



Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program

Submitted Date: 3/26/2010 6:04:06 PM	Easygrants ID: 5714
Funding Opportunity: Broadband Technology Opportunities Program	Applicant Organization: UTOPIA
Task: Submit Application - BTOP	Applicant Name: Mr. Todd W Marriott

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A. General Application Information

Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	023764206
CCR # (CAGE)	5JTB6
Legal Business Name	UTOPIA
Point of Contact (POC)	KIRT SUDWEEKS 8016133800 Ext. ksudweeks@utopianet.org
Alternate POC	JARROD PANTIER 8016133861 Ext. jpantier@utopianet.org
Electronic Business POC	KIRT SUDWEEKS 8016133800 Ext. ksudweeks@utopianet.org
Alternate Electronic Business POC	JARROD PANTIER 8016133861 Ext. jpantier@utopianet.org

Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
Prefix	Mr.
First Name	Todd
Middle Name	W
Last Name	Marriott
Suffix	
Telephone Number	801-865-8470



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Fax Number	
Email	tmarriott@utopianet.org
Title	Executive Director

Additional Contact Information of Person to be Contacted on Matters Involving this Application:

Project Role	Name	Phone	Email
Secondary Point of Contact	Jarrold , Pantier	8013019283	jpantier@utopianet.org
Other Contact	Woolsey , Scott	8013721884	swoolsey@utopianet.org

Environmental Point of Contact

Prefix: Name: Pantier, Jarrod Suffix: Telephone Number: 8013019283 Title: Director of OSP
Prefix: Name: Woolsey, Scott Suffix: Telephone Number: 8013019283 Title: Project Manager

Organization Classification	
Type of Organization	State or State Agency
Is the organization a small business?	No



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Does the organization meet the definition of a socially and economically disadvantaged small business concern?	No
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Authorized Organizational Representative	
AOR Name	SUDWEEKS, KIRT
Result	Applicant Authorized

Project Title and Project Description

Project Title: Utah Telecommunication Open Infrastructure Agency Community Partnership Project

Project Description: The Utah Telecommunication Open Infrastructure Agency Community Partnership Project seeks funds to construct cutting-edge, fiber broadband services to 395 anchor institutions, government facilities and other critical community-support organizations in the network’s boundaries. These services are necessary to meet ongoing demands and needs of the eight communities targeted in this proposal.

CCI Priority Checklist

The following items were selected from the CCI Priority Checklist:

1. This project will deploy Middle Mile broadband infrastructure to community anchor institutions.
2. The project will deploy Middle Mile broadband infrastructure and has incorporated a public-private partnership among government, non-profit and for-profits entities, and other key community stakeholders.
3. This project will deploy Middle Mile broadband infrastructure in economically distressed areas.
4. This project will deploy Middle Mile broadband infrastructure to community colleges.
5. This project will deploy Middle Mile broadband infrastructure to public safety entities.
6. This project will deploy Middle Mile broadband infrastructure and either includes a Last Mile infrastructure component in unserved or underserved areas or has received commitments from one or more Last Mile broadband service providers to utilize the Middle Mile components. Any Last Mile components in rural areas do not exceed 20% of the total eligible costs of the project.



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7. This project will deploy Middle Mile broadband infrastructure and the applicant has proposed to contribute 30 percent or more in non-federal cost match.

Comprehensive Community Infrastructure Components

The following items were selected from the Comprehensive Community Infrastructure Components:

Middle Mile

BIP Applicants

Have you also applied to BIP for funding in the sample proposed funded service area?

- No

If Yes, please provide the project title and Easygrants ID number:

Title of Joint BIP Application:

Easygrants ID:

Other Applications

Is this application being submitted in coordination with any other application being submitted during this round of funding?

- Yes

Easygrants ID	Project Title
4853	Utah Anchors: A Community Broadband Project
362	Utah Anchors: A Community Broadband Project

If YES, please explain any synergies and/or dependencies between this project and any other applications.



