaver	UT	84713	435-438-2482

17264 RFP02 Health care facilities	RUCA (Pri)	RUCA (Sec)	Census Tract	Public or Non-public	For Profit / Not For Profit	Eligible entity?	Eligible Entity Type
Altamont Medical Center	10	10.3	9404.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Basin Clinic	4	4.0	9883.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Bear Lake Community Health Center	10	10.0	9501.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Beaver Valley Hospital	10	10.0	1001.00	Public	Not-for-profit	Yes	5: Not-for-profit hospital
Blanding Clinic	7	7.0	9782.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Blanding Family Practice	7	7.0	9782.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Blue Mountain Hospital	7	7.0	9782.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Carbon Medical Services Association	5	5.0	0004.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Central Utah Public Health Department	7	7.0	9753.00	Public	Not-for-profit	Yes	3: Local health department or agency
Central Valley Medical Center	7	7.3	0101.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Duchesne Valley Medical Clinic	10	10.0	9403.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Enterprise Valley Medical Clinic	2	2.0	2702.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Fountain Green Clinic	10	10.0	9722.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Fourth Street Clinic	1	1.0	1024.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Green River Medical Center	10	10.6	9761.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Gunnison Valley Hospital	7	7.0	9723.00	Public	Not-for-profit	Yes	5: Not-for-profit hospital
Helper Clinic	4	4.0	0005.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Kane County Hospital	7	7.0	1302.00	Public	Not-for-profit	Yes	5: Not-for-profit hospital
Milford Memorial Hospital	10	10.0	1002.00	Public	Not-for-profit	Yes	5: Not-for-profit hospital
Moab Regional Hospital	7	7.0	0002.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Monument Valley Health Center	10	10.0	9421.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Navajo Mountain Community Health Clinic	10 (est)	10.0 (est)	9421.00 (est)	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Salt Lake Valley Health Department	1	1.0	1120.00	Public	Not-for-profit	Yes	3: Local health department or agency
Salt Lake Valley Health Department	1	1.0	1032.00	Public	Not-for-profit	Yes	3: Local health department or agency
San Juan Hospital	10	10.6	9781.00	Public	Not-for-profit	Yes	5: Not-for-profit hospital
Southeastern Utah Health Department	4	4.0	0003.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southeastern Utah Health Department	7	7.0	9782.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southeastern Utah Health Department	7	7.0	0002.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southwest Utah Community Health Center	1	1.0	2703.00	Public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Southwest Utah Public Health Department	1	1.0	2713.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southwest Utah Public Health Department	4	4.0	1105.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southwest Utah Public Health Department	10	10.0	1001.00	Public	Not-for-profit	Yes	3: Local health department or agency

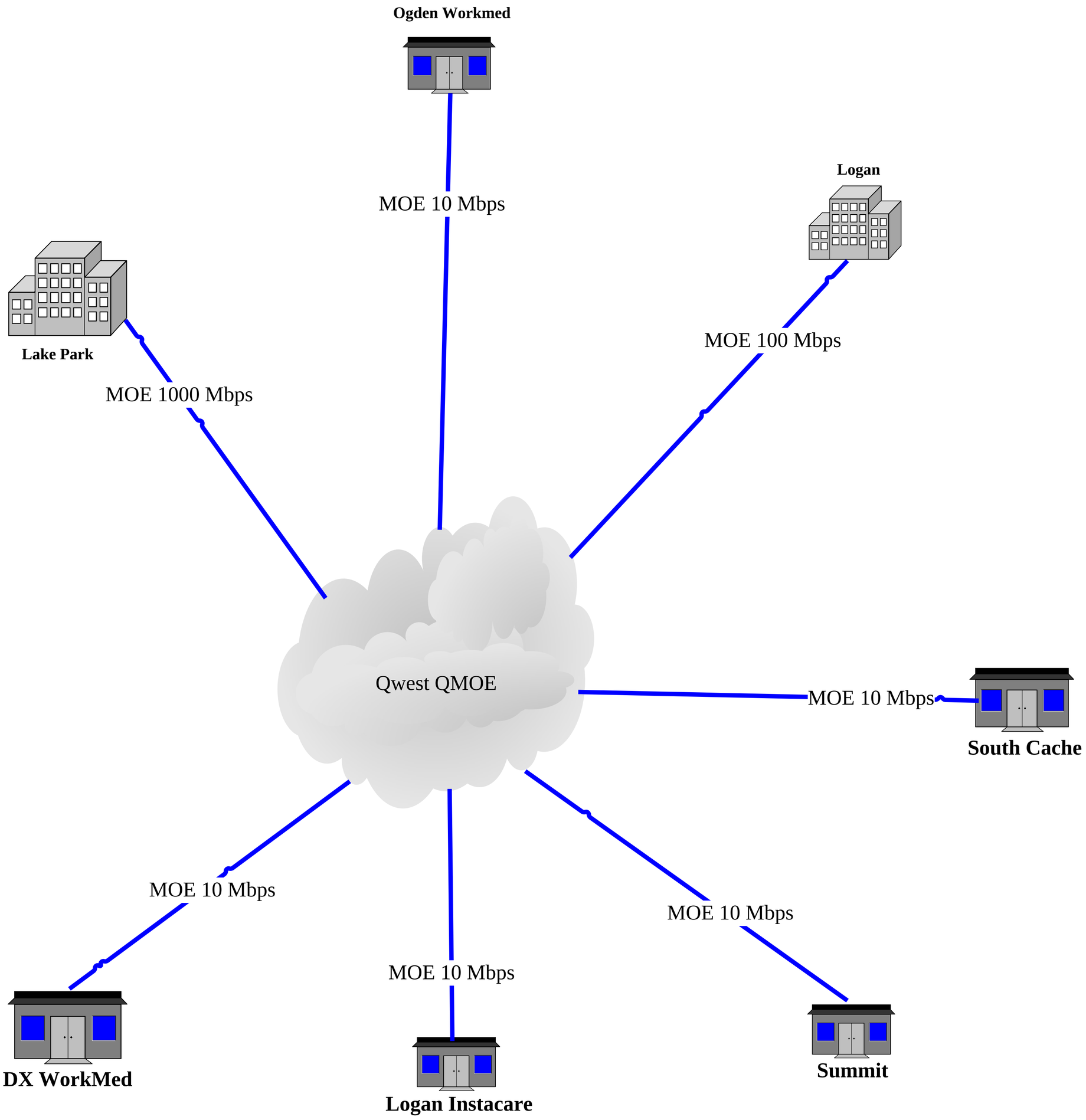
Status as of 7/30/2012	17264 RFP02 Health care facilities	Address Line	County	City	State	ZIP	Phone #
complete	Southwest Utah Public Health Department	609 North Main Street	Garfield	Panguitch	UT	84759	435-676-8800
complete	Southwest Utah Public Health Department	245 South 200 East	Kane	Kanab	UT	84741	435-644-2537
complete	Summit County Public Health Department	650 Round Valley	Summit	Park City	UT	84060	435-333-1500
complete	Tabiona Medical Clinic	Main Street	Duchesne	Tabiona	UT	84072	435-848-5509
complete	TriCounty Health Department	281 East 200 North	Duchesne	Roosevelt	UT	84066	435-722-6300
complete	TriCounty Health Department	133 South 500 East	Uintah	Vernal	UT	84078	435-781-5475
complete	Uintah Basin Medical Center	250 West 300 North, 75-2	Duchesne	Roosevelt	UT	84066	435-722-4691
complete	University of Utah Health Sciences Center (listed on both RFP01 and RFP02; serves as health care facility **and** network core)	50 North Medical Drive	Salt Lake	Salt Lake City	UT	84112	801-585-9675
complete	Wayne Community Health Center	128 South 300 West	Wayne	Bicknell	UT	84715	435-425-3744

17264 RFP02 Health care facilities	RUCA (Pri)	RUCA (Sec)	Census Tract	Public or Non-public	For Profit / Not For Profit	Eligible entity?	Eligible Entity Type
Southwest Utah Public Health Department	10	10.0	0003.00	Public	Not-for-profit	Yes	3: Local health department or agency
Southwest Utah Public Health Department	7	7.0	1302.00	Public	Not-for-profit	Yes	3: Local health department or agency
Summit County Public Health Department	2	2.0	9943.01	Public	Not-for-profit	Yes	3: Local health department or agency
Tabiona Medical Clinic	10	10.0	9403.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
TriCounty Health Department	7	7.0	9405.00	Public	Not-for-profit	Yes	3: Local health department or agency
TriCounty Health Department	4	4.0	9884.00	Public	Not-for-profit	Yes	3: Local health department or agency
Uintah Basin Medical Center	7	7.0	9405.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
University of Utah Health Sciences Center (listed on both RFP01 and RFP02; serves as health care facility **and** network core)	1	1.0	1014.00	Public	Not-for-profit	Yes	1: Post-secondary educational institution offering health care instruction, teaching hospital or medical school
Wayne Community Health Center	10	10.0	9791.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants

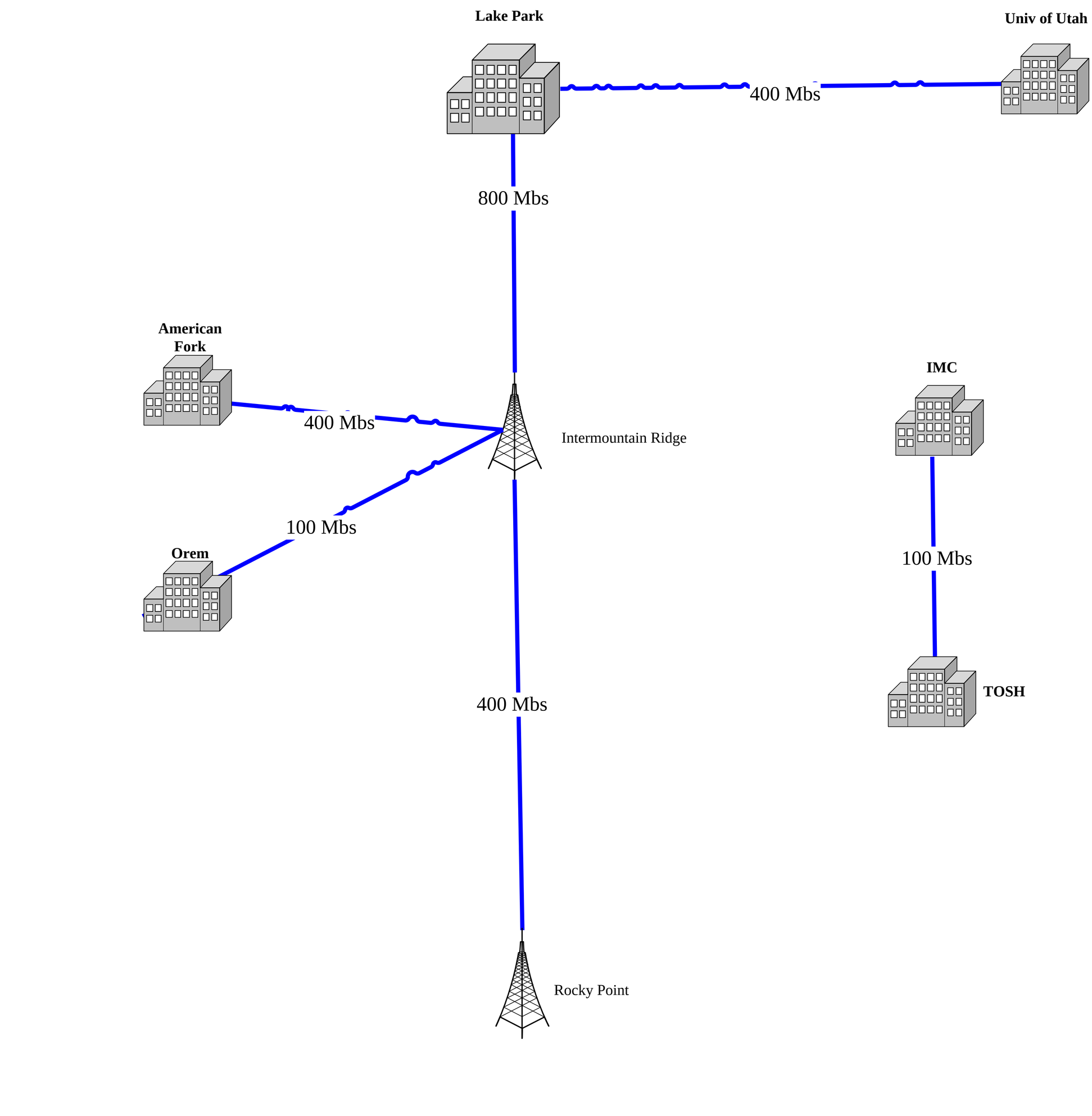
17264 RFP02 **Health care facilities** - 466A packets submiited; awaiting approval	**Address Line**	**County**	**City**	**State**	**ZIP**	**Phone #**	**RUCA (Pri)**
Bonneville Dialysis Center	5575 South 500 East	Weber	Ogden	UT	84405	801-479-0351	1
Cache Valley Community Health Center	1515 North 400 East, Suite 204	Cache	North Logan	UT	84341	435-755-6061	1
Castleview Dialysis Center	230 North Hospital Drive	Carbon	Price	UT	84501	435-637-8696	4
Dixie Dialysis Center	720 South River Road, Suite D-110	Washington	St.George	UT	84790	435-656-0857	1
Provo Dialysis Center	1675 North Freedom Blvd	Utah	Provo	UT	84604	801-373-0167	1
South Valley Dialysis Center	8750 South Sandy Parkway	Salt Lake	Sandy	UT	84070	801-233-8745	1
Summit County Public Health Department	85 North 50 East	Summit	Coalville	UT	84017	435-336-3222	10
Summit County Public Health Department	110 North Main Street	Summit	Kamas	UT	84036	435-783-4351	10
Valley Medical Clinic	425 East State Street	Kane	Orderville	UT	84758	435-648-2775	10
Valley View Medical Center	1303 North Main Street	Iron	Cedar City	UT	84720	435-586-6587	4

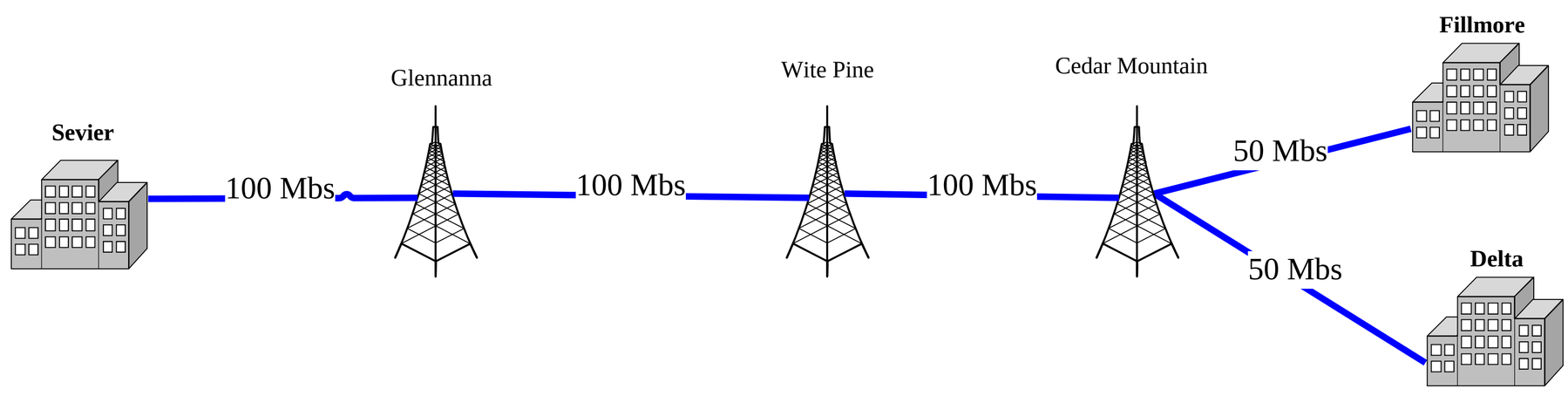
17264 RFP02 Health care facilities - 466A packets submiited; awaiting approval	RUCA (Sec)	Census Tract	Public or Non-public	For Profit / Not For Profit	Eligible entity?	Eligible Entity Type
Bonneville Dialysis Center	1.0	2111.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital
Cache Valley Community Health Center	1.0	0006.00	Non-public	Not-for-profit	Yes	2: Community health center or health center providing health to migrants
Castleview Dialysis Center	4.0	0005.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Dixie Dialysis Center	1.0	2718.00	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Provo Dialysis Center	1.0	0014.02	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
South Valley Dialysis Center	1.0	1124.01	Non-public	Not-for-profit	Yes	10: Urban Health Clinic
Summit County Public Health Department	10.6	9941.00	Public	Not-for-profit	Yes	3: Local health department or agency
Summit County Public Health Department	10.6	9942.00	Public	Not-for-profit	Yes	3: Local health department or agency
Valley Medical Clinic	10.6	1301.00	Non-public	Not-for-profit	Yes	6: Rural health clinic
Valley View Medical Center	4.0	1105.00	Non-public	Not-for-profit	Yes	5: Not-for-profit hospital

USAC QWEST Circuits

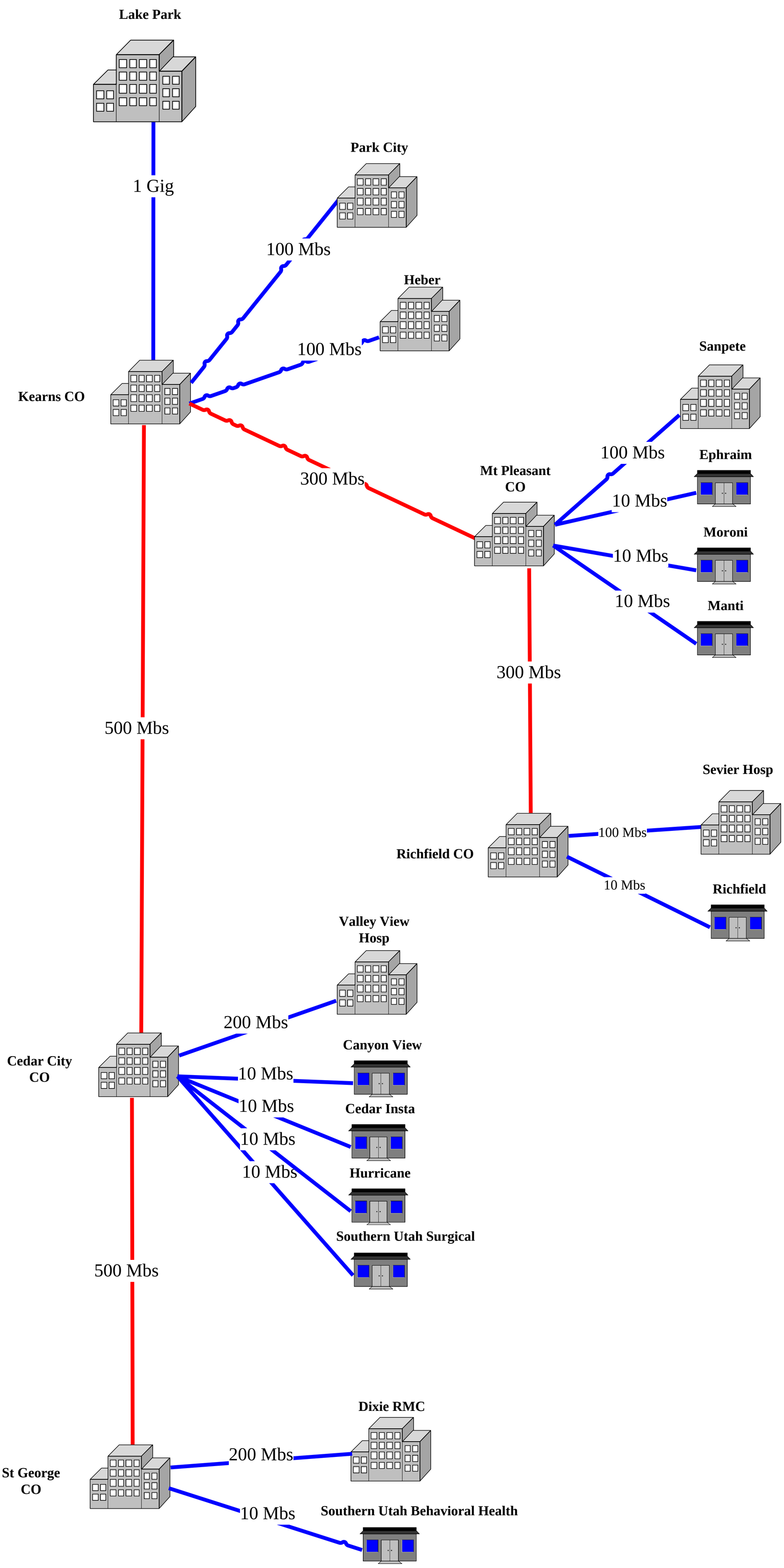


USAC Great Basin Circuits



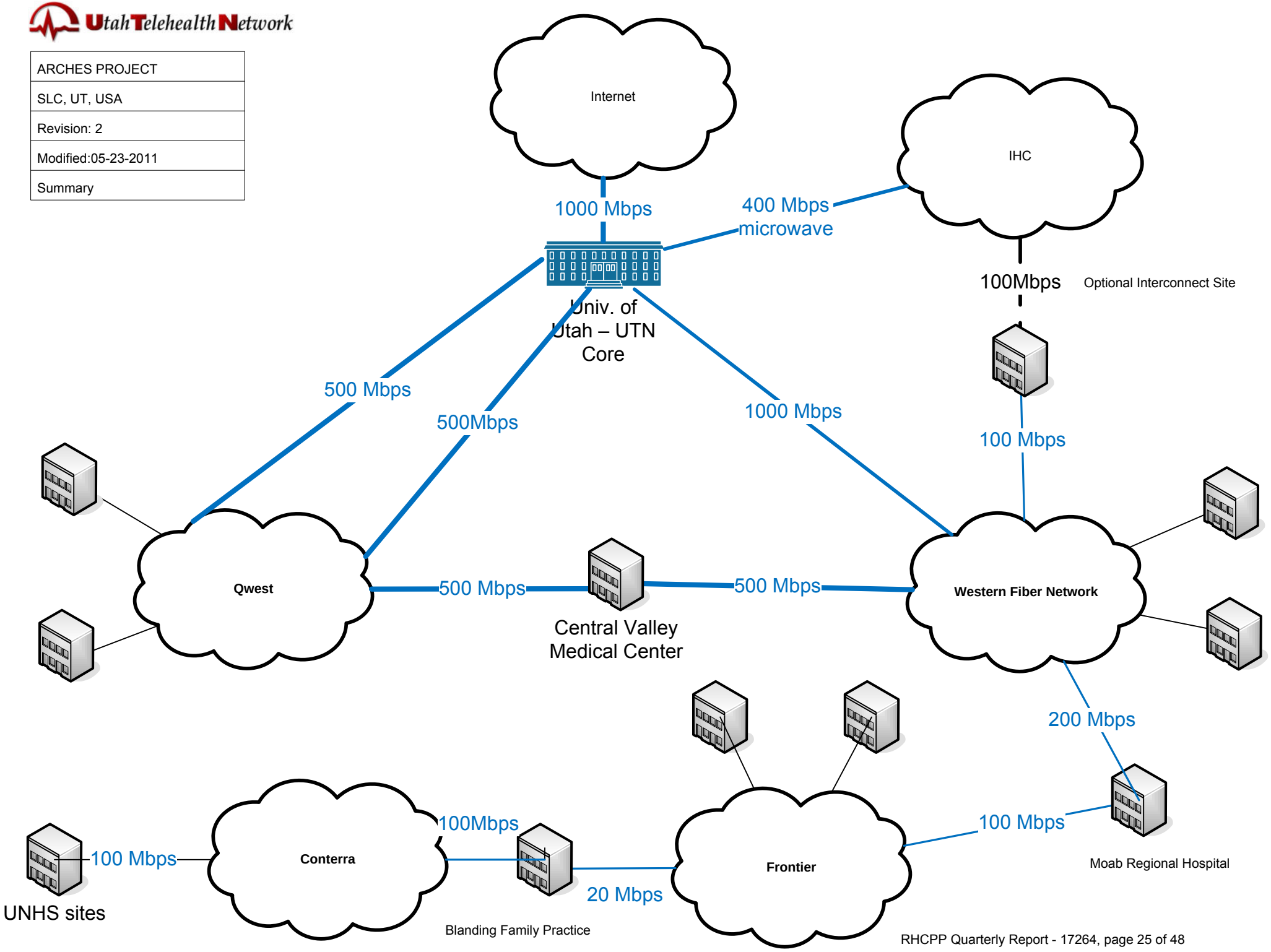


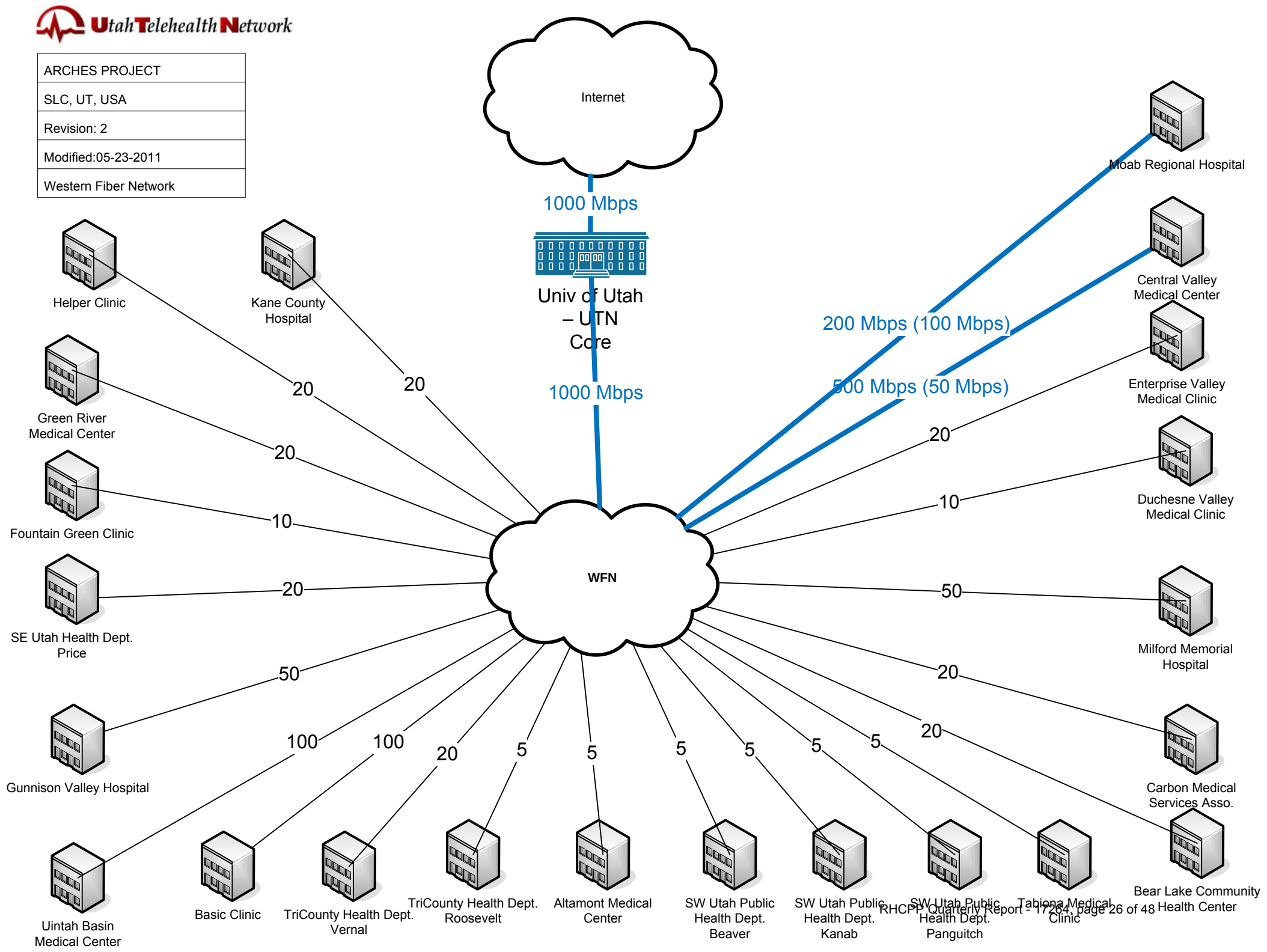
USAC Western Fibernet Circuits



Utah Telehealth Network

ARCHES PROJECT
SLC, UT, USA
Revision: 2
Modified:05-23-2011
Summary




Utah Telehealth Network
ARCHES PROJECT
SLC, UT, USA
Revision: 2
Modified:05-23-2011
Western Fiber Network
Internet
1000 Mbps
Univ of Utah – UTN Core
1000 Mbps
WFN
200 Mbps (100 Mbps)
500 Mbps (50 Mbps)
Helper Clinic
Kane County Hospital
Green River Medical Center
Fountain Green Clinic
SE Utah Health Dept. Price
Gunnison Valley Hospital
Uintah Basin Medical Center
Basic Clinic
TriCounty Health Dept. Vernal
TriCounty Health Dept. Roosevelt
Altamont Medical Center
SW Utah Public Health Dept. Beaver
SW Utah Public Health Dept. Kanab
SW Utah Public Health Dept. Panguitch
Tabiona Medical Clinic
Bear Lake Community Health Center
Carbon Medical Services Asso.
Milford Memorial Hospital
Duchesne Valley Medical Clinic
Enterprise Valley Medical Clinic
Central Valley Medical Center
Moab Regional Hospital
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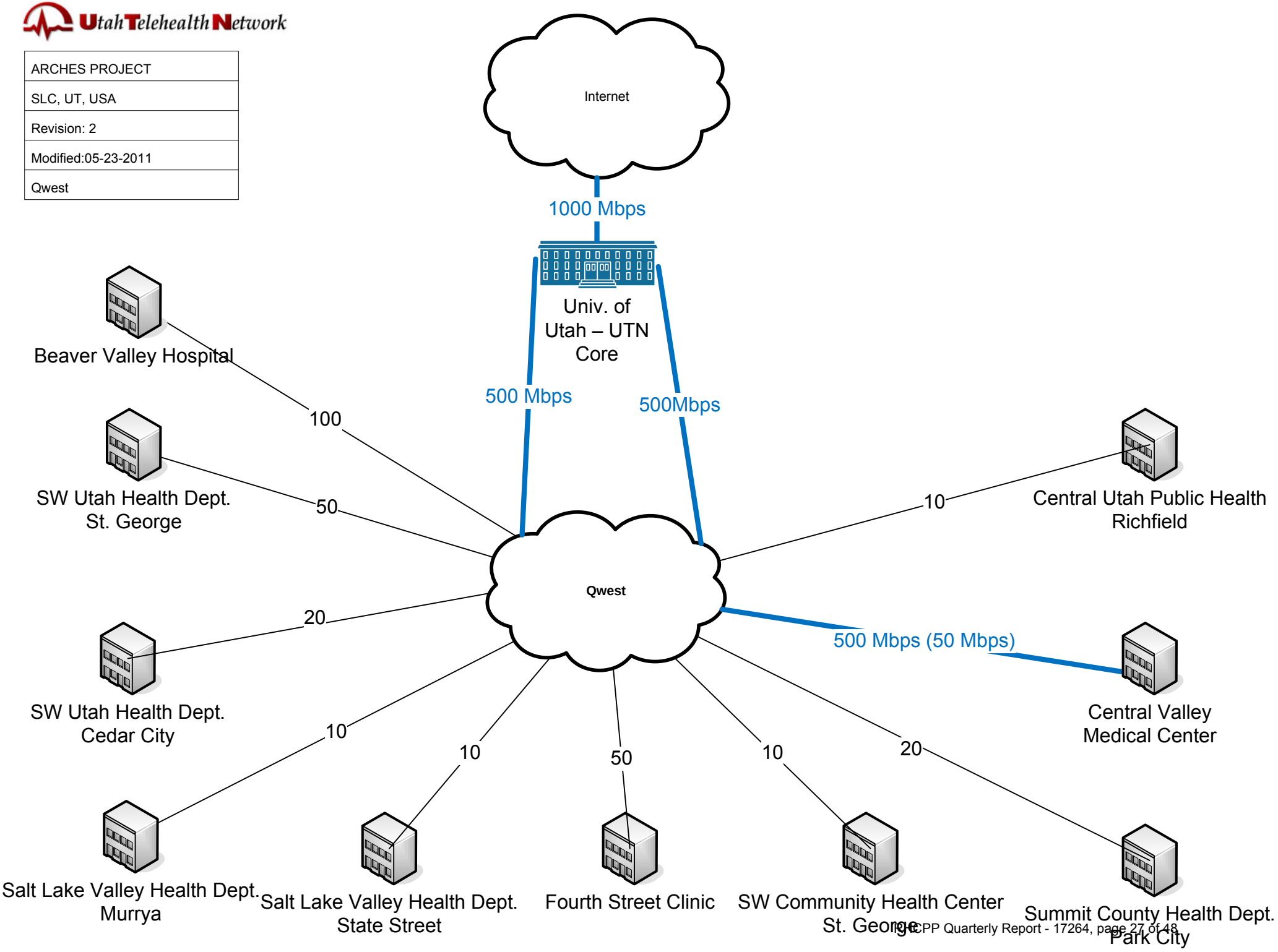
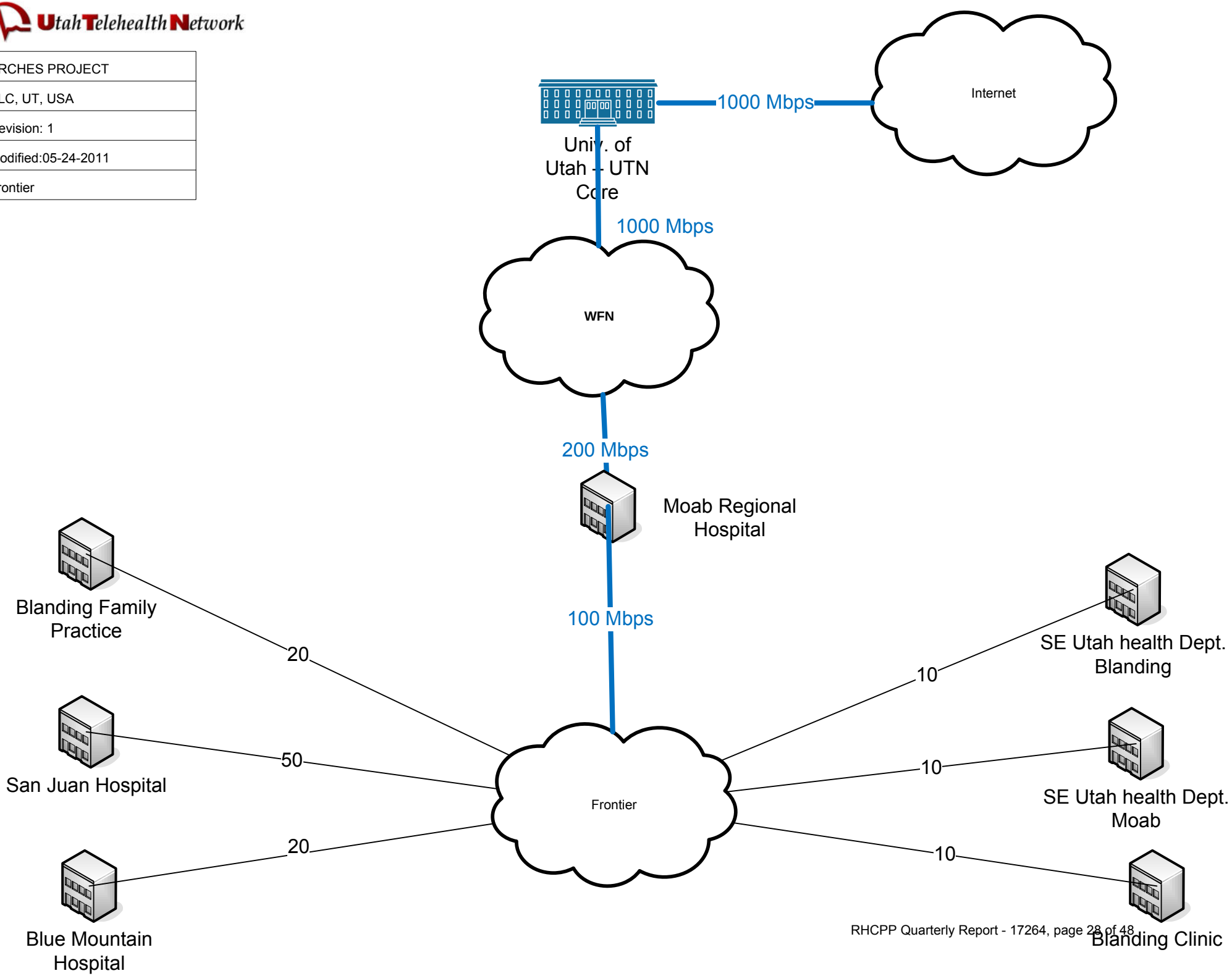
Utah Telehealth Network

ARCHES PROJECT
SLC, UT, USA
Revision: 2
Modified:05-23-2011
Qwest



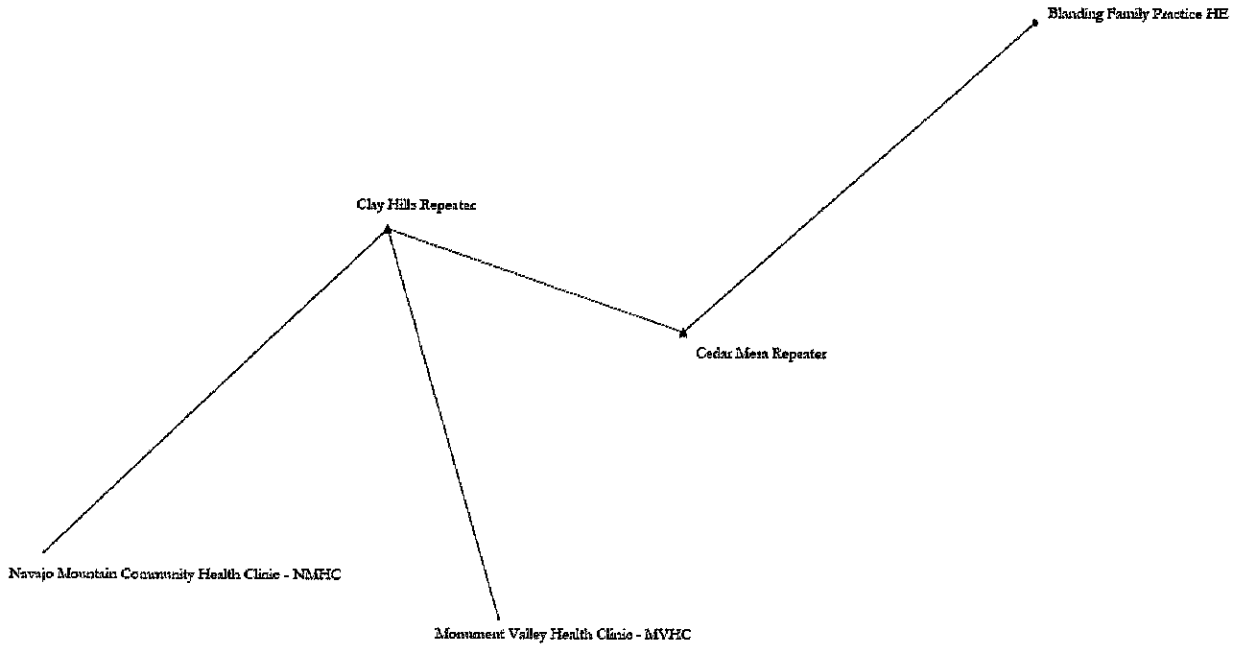
Utah Telehealth Network

ARCHES PROJECT
SLC, UT, USA
Revision: 1
Modified:05-24-2011
Frontier



NETWORK DESIGN

Network Design subject to change upon final engineering.



ID		Task Name	Duration	Start	Finish	Predecessors
0		**Intermountain Healthcare FCC Pilot Project (April 2011 Update)**	**1007 days**	**Wed 1/2/08**	**Fri 12/23/11**	
1		**Infrastructure Deployment Details**	**1007 days**	**Wed 1/2/08**	**Fri 12/23/11**	
2	✓	**Scope**	**4 days**	**Wed 1/2/08**	**Mon 1/7/08**	
3	✓	Determine project scope	1 day	Wed 1/2/08	Wed 1/2/08	
4	✓	Secure project sponsorship	1 day	Thu 1/3/08	Thu 1/3/08	3
5	✓	Define preliminary resources	1 day	Fri 1/4/08	Fri 1/4/08	4
6	✓	Secure core resources	1 day	Mon 1/7/08	Mon 1/7/08	5
7	✓	Scope complete	0 days	Mon 1/7/08	Mon 1/7/08	6
8	✓	**Budget Review Process**	**130 days**	**Tue 1/8/08**	**Thu 7/10/08**	**7**
9	✓	Review sites budget plan (Intermountain, RHCPP, other)	45 days	Tue 1/8/08	Tue 3/11/08	
10	✓	Planning & Preparation checkpoint (June 2008)	1 day	Tue 6/10/08	Tue 6/10/08	21
11	✓	Planning & Preparation checkpoint (July 2008)	1 day	Thu 7/10/08	Thu 7/10/08	29
12	✓	**Planning & Preparation Phase 1**	**56 days**	**Tue 2/26/08**	**Tue 5/13/08**	
13	✓	Discuss Radiology/Imagining site priorities with Deanna Welch	1 day	Thu 2/28/08	Thu 2/28/08	
14	✓	Discuss Rural site priorities with Jon Hoopes	1 day	Tue 2/26/08	Tue 2/26/08	
15	✓	Contact Scott Palfreyman to review LOA	1 day	Thu 2/28/08	Thu 2/28/08	
16	✓	Take Deanna & Jon's input to put together site roll out plan	10 days	Mon 3/10/08	Fri 3/21/08	
17	✓	Determine Legal's involvement in the process	5 days	Mon 3/10/08	Fri 3/14/08	
18	✓	Intermountain's Team develops network plan	15 days	Wed 3/12/08	Tue 4/1/08	
19	✓	Complete Intermountain's network design	0 days	Tue 4/1/08	Tue 4/1/08	18
20	✓	Collaboration with UTN and consortium partners	30 days	Wed 4/2/08	Tue 5/13/08	19
21	✓	Finish Consortium network plan	0 days	Tue 5/13/08	Tue 5/13/08	20
22	✓	**Planning & Preparation Phase 2**	**311 days**	**Wed 4/2/08**	**Thu 6/25/09**	
23	✓	Develop RFP and review with appropriate people	60 days	Wed 4/2/08	Wed 6/25/08	18
24	✓	Pre RFP Meeting with Selected Vendors	5 days	Wed 5/14/08	Tue 5/20/08	23
25	✓	Review and fine tune RFP	40 days	Wed 5/21/08	Thu 7/17/08	24
26	✓	Estimate costs of project as part of RFP process	3 days	Wed 5/21/08	Fri 5/23/08	24
27	✓	Complete RFP for Intermountain Healthcare	0 days	Fri 5/23/08	Fri 5/23/08	26
28	✓	Conclude LOA information / format	50 days	Mon 4/28/08	Tue 7/8/08	19
29	✓	Obtain signed LOA documents from all locations	29 days	Tue 7/8/08	Mon 8/18/08	28
30	✓	**Contract Development (between Intermountain and UTN)**	**180 days**	**Tue 8/19/08**	**Wed 5/6/09**	**29**
31	✓	Legal development of Contract	180 days	Tue 8/19/08	Wed 5/6/09	
32	✓	Post RFP on Public Facing Website	0 days	Wed 5/6/09	Wed 5/6/09	31
33	✓	Post RFP on USAC (28 days)	35 days	Thu 5/7/09	Thu 6/25/09	32

Dec 31, '06 S M T W

Project: Intermountain Healthcare FCC
Date: Thu 4/28/11

Task	External Milestone	Manual Summary Rollup	
Split	Inactive Task	Manual Summary	
Milestone	Inactive Milestone	Start-only	
Summary	Inactive Summary	Finish-only	
Project Summary	Manual Task	Progress	
External Tasks	Duration-only	Deadline	

ID		Task Name	Duration	Start	Finish	Predecessors
34	✓	**Planning & Preparation Phase 3**	**194 days**	**Fri 6/26/09**	**Mon 4/5/10**	**22**
35	✓	Complete a signed version of the 465 and mailed to FCC	9 days	Fri 6/26/09	Wed 7/8/09	
36	✓	FCC / USAC evaluation of submitted material	5 days	Thu 7/9/09	Wed 7/15/09	35
37	✓	Obtain FCC / USAC approval for RFP/LOA/465 documents	0 days	Wed 7/15/09	Wed 7/15/09	36
38	✓	Begin Competive Bidding Process	180 days	Thu 7/16/09	Mon 4/5/10	37
39	✓	Complete Competitive Bidding Process	0 days	Mon 4/5/10	Mon 4/5/10	38
40	✓	**Vendor Review & Analysis Phase 1**	**151 days**	**Tue 4/6/10**	**Thu 11/4/10**	**39**
41	✓	Review vendor responses received	20 days	Tue 4/6/10	Mon 5/3/10	
42	✓	Determine short list of selected vendors	5 days	Tue 5/4/10	Mon 5/10/10	41
43	✓	Meet with vendors to conclude arrangements, detail proposed costs	5 days	Tue 5/11/10	Mon 5/17/10	42
44	✓	Conclude selected vendor(s)	1 day	Tue 5/18/10	Tue 5/18/10	43
45	✓	Create 466-A form / Submit to USAC	120 days	Wed 5/19/10	Thu 11/4/10	44
46	✓	Conclude Vendor Review & Analysis Phase 1	0 days	Thu 11/4/10	Thu 11/4/10	45
47	✓	**Vendor Review & Analysis Phase 2**	**47 days**	**Fri 11/5/10**	**Thu 1/13/11**	**46**
48	✓	Budget review based on conclusive cost information	5 days	Fri 11/5/10	Thu 11/11/10	
49	✓	Revise location plan - due to changed finances	1 day	Fri 11/12/10	Fri 11/12/10	48
50	✓	Negotiate Vendor Contract(s)	30 days	Mon 11/15/10	Wed 12/29/10	49
51	✓	Await FCL's	10 days	Thu 12/30/10	Wed 1/12/11	50
52	✓	Conclude Vendor Review & Analysis Phase 2	0 days	Wed 1/12/11	Wed 1/12/11	51
53	✓	Develop 467 Form for USAC	1 day	Thu 1/13/11	Thu 1/13/11	52
54	✓	Submit 467 forms to USAC	1 day	Thu 1/13/11	Thu 1/13/11	52
55		**Begin Implementation Vendor 1 (Qwest)**	**240 days**	**Fri 1/14/11**	**Fri 12/23/11**	**47**
56		Install QMOE at selected Qwest sites	240 days	Fri 1/14/11	Fri 12/23/11	52
57		Conclude Implementation Vendor 1 (Qwest)	0 days	Fri 12/23/11	Fri 12/23/11	56
58		Continue Monthly Recurring Costs (Cover MRC)	240 days	Fri 1/14/11	Fri 12/23/11	52
59		**Begin Implementation Vendor 2 (Great Basin)**	**240 days**	**Thu 1/13/11**	**Thu 12/22/11**	
60		Install Microwave at selected GB sites	240 days	Thu 1/13/11	Thu 12/22/11	52
61		Conclude Implementation Vendor 2 (Great Basin)	0 days	Thu 12/22/11	Thu 12/22/11	60
62		Continue Monthly Recurring Costs (Cover MRC)	240 days	Thu 1/13/11	Thu 12/22/11	52
63		**Begin Implementation Vendor 3 (Western FiberNet)**	**240 days**	**Thu 1/13/11**	**Thu 12/22/11**	
64		Install fiber connectivity at selected WFN sites	240 days	Thu 1/13/11	Thu 12/22/11	52
65		Conclude Implementation Vendor 3 (WFN)	0 days	Thu 12/22/11	Thu 12/22/11	64
66		Continue Monthly Recurring Costs (Cover MRC)	240 days	Thu 1/13/11	Thu 12/22/11	52

Dec 31, '06
S M T W

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Task	External Milestone	Manual Summary Rollup	
Split	Inactive Task	Manual Summary	
Milestone	Inactive Milestone	Start-only	
Summary	Inactive Summary	Finish-only	
Project Summary	Manual Task	Progress	
External Tasks	Duration-only	Deadline	

Utah Telehealth Network RHCPP Sustainability Plan
For the Utah ARCHES Project, as of 12/8/2010

The Utah Telehealth Network's RHCPP project, Utah ARCHES, will connect approximately 90 health care facilities in support of the adoption and use of health information technology, including telehealth. It is budgeted for a total of $10,642,305, of which up to $9,045,959 (85%) will come from the FCC and $1,596,346 (15%) will come from the Utah Telehealth Network and our project partners and participants.

Background

Established in 1996, the Utah Telehealth Network (UTN) connects rural hospitals, clinics, and local health departments throughout Utah. Each site's network connection links patients and health professionals to multiple resources and specialists, wherever they are. UTN's mission, to expand access to health care services and resources through the innovative use of technology, is accomplished through telehealth and telemedicine applications. In the near future, the network will be used by sites to participate in emerging projects for sharing electronic patient information and the development of interoperability between electronic medical record systems.

Administratively, UTN is a program of University of Utah Health Care within the Information Technology Services department. Like many telehealth networks, UTN began as a grant funded program. Over time, UTN has become self-sustainable, now using grants as a way to grow rather than a means of subsistence. UTN's current operating budget is $1.1 million and is based upon diverse funding streams: the State of Utah, the University of Utah, and revenue generated by network member fees, user fees, and contracts.

Through an annual line item of about $500,000, the State of Utah provides a base of funding for the network to ensure that UTN maintains a rural focus. The University of Utah contributes approximately $250,000 in direct funding, plus indirect support for office space and administrative oversight. The remaining annual operating revenue of $350,000 is generated by network member fees, user fees, and contracts. UTN has 30+ network member sites, whose monthly fees include the cost of a T1 (factoring in USAC discounts), technical support services, and videoconferencing fees. Several non-member customers pay user fees for videoconferencing services and technical support. UTN also takes full advantage of the existing USAC RHCD program and receives annual discounts on every eligible telecommunications line in the network.

Today, most UTN sites connect via T1 lines, which they have outgrown. As telehealth applications become more widespread, as health care adopts more health information technology, and as day-to-day business relies more on electronic communication, UTN network member sites are demanding more bandwidth and more reliable connections. They are eager to participate in the RHCPP project as it will provide the electronic platform to facilitate the advancement of health information technology at their locations.

Utah ARCHES Project Partners

The Utah Telehealth Network has many key partners in the project. The University of Utah, on behalf of UTN, is legally and financially responsible for the project. Intermountain Healthcare shares leadership of the project with UTN and the University. The Utah Navajo Health System is an Indian-owned and –operated system of community health centers and is a key partner in southeastern Utah. The Utah

Hospital Association, the Association for Utah Community Health, the Utah Association of Local Health Departments, and the Utah Department of Health serve as project and communication liaisons to their constituencies. The Utah Department of Technology Services and the Utah Education Network have provided their technical expertise in the planning and design of the project.

Utah ARCHES Governance

The Utah ARCHES project has two levels of governance. The first is the Utah ARCHES Management Team, a working group representing project partners and comprised of technical experts. This group helped design the network, draft the RFP, evaluated proposals, and is involved in the technical and operational components of project implementation.

Utah ARCHES Management Team members are:

Deb LaMarche, Project Coordinator and Co-chair
Kyle Andersen, Co-chair, Intermountain Healthcare – Enterprise Communications
Barry Bryson, Utah Education Network
Brent Elieson, University of Utah Information Technology – Network Services
Darrell Martin, Intermountain Healthcare
David Dalpias, University of Utah Dialysis Program
Dennis Sampson, Utah Education Network
Floyd Ritter, State of Utah Department of Technology Services
Jamie Steck, Central Utah Clinics
Jeff Shuckra, Utah Telehealth Network
Jeff Steinitz, Bear River Health Department, representing local health departments
Joe Cohen, State of Utah Department of Technology Services – Health Department liaison
Libbey Chuy, Association for Utah Community Health
Marz Cesarini, Utah Telehealth Network
Mike Raiford, Intermountain Healthcare
Peter Bonsavage, Utah Telehealth Network
Scott Horne, Utah Hospital Association
Syndi Haywood, University of Utah Information Technology

The second level of governance is provided by the Utah Telehealth Network Advisory Board and its appropriate subcommittees. The UTN Advisory Board governs UTN and operates under a set of bylaws and a Memorandum of Agreement with the University of Utah, which has administrative responsibility for UTN. The Board is responsible for the oversight of the Utah ARCHES Project through both the RHCPP project period and into the future. Its Technical Subcommittee is monitoring the progress of the Utah ARCHES Management Team and the overall project design. The Finance Subcommittee is working with staff on project financial issues, including the fee structure for RHCPP participation.

Current UTN Advisory Board members are:

Kathy Froerer, Chair, Executive Director, Utah Association of Local Health Departments
Scott MacDonald, Vice-chair, IT Manager, Beaver Valley Hospital
Brent Hales, CFO, Uintah Basin Medical Center
Beverly Ann Evans, Utah Department of Economic Development – Rural Division
Jean Shipman, Director, University of Utah Eccles Health Sciences Library
John Bohnsack, MD, University of Utah Department of Pediatrics
Robert Allen, Vice President, Intermountain Healthcare, and CEO, Park City Hospital

Donna Singer, CEO, Utah Navajo Health System
Joyce Mitchell, Associate Vice President, University of Utah Health Sciences, and Chair, Department of BioInformatics
Mike Petersen, Director, Utah Education Network
Bette Vierra, Executive Director, Association for Utah Community Health
Jan Root, President and CEO, Utah Health Information Network
Robert Jex, Utah Department of Health
Byron Bair, MD, University of Utah, and Director, VA Center for Rural Health – Western Region
Marta Petersen, MD, Director, Utah Telehealth Network *ex officio member*

Minimum 15% Funding Match

The minimum 15% match for this project equals $1,596,346. As of September 2, 2010, project match funds of $1,216,634 have been committed and received. The remaining match of $379,712 will come from individual eligible site contributions toward monthly recurring costs and, if necessary, towards a portion of the one-time costs.

Overview of Projected Budget and Match	NRC	MRC	Total
RFP01 – 26 sites	$2,299,269	$1,579,771	$3,879,040
85% FCC	$1,954,379	$1,342,805	$3,297,184
15% Match	**$344,890**	**$236,966**	**$581,856**
RFP02* – 64 sites	$2,928,524	$3,834,741	$6,763,265
85% FCC	$2,489,245	$3,259,530	$5,748,775
15% Match	**$439,279**	**$575,211**	**$1,014,490**
Total Project – 90 sites	$5,227,793	$5,414,512	$10,642,305
85% FCC	$4,443,624	$4,602,335	$9,045,959
15% Match	**$784,169**	**$812,177**	**$1,596,346**

* RFP02 budget total is accurate, but number of sites and division of funds between NRC and MRC are estimates.

Source of Match, by RFP	$ for NRC	$ for MRC	$ Total Match
Intermountain Healthcare	$344,890	$236,966	$581,856
Subtotal RFP01	**$344,890**	**$236,966**	**$581,856**
State of Utah line item for Utah Telehealth via University of Utah (UU activity 12480)	$410,000	$0	$410,000
George S. & Dolores Dore Eccles Foundation awarded to Utah Telehealth (UU activity 18637)	$0	$201,400	$201,400
Utah Telehealth Network gift account (UU activity 06972)	$29,279	$0	$29,279
RFP02 project participants, via monthly fees	$0	$373,811	$373,811
Subtotal RFP02	**$439,279**	**$575,211**	**$1,014,490**
Total match	**$784,169**	**$812,177**	**$1,596,346**

Long term sustainability plan assumptions

The sustainability plan for this project covers a period of 10 years from the time of the first Funding Commitment Letter. It has been developed based upon the following assumptions:

UTN funding sources will remain stable

UTN will continue to receive state funding to support rural participation. The University of Utah, member sites, and users of services will continue to contribute to the overall support of the network.

Broadband access is necessary for health care delivery

Utah's purpose for participating in the FCC RHCPP program was originally to support the adoption of health information technology (HIT), such as electronic health records and telemedicine, especially in rural areas. Since then, many factors have caused this need to become even more critical.

In the past year, Utah has been awarded several ARRA stimulus grants dedicated to the adoption and meaningful use of electronic health records and the development of clinical health information exchange. As health care delivery is being transformed, it is expected that coming payment reform will reinforce the use of technology as a component of cost effective, quality health care.

In addition, technology improvements are requiring more bandwidth for telemedicine. Video-conferencing is migrating to high definition, increasing bandwidth needs (2 mbps vs. 384 kbps) for telemedicine applications. Newer radiology equipment produces larger files, which also require more bandwidth. Many health care facilities, particularly those in rural areas, do not have their own 42/7 radiologists and, therefore, rely on broadband to transmit radiology studies to distant radiologists for timely diagnoses.

It is assumed that after three to five years, it will be nearly impossible for most health care providers to practice healthcare without access to broadband. Given this environment and the fact that our chosen broadband solution, dedicated Ethernet, is scalable, it is assumed that each site's bandwidth will be adequate during the RHCPP pilot, then will increase by approximately 25% by the beginning of Year 6.

Ineligible Health Care Facilities

It is anticipated that a limited number of ineligible health care facilities may participate in the RHCPP and continue beyond the life of the project. These facilities will be expected to pay their fair share, which will be calculated based upon their subscribed bandwidth.

Cost model

Broadband rates received from vendors for this Pilot vary significantly depending upon location. Monthly Recurring Charges (MRC) for urban sites are the most favorable, with increasingly higher rates as sites become more rural and remote. During the Pilot, UTN will use weighted averages to standardize rates by bandwidth to level the playing field and encourage participation by rural sites. It is our intent to maintain a similar cost model upon completion of the Pilot.

Future Cost of Broadband

Between this RHCPP project, a large BTOP grant awarded to Utah, and other investments occurring in the state, it is anticipated that the expansion of broadband infrastructure will lead to a reduction in cost for broadband in the future. This is likely to be more true for urban than for rural. For the purposes of the

sustainability plan, we will budget conservatively and assume that MRC costs remain the same following completion of the Pilot. However, because we believe that prices will ultimately fall, we do not intend to sign 10 year contracts with vendors as we believe that this would commit us to unnecessarily high prices during the latter part of the sustainability period.

Future USAC Discounts

Based upon the FCC's NPRM published in the Federal Register on August 8, 2010, it is assumed that a USAC discount of 50% of MRC may be available in the future, at a minimum for currently eligible rural sites. Moving forward, it is the intent of this project to utilize those discounts to the fullest extent possible.

Network Management

For logistics and practical purposes, the project is being implemented in two parts. The first, as described in RFP01, upgrades bandwidth to 25 Intermountain urban and rural healthcare facilities and links the Intermountain network through their Lake Park Data Center to the Utah Telehealth Network hub (26th site). The second part, represented through RFP02, will connect approximately 64 non-Intermountain Healthcare urban and rural health care facilities into the Utah Telehealth Network hub.

The primary responsibility for network support will be shared by Intermountain Healthcare and the Utah Telehealth Network. Intermountain will be responsible for managing their own sites identified in RFP01. As detailed in Addendum 1, Intermountain centralizes support for all network and information technology services and will continue this model for the Utah ARCHES Project. UTN will be responsible for network management of all sites connected through RFP02 and will coordinate technical support services closely with health care facilities' local IT staff. Today, UTN and Intermountain work closely on technical support for videoconferencing and media services. This cooperative relationship will continue with the addition of network services.

Network management costs will be funded two different ways. Intermountain will continue to charge its sites General & Administrative fees payable to the corporation. These fees contribute to the support of the IT Department and their network operations services. UTN's network management costs will be covered through a combination of 1) an ongoing State of Utah line item, and 2) monthly fees to participants.

Ownership

Intermountain Healthcare will own all assets purchased through RFP01. The University of Utah will own all assets purchased through RFP02 with the assurance that Pilot Program assets will be used only for health care purposes.

Terms of Membership

Since 2003, UTN has required that all network members sign a participation agreement. Because of Intermountain's significant role in this project, an amending agreement to their participation agreement was negotiated and signed prior to the posting of RFP01.

For sites connecting via RFP02, UTN's basic participation agreement has been revised and member fees are being restructured. Each site or its parent organization will be required to sign a new participation agreement prior to being connected via the RHCPP project. These agreements include a section outlining general terms including such items as an overview of participation, liability, HIPAA compliance. Other sections detail scope of services, member responsibilities, and network member fees. Terms will coincide with the end of the RHCPP project with the option to renew annually for five additional years.

UTN network member fees will be charged monthly to RFP02 participating sites and will be itemized to include the following:

- **Bandwidth to sites**. Weighted averages will be used to postalize fees for 5 MB, 10 MB, 20 MB, and 50 MB. Fees for sites connecting at higher bandwidths will be based upon actual costs. During the RHCPP project, fees will be based on the 15% match. After the project, fees will be based upon USAC's rates for eligible sites and 100% for sites that become ineligible at the end of the project.
- **Backbone**. This includes a portion of transport charges from rural regions back to Salt Lake City and a portion of the connectivity costs of the UTN hub into the network. These costs will be divided among all eligible sites and will be based on the 15% match rate during the RHCPP and the appropriate rate during the sustainability period.
- **Equipment maintenance**. Costs to maintain router, firewall, and UPS for the network core and each site
- **Network management**, which includes 24/7 monitoring and technical support, including proactive vulnerability scanning, a limited number of VPNs, and other network and security services.
- **Administration.** This fee helps support UTN's administrative, business and operational activities in support of the network.
- **Videoconferencing & media services (OPTIONAL).** Bridging, live streaming, video-on-demand and associated technical support services for interested sites
- **Value-added services (OPTIONAL)**, such as off-site backup, etc.

Depending upon costs that might not be covered by the RHCPP, participating sites may be charged the equivalent of one or two month's fees as an installation fee. Actual pricing will be finalized at the completion of the bidding process.

Excess Capacity/Fair Share

There is no intent to incorporate excess capacity into this project; this will be a health care network only.

However, there are a limited number of ineligible health care facilities (such as for-profit health care providers or health care organization administrative offices) that legitimately need to be part of the network due to relationships with eligible providers. These facilities will be responsible for paying their fair share to cover any use of FCC-funded infrastructure and resources. Ineligible health care facilities that are required to pay fair share will be charged UTN member fees using the following formula:

- FCC-funded infrastructure or resources will be charged proportionally at 100% of actual cost and excluding the 15% RHCPP or any other USAC discounts. These include the following:
    - Bandwidth to sites
    - Site equipment and equipment maintenance
    - Backbone capacity - Ineligible sites will be charged a proportional share of backbone costs, the formula for which will require USAC/FCC approval.

- All other member fee components would be charged the same as for eligible sites.

10 Year Project Budget

The following two pages detail a 10 year pro forma budget for the project. It outlines budget assumptions, one-time costs, recurring costs, total costs, and income sources.

In the absence of final rules for continuation beyond the end of the project, it assumes that a 50% discount will be available for eligible rural sites after RHCPP funds have been spent. This may not be sufficient for at least some sites, especially the most rural sites, but for the purposes of this budget, it is assumed that they will all choose to continue.

10 Year Pro Forma for FCC RCHPP 17264 Utah Telehealth Network

1. Assumptions:

Project overall

a. This pro forma is limited to sustainability for FCC RHCPP-related network and costs only, which represent only a portion of business operations.
b. This pro forma is limited to eligible sites only. Ineligible sites, if any, will pay their fair share as approved by USAC/FCC.
c. One time project bandwidth growth increase factor of 25% at the beginning of year 6. All costs in years 6-10 have been increased by 25% accordingly.

RFP01

d. RFP01 - Year 1 will include only November & December expenditures, Year 4 will include 10 months of RHCPP to round out the full three years.
e. RFP01 - First three year's funding will be covered by the RHCPP, years 4 through 10 imply RHCD 50% funding for eligible sites, and Intermountain 100% funding for non-eligible sites.

RFP02

f. RFP02 - Budget is based upon estimates and anticipated interest as this pro forma is being produced during vendor contract negotations and discussions with individual sites.
g. RFP02 - Anticipate connecting 64 eligible sites (48 rural, 16 urban), with 42 remaining eligible sites wait-listed in case of additional funds.
h. RFP02 - Sites have the option to select bandwidth of 5 MB, 10 MB, 20 MB, 50 MB, or 100 MB, with an estimated customer bandwidth total of 2000 MB.
i. RFP02 - Eligible sites will be charged postalized rates that average 15% of RCHPP-funded project costs and a share of non-RHCPP-funded project costs.
j. RFP02 - RHCPP budget will support one time plus four years of monthly recurring costs for eligible sites (beginning mid year 2011 through mid year 2015.
k. RFP02 - Beginning midyear 2015 through remainder, assume RHCD 50% funding for eligible (rural sites) with sites funding non-eligible portions and sites.
l. RFP02 - This assumes that all sites will continue beyond the life of the project. However, to continue, some sites may require a combination of decreasing prices from vendors (as infrastructure is built out) and/or USAC discounts larger than 50% and/or additional new funding streams.

10 Year Pro Forma for FCC RCHPP 17264 Utah Telehealth Network

2. One Time Costs (Construction, Installation)

RFP01 - Intermountain Healthcare - 26 Sites	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014	Year 6 2015	Year 7 2016	Year 8 2017	Year 9 2018	Year 10 2019	Project Total
Network Equipment, Installation or Engineering	$383,212	$1,916,058	$0	$0	$0	$0	$0	$0	$0	$0	$2,299,269
Sub-Total, RFP01 One time	$383,212	$1,916,058	$0	$0	$0	$0	$0	$0	$0	$0	$2,299,269
RFP02 - University of Utah/UTN - 64 Sites											
Backbone Network Equip., Install. or Engineering	$0	$518,727	$0	$0	$0	$0	$0	$0	$0	$0	$518,727
Sites Network Equip., Install. or Engineering	$0	$2,667,625	$0	$0	$0	$0	$0	$0	$0	$0	$2,667,625
Sub-Total, RFP02 One time	$0	$3,186,352	$0	$0	$0	$0	$0	$0	$0	$0	$3,186,352
Total, One Time Costs	$383,212	$5,102,410	$0	$0	$0	$0	$0	$0	$0	$0	$5,485,621

3. Monthly Recurring Costs (Annualized)

RFP01 - Intermountain Healthcare - 26 Sites	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014	Year 6 2015	Year 7 2016	Year 8 2017	Year 9 2018	Year 10 2019	Project Total
Rural Sites - 13 Sites											
Network Bandwidth Costs	$30,800	$184,800	$184,800	$184,800	$184,800	$231,000	$231,000	$231,000	$231,000	$231,000	$1,925,000
Urban Sites - 13 Sites											
Network Bandwidth Costs	$57,763	$346,578	$346,578	$346,578	$346,578	$433,223	$433,223	$433,223	$433,223	$433,223	$3,610,188
Sub-Total, RFP01 Recurring	$88,563	$531,378	$531,378	$531,378	$531,378	$664,223	$664,223	$664,223	$664,223	$664,223	$5,535,188
RFP02 - University of Utah/UTN - 64 Sites											
Rural Eligible Sites - 48 sites (estimated)											
Site bandwidth costs	$0	$271,429	$550,060	$550,060	$550,060	$618,817	$687,575	$687,575	$687,575	$687,575	$5,290,726
Backbone/transport costs	$0	$112,517	$189,564	$189,564	$189,564	$213,260	$236,955	$236,955	$236,955	$236,955	$1,842,289
Urban Sites - 16 sites (estimated)											
Site bandwidth costs	$0	$67,857	$128,515	$128,515	$128,515	$144,579	$160,644	$160,644	$160,644	$160,644	$1,240,557
Core/backbone costs	$0	$28,129	$91,728	$91,728	$91,728	$103,194	$114,660	$114,660	$114,660	$114,660	$865,147
Network & Administration (no RHCPP funds)	$0	$159,111	$318,222	$318,222	$318,222	$318,222	$318,222	$318,222	$318,222	$318,222	$2,704,887
Sub-Total, RFP02 Recurring	$0	$639,043	$1,278,089	$1,278,089	$1,278,089	$1,398,072	$1,518,056	$1,518,056	$1,518,056	$1,518,056	$11,943,606
Total, MRC Annualized	$88,563	$1,170,421	$1,809,467	$1,809,467	$1,809,467	$2,062,295	$2,182,279	$2,182,279	$2,182,279	$2,182,279	$17,478,794

4. Total Project Costs

Total Costs, RFP01 (One time & Recurring)	$471,775	$2,447,436	$531,378	$531,378	$531,378	$664,223	$664,223	$664,223	$664,223	$664,223	$7,834,457
Total Costs, RFP02 (One time & Recurring)	$0	$3,825,395	$1,278,089	$1,278,089	$1,278,089	$1,398,072	$1,518,056	$1,518,056	$1,518,056	$1,518,056	$15,129,958
Total Costs, Project (One-Time & Recurring)	$471,775	$6,272,831	$1,809,467	$1,809,467	$1,809,467	$2,062,295	$2,182,279	$2,182,279	$2,182,279	$2,182,279	$22,964,415

5. Income (Project Inlays)

RFP01 - Intermountain Healthcare - 26 Sites	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014	Year 6 2015	Year 7 2016	Year 8 2017	Year 9 2018	Year 10 2019	Project Total
Intermountain	$70,766	$367,115	$79,707	$151,794	$438,978	$548,723	$548,723	$548,723	$548,723	$548,723	$3,851,973
USAC - RHCPP	$401,008	$2,080,320	$451,671	$364,184	$0	$0	$0	$0	$0	$0	$3,297,184
USAC - RHCD (50% rural only)	$0	$0	$0	$15,400	$92,400	$115,500	$115,500	$115,500	$115,500	$115,500	$685,300
Sub-Total, RFP01 Income	$471,775	$2,447,436	$531,378	$531,378	$531,378	$664,223	$664,223	$664,223	$664,223	$664,223	$7,834,457
RFP02 - University of Utah/UTN - 64 Sites											
UU/State of Utah	$0	$410,000	$0	$0	$0	$57,330	$114,660	$114,660	$114,660	$114,660	$925,970
Eccles Foundation		$108,093	$26,259	$26,259	$26,259	$13,130					$200,000
UTN member sites		$414,131	$435,943	$435,943	$435,943	$799,686	$1,163,430	$1,163,430	$1,163,430	$1,163,430	$7,175,366
USAC - RHCPP (85% of eligible costs)	$0	$2,893,171	$815,887	$815,887	$815,887	$407,943	$0	$0	$0	$0	$5,748,775
USAC - RHCD (50% rural only)	$0	$0	$0	$0	$0	$119,983	$239,966	$239,966	$239,966	$239,966	$1,079,847
Sub-Total, RFP02 Income	$0	$3,825,395	$1,278,089	$1,278,089	$1,278,089	$1,398,072	$1,518,056	$1,518,056	$1,518,056	$1,518,056	$15,129,958
Total Project Income Sources:	$471,775	$6,272,831	$1,809,467	$1,809,467	$1,809,467	$2,062,295	$2,182,279	$2,182,279	$2,182,279	$2,182,279	$22,964,415

Addendum 1: RFP01 Intermountain Healthcare

A key partner in the Utah ARCHES Project is Intermountain Healthcare, a large regional nonprofit system of hospitals, surgery centers, doctors, and clinics that serves the medical needs of Utah and southeastern Idaho. Intermountain is a member of UTN; an amending agreement to its existing contract outlines roles and responsibilities specific to RHCPP implementation.

All of Intermountain's hospitals and clinics are company-owned facilities and technically serviced by a primary data center located in West Valley City, Utah with a backup secondary data center site located in Ogden, Utah. More than an estimated 2500 clinical and financial applications are delivered from these data centers across wide-area network links which connect all facilities to both data centers. This centralized delivery strategy places significant reliance on network infrastructure to distribute these applications to clinicians and care givers within the system. Indeed, Intermountain's business model is dependent upon this centralized delivery strategy.

As a result, network circuits are already in place connecting each rural and urban facility to deliver these services. These circuits are currently maintained by Intermountain's Network Technology operational infrastructure budget (*see **Table A***), with the current USAC Rural Health Care Division program providing discounts to eligible sites (*see **Table B1***). Current operational spending by Intermountain to maintain network connectivity to all facilities exceeds three million dollars annually. An indication of Intermountain's historic commitment to infrastructure spending is reflected in **Table A**, which lists operational expenditures over the past five years.

RFP01 Table A

5 Year Expense Report - Intermountain Healthcare Network Technology

	2004	2005	2006	2007	2008	2009
Salaries + Benefits	$1,385,981	$1,448,893	$1,247,326	$1,418,796	$1,556,568	$2,388,036
Non-Salary Expense	$2,032,748	$2,444,472	$2,714,489	$3,130,055	$3,483,763	$1,905,488
Capital	$1,592,500	$2,381,000	$2,720,482	$3,281,169	$2,310,516	$2,427,600
Total	$5,011,229	$6,274,365	$6,682,297	$7,830,019	$7,350,847	$6,721,124

****Assumptions**

** Capital expense for 2004 & 2005 is based on the average % of Total Ops expense in years 2006 - 2009

** Capital includes all expenses incurred in the calendar year (current + carryover funds)

Table B2 summarizes RHCPP project costs for the facilities covered under RFP01. Total project costs are budgeted to be $3,879,040, of which Intermountain Healthcare is committed to cover 15%, or $581,856, with the RHCPP responsible for the remaining 85%, or $3,297,184.

In Intermountain Healthcare's financial model, network costs are borne centrally by the corporation through the IT department. Individual Intermountain facilities pay General & Administrative fees to the corporation for these and other services. Therefore, the 15% match for participating Intermountain

Healthcare locations will be paid centrally. Funds have been set aside to cover the match and any additional costs required to implement the RHCPP project for Intermountain Healthcare facilities.

In addition, Intermountain intends to maintain network connectivity during and far beyond the project sustainability period of ten years. Each facility relies upon the network for its normal operations, including many patient-care critical applications, and thus requires that the network maintain at least the minimum level of connectivity to support application requirements. Intermountain views the RHCPP funding as an opportunity to "jump start" improvements in network infrastructure growth and to increase bandwidth and improve reliability.

Looking forward beyond RHCPP financial support, Intermountain anticipates three possible scenarios related to sustainability. In the first scenario, the FCC phases out, and eventually eliminates, all funding. In the second scenario, the RHCPP replaces current Universal Service, (RHC) program and funding continues at up to 85%. In the third scenario, the FCC reverts back to the current RHC program at a 50% discount rate. **Table C** below anticipates future funding sustainability with each of these funding scenarios in mind.

Intermountain remains fully committed to the financial support necessary to deliver network services to all facilities. The availability, reliability and constant continuation of network services ensures that Intermountain will continue to be able to deliver clinical applications via network technology services.

RFP01 Table B1

Project sites: Current connectivity and costs, using the existing USAC RHCD program where applicable, prior to RHCPP implementation.

Health Care Facility	Current Service Provider	Circuit Type	EXISTING USAC RHCD Discounts		
			Circuit MRC	USAC Funding per mo.	Net MRC
American Fork Hospital (0001)	QWest	MOE 100Mb	$1,148	$0	$1,148
Canyon View Family Practice (0003)	QWest	1 T1	$359		$359
Southern Utah Surgical Associates (0004)	QWest	1 T1	$190	$0	$190
The Orthopedic Specialty Hospital (0005)	QWest	MOE 100Mb	$1,148	$0	$1,148
Heber Valley Medical Center (0006)	QWest	MOE 100Mb	$1,148	$0	$1,148
Logan Regional Hospital (0007)	QWest	DS3	$1,368	$1,123	$245
McKay-Dee Hospital (0008)	Integra	2 Gig Eth.	$6,500	$0	$6,500
Orem Community Hospital (0009)	Integra	DS3	$1,735	$0	$1,735
Logan Instacare (0011)	QWest	2 T1	$260	$0	$260
Ogden Workmed (0012)	QWest	2 T1	$230	$0	$230
South Cache Valley Clinic (0014)	QWest	2 T1	$320	$0	$320
Summit Clinic (Smithfield) (0015)	QWest	1 T1	$267	$0	$267
Richfield Family Practice (0016)	QWest	1 T1	$191	$0	$191
Hurricane Valley Clinic (0017)	QWest	MOE 10Mb	$689	$0	$689
Cedar City Instacare (0018)	QWest	1 T1	$191	$0	$191
Southern Utah Behavioral Health (0019)	QWest	1 T1	$191	$0	$191
St. George Workmed (0020)	QWest	1 T1	$262	$0	$262
Sevier Valley Family Practice (0021)	Fiber from Sevier Med Ctr		$0	$0	$0
Sevier Valley Medical Center (0022)	QWest	OC3	$14,609		$14,609
Valley View Medical Center (0024)	QWest	45 Mb LSS	$1,800	$0	$1,800
Delta Community Medical Center (0025)	Questar	1 T1	$3,846	$3,622	$224
Fillmore Community Medical Center (0026)	Questar	1 T1	$3,986	$3,762	$224
Manti Family Clinic (0028)	QWest	1 T1	$650	$0	$650
Park City Hospital (0029)	QWest	DS3	$2,005	$1,781	$224
Dixie Regional Medical Center (0030)	QWest	400 Mb MOE	$2,499	$0	$2,499
UofUtah Health Sciences Center (0032)					
Cost MRC Totals >>>			$45,589	$10,289	$35,300
Annual Cost Totals >>>			$547,066	$123,463	$423,603

RFP01 Table B2

Project sites: Proposed RHCPP connectivity and costs

Health Care Facility	Rural Health Care PILOT PROGRAM (RHCPP)					
	Proposed Circuit Type	Proposed Service Provider	Proposed One-time Cost	Proposed MRC	Total MRC*** (3 Year)	Total RHCPP (3 Year)
American Fork Hospital (0001)*	MW 400Mb	Great Basin	$814,032	$2,001	$72,036	$886,068
Canyon View Family Practice (0003)	FE 10Mb	WFN**	$8,283	$750	$27,000	$35,283
Southern Utah Surgical Associates (0004)	FE 10Mb	WFN	$8,972	$750	$27,000	$35,972
The Orthopedic Specialty Hospital (0005)	FE 200Mb	Great Basin	$47,615	$417	$15,012	$62,627
Heber Valley Medical Center (0006)	FE 100Mb	WFN	$117,450	$1,339	$48,204	$165,654
Logan Regional Hospital (0007)	MOE 100Mb	QWest	$21,148	$1,084	$34,688	$55,836
McKay-Dee Hospital (0008)	MW 800Mb	Great Basin	$336,540	$967	$34,812	$371,352
Orem Community Hospital (0009)	MW 100Mb	Great Basin	$100,084	$667	$24,012	$124,096
Logan Instacare (0011)	FE 10Mb	QWest	$20,548	$669	$22,061	$42,609
Ogden Workmed (0012)	FE 10Mb	QWest	$20,548	$669	$22,061	$42,609
South Cache Valley Clinic (0014)	MOE 10Mb	QWest	$20,548	$669	$22,061	$42,609
Summit Clinic (Smithfield) (0015)	MOE 10Mb	QWest	$91,050	$669	$22,061	$113,111
Richfield Family Practice (0016)	FE 10Mb	WFN	$14,334	$781	$28,116	$42,450
Hurricane Valley Clinic (0017)	FE 10Mb	WFN	$9,950	$875	$31,500	$41,450
Cedar City Instacare (0018)	FE 10Mb	WFN	$22,069	$750	$27,000	$49,069
Southern Utah Behavioral Health (0019)	FE 10Mb	WFN	$7,550	$875	$31,500	$39,050
St. George Workmed (0020)	MOE 10Mb	QWest	$20,552	$669	$22,061	$42,613
Sevier Valley Family Practice (0021)	FE 10Mb	WFN	$14,334	$781	$28,116	$42,450
Sevier Valley Medical Center (0022)	FE 100Mb	WFN	$38,187	$1,093	$39,348	$77,535
Valley View Medical Center (0024)	FE 200Mb	WFN	$26,050	$2,195	$79,020	$105,070
Delta Community Medical Center (0025)	MW 50Mb	Great Basin	$182,862	$1,983	$71,388	$254,250
Fillmore Community Medical Center (0026)	MW 50Mb	Great Basin	$182,862	$1,983	$71,388	$254,250
Manti Family Clinic (0028)	FE 10Mb	WFN	$7,050	$781	$28,116	$35,166
Park City Hospital (0029)	FE 100Mb	WFN	$19,650	$1,339	$48,204	$67,854
Dixie Regional Medical Center (0030)*	FE 200Mb	WFN	$35,380	$19,111	$687,996	$723,376
UofUtah Health Sciences Center (0032)	MW 400Mb	Great Basin	$111,621	$417	$15,012	$126,633
Projected RFP01 Total >>>			$2,299,269	$44,282	$1,579,771	$3,879,040
Projected Intermountain 15% >>>			$344,890	$6,642	$236,966	$581,856
Projected FCC RHCPP 85% >>>			$1,954,379	$37,639	$1,342,805	$3,297,184

* NOTE: Backbone costs have been added to these locations

** WFN = Western FiberNet

*** Highlighted Qwest sites have < 36 months of MRC to balance overall project, balance covered by Intermountain

RFP01 Table C

Project sites: Future funding scenarios

Health Care Facility Name	Proposed Service Provider Name	Circuit Type	Circuit Monthly Recurring Costs (MRC)		
			Scenario 1 No Funding Available	Scenario 2 RHCPP Extends 85% Support	Scenario 3 USAC RHDP 50% Support
American Fork Hospital (0001)*	Great Basin	MW 400Mb	$2,001	$300	$2,001
Canyon View Family Practice (0003)	WFN	FE 10Mb	$750	$113	*$375*
Southern Utah Surgical Associates (0004)	WFN	FE 10Mb	$750	$113	*$375*
The Orthopedic Specialty Hospital (0005)	Great Basin	FE 200Mb	$417	$63	$417
Heber Valley Medical Center (0006)	WFN	FE 100Mb	$1,339	$201	*$670*
Logan Regional Hospital (0007)	QWest	MOE 100Mb	$1,084	$163	*$542*
McKay-Dee Hospital (0008)	Great Basin	MW 800Mb	$967	$145	$967
Orem Community Hospital (0009)	Great Basin	MW 100Mb	$667	$100	$667
Logan Instacare (0011)	QWest	FE 10Mb	$669	$100	$669
Ogden Workmed (0012)	QWest	FE 10Mb	$669	$100	$669
South Cache Valley Clinic (0014)	QWest	MOE 10Mb	$669	$100	$669
Summit Clinic (Smithfield) (0015)	QWest	MOE 10Mb	$669	$100	$669
Richfield Family Practice (0016)	WFN	FE 10Mb	$781	$117	*$391*
Hurricane Valley Clinic (0017)	WFN	FE 10Mb	$875	$131	*$438*
Cedar City Instacare (0018)	WFN	FE 10Mb	$750	$113	*$375*
Southern Utah Behavioral Health (0019)	WFN	FE 10Mb	$875	$131	$875
St. George Workmed (0020)	QWest	MOE 10Mb	$669	$100	$669
Sevier Valley Family Practice (0021)	WFN	FE 10Mb	$781	$117	*$391*
Sevier Valley Medical Center (0022)	WFN	FE 100Mb	$1,093	$164	*$547*
Valley View Medical Center (0024)	WFN	FE 200Mb	$2,195	$329	*$1,098*
Delta Community Medical Center (0025)	Great Basin	MW 50Mb	$1,983	$297	*$992*
Fillmore Community Medical Center (0026)	Great Basin	MW 50Mb	$1,983	$297	*$992*
Manti Family Clinic (0028)	WFN	FE 10Mb	$781	$117	*$391*
Park City Hospital (0029)	WFN	FE 100Mb	$1,339	$201	*$670*
Dixie Regional Medical Center (0030)*	WFN	FE 200Mb	$19,111	$2,867	$19,111
U of Utah Health Sciences Center (0032)	Great Basin	MW 400Mb	$417	$63	$417
Cost MRC Totals >>>			$44,282	$6,642	$36,040
Annual Cost Totals >>>			$531,378	$79,707	$432,474

* Note: Backbone costs are included to these locations.

Scenario 3: *Reverse Image denotes Rural Site* - eligible for USAC 50% discount on MRC's

As previously noted and illustrated in **Table A**, Intermountain Healthcare is fully prepared to cover future costs as outlined in **Table C**, above, regardless of scenario. However, future discounts, while not necessary to maintain the specified circuits, would be welcome as it would free up funding to expand broadband services to additional Intermountain sites.

Addendum 2: RFP02 University of Utah

On behalf of the Utah Telehealth Network and all other non-Intermountain health care facilities

The University of Utah RFP for non-Intermountain sites included a total of 127 interested health care facilities. Pricing for a range of bandwidth was requested for each site. The competitive bidding process is has been completed. Four vendors have been selected and contract negotiations are in progress.

It appears that there will be enough funding for 60-70 sites. In anticipation of the possibility that there might end up being more interest than availability, last winter the UTN Advisory Board approved a priority list for including sites in implementation:

Priority 1 – existing UTN member sites;
Priority 2 – sites included in the original proposal to the FCC;
Priority 3 – sites added for RFP02;
Priority 4 – sites that asked to join since RFP02 was published.

It appears that there will be enough funding to include all interested Priority 1 and 2 sites; they are currently being asked to commit to the project and to designate their desired bandwidth level. Depending upon the response, some Priority 3 sites may be able to participate as well. The remaining 40-50 sites will be wait-listed. Site agreements will be signed by all participating health care providers prior to ordering equipment and services for them.

Vendor contracts are being negotiated to terminate with the end of the project period, with the option of continuing annual renewals. In addition to this FCC project, other organizations in Utah have been awarded BTOP and other telecommunications grants. It is hoped that the cumulative benefit of these funded infrastructure projects will be more favorable monthly recurring rates in the future.

Participating site contracts will also terminate with the end of the project, with the option of continuing annual renewals. Current Utah Telehealth Network membership fees have been re-priced for participating RHCPP eligible health care facilities to reflect project costs and discounts. Fees have been postalized for the following bandwidths: 5 mbps, 10 mbps, 20 mbps, 50 mbps, and 100 mbps. One gigabit per second connections, if any, will be based on per site costs. Membership fees include: 15% of a weighted average of the MRC for a given level of bandwidth; network management fees; fees for additional optional services, if desired; and an administrative fee.

Included with Addendum 2 are two attachments:

RFP02 Table A: *Working Budget* – provides a summary of major budget components and funding sources to implement RFP02.

RFP02 Table B*: UTN Member Pricing for FCC-Eligible Sites* – outlines membership fees for participating eligible health care providers. It is being presented to interested sites to assist them in their decision-making regarding participation and at what bandwidth level.

Non-eligible health care facilities will pay their fair share based upon a proposal under development and to be approved in advance by USAC.

RFP02 Table A

FCC RHCPP Working Budget	Total	RHCPP 85%	Match 15%
Proposed project	10,642,305	9,045,959	1,596,346
RFP01 (Intermountain)	3,879,040	3,297,184	581,856
RFP02 (UU/UTN)	6,763,265	5,748,775	1,014,490
RFP02 WORKING Budget	6,685,293	5,682,499	1,002,794
REMAINDER	77,972	66,276	11,696

As of 11/19/2010

RFP02 WORKING Budget, post-competitive bids	Total	RHCPP 85%	UTN		ELIGIBLE SITES		
** UTN has $610,000 for match & project costs*			15% match	100%	15% match	100%	
UTN core equip 1X + 4 years (all paid one time)	226,210	192,279	33,932				FCC funding requested
UTN core 1.4G connect, 1X + 48 mos	371,312	315,615	55,697				FCC funding requested
UTN transport/interconnect equip, 1X + 48 mos	77,304	65,708	11,596				FCC funding requested
UTN transport/interconnects, one time	124,469	105,799	18,670				FCC funding requested
UTN transport/interconnects, MRC*48 mos.	758,256	644,518	50,000		63,738		FCC funding requested
Site routers w/maintenance	272,374	231,518	40,856				FCC funding requested
Site circuit estimated one-time	2,141,069	1,819,909	125,000		196,160		FCC funding requested
Site circuits MRC*48 months	2,714,299	2,307,154			407,145		FCC funding requested
Subtotal	6,685,293	5,682,499	335,750	0	667,044	0	
UTN Core servers for mgmt & monitoring	7,500	0		7,500			not FCC-funded
Site firewalls w/maintenance	254,182	0		254,182			not FCC-funded
UTN Network management	852,888	0				852,888	not FCC-funded
UTN Administration fee	420,000	0				420,000	not FCC-funded
Misc project expenses	12,568	0	12,568				not FCC-funded
Subtotal	1,547,138	0	12,568	261,682	0	1,272,888	
RFP02 working total	8,232,431	5,682,499	348,318	261,682	667,044	1,272,888	
			UTN Total	610,000	Site Total	1,939,932	

Assumptions:

1. UTN has $610,000 for match and project costs (State line item carry-forward, Eccles Foundation)
2. Project budget includes one time plus four years of monthly recurring costs.
3. Number of interested sites exceeds available funding.
4. Sites will be invited to participate in the following order, as approved by UTN Advisory Board:
   - Priority 1: UTN member sites
   - Priority 2: Part of original proposal to FCC in 2007
   - Priority 3: Added for inclusion on RFP02 2009
   - Priority 4: Added since RFP02; would be bid in RFP03 only if funds become available
5. Sites will be able to select broadband speed (5 MB, 10 MB, 20 MB, 50 MB, 100 MB)
6. Priority 1 and 2 sites should all be accommodated,
   based upon these site estimates: 4 - 5MB, 19 - 10MB, 21 - 20MB, 9 - 50MB, 7 - 100MB.
7. Ineligible sites may particpate but must pay their fair share, as approved by FCC. Ineligible particiation has no impact on availability for eligible sites
8. Some Priority 3 sites may be added if:
   - Some invited sites decline to participate
   - Qwest site cost actuals come in less than budgeted
   - Additional funds made available by the FCC (unused RHCPP or new program funds)

RFP02 Table B

*UTN Member Fees for **Participating FCC-Eligible** Sites*

FCC Rural Health Care Pilot Program, Utah ARCHES Project

UTN Advisory Board Finance Subcommittee approval 11/19/2010

The Utah ARCHES Project creates a high speed private broadband network for Utah health care providers to support the adoption of health information technology (HIT), expand telemedicine capability, and meet the clinical and operational missions of our member health care providers. The network will be managed by the Utah Telehealth Network and includes a single point of contact for service and support, 24/7 monitoring and management of the network, access to a variety of security management services and tools, Internet access, and more.

FCC-Eligible UTN Member Fees	5 MB	10 MB	20 MB	50 MB	100 MB
One time installation					
Core/backbone installation, included					
Site broadband installation	950	1,200	2,400	4,900	8,200
Site router, w/4 year maintenance, managed by UTN, included					
Site firewall, w/4 year maintenance, managed by UTN, included					
**** Each site must have/purchase a UTN-approved UPS (battery back-up), approximately $809 new ****					
Monthly charges					
Network & Security Services					
Core/backbone MRC (added into site broadband MRC)					
Site broadband MRC, average rate discounted by 85%	100	130	140	150	300
Network management fee	75	100	200	450	800
Equipment maintenance & upgrades	25	30	35	50	75
Administration fee	50	80	110	240	260
Network & security services subtotal	250	340	485	890	1,435
Videoconferencing & Media Services					
Bridging/video on demand/tech support	140	175	200	220	240
Site videoconferencing maintenance & equip	75	75	75	75	75
Videoconferencing & media services subtotal	215	250	275	295	315
UTN Monthly Member Fee					
Participating FCC-Eligible Member total	465	590	760	1,185	1,750

Additional services for members	
Email (non-encrypted) w/own domain	$1/user/month, pass-through to XMission
Additional external VPNs >3 set-up fee	$85/hr up to 5 hour max (no extra charge for 50MB, 100 MB)
Videoconference equipment maintenance >1	~$750/year, pass-through to vendor
Network management of satellite site equipment	TBD
Remote access for end-users	TBD
Off site storage	TBD
Customized video-on-demand production	TBD
Advanced troubleshooting	$85/hr
Consulting	$85/hr
Specific applications	TBD

Pricing in effect for 4 years or until project ends, whichever comes first