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The round one (Easygrants ID #362) and round two (Easygrants ID #4853) middle mile applications: “Utah Anchors: A community broadband project” were submitted by the University of Utah on behalf of the Utah Education Network (UEN). They will provide broadband connections for many schools and libraries throughout Utah. In connection with the first grant awarded to UEN and their round two application, UEN and the Utah Telecommunication Open Infrastructure Agency (UTOPIA) will partner to provide many of these broadband connections for underserved schools and libraries. The first round connections are located within four member cities that are part of our current application – Orem, Layton, Murray, and Payson. Once completed, these connections for UEN will serve as an additional platform for UTOPIA to continue building to other nearby anchor institutions and facilities as part of this application. The Utah Telecommunication Open Infrastructure Agency Community Partnership Project would make the additional connections possible to create a truly comprehensive community network. In summary, the Federal funds awarded to UEN in round one will be fully utilized to directly connect schools and libraries through UEN, but upon successful award, UTOPIA will have the opportunity to leverage that investment to connect many other anchor institutions and government facilities with the additional funding.

Individual Background Screening

Is the Applicant exempt from the Department of Commerce requirements regarding individual background screening in connection with any award resulting from this Application?

- Yes, Applicant is exempt because it is a unit of a state or local government

If the answer to the above question is "No," please identify each key individual associated with the Applicant who would be required to complete Form CD-346, "Applicant for Funding Assistance," in connection with any award resulting from this Application:

Name	Title	Employer

B. Executive Summary, Project Purpose and Benefits



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Essay Question

Executive Summary of the proposed project:

In 2002, 16 Utah municipalities – frustrated by the inability (or unwillingness) for local incumbent telecom providers to establish adequate connectivity to their institutions of learning, economic development, and to their citizenry as a whole – moved forward with a major broadband initiative. They began to establish open-access, active-Ethernet, fiber-to-the-premise broadband infrastructure as a state interlocal agency: the Utah Telecommunications Open Infrastructure Agency (UTOPIA). From its inception, the comprehensive project planned to provide a ubiquitous build to every citizen, first responder, library, school, college, public safety entity, and anchor institution in the respective municipalities. At its core, that’s precisely what UTOPIA is: the answer to the cumulative need of the 500,000 residents in these Utah cities. However, UTOPIA’s progress has been impeded and all but halted. The residents of these communities have been unable to get the broadband services for which the network was formed. Eight of these 15 cities, representing a population of about 375,000, are requesting BTOP funding to further deploy the network into sections of their communities.

As national economies have suffered, the cities of UTOPIA have felt the severe effects of that storm. The network’s funding capabilities (and therefore deployment) have been critically restricted. If awarded, the BTOP grant will produce nearly 220 new jobs across the board, host myriad economic development projects, and complete an additional 20% of the needed network infrastructure. UTOPIA’s total grant request for just over \$16.2 million dollars goes entirely towards middle mile infrastructure and connectivity. UTOPIA, however, maintains a unique advantage through its recently proven, groundbreaking, last-mile, sustainable broadband deployment methodology and practices. The requested middle mile infrastructure will directly, yet independently, support UTOPIA’s unique last mile infrastructure model, a program based on pre-sales. Each of UTOPIA’s municipal regions are segmented into broadband footprints, engineered to accommodate, on average, 800 subs per footprint. UTOPIA deploys fiber-to-the-premise in a last mile scenario only as predetermined take rates are realized in both residential and business sectors in these footprints. By establishing market demand upfront and requiring participants to share in the financial burden of construction, UTOPIA deployments attain the highest level of sustainability. Even though deployments require consumer buy-in, recent “first-time through” takes rates in UTOPIA footprints have been as high as 30 to 40%. Such unprecedented takes rates document significantly underserved community needs.



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Clearly, UTOPIA is not requesting BTOP funding for last mile infrastructure; however, a successful grant would result in last mile deployment to thousands of citizens and businesses. UTOPIA’s sustainable fiber deployment is more than mere speculation or forecasting. Rather, it is based on sustainable last mile models that have been proven by UTOPIA’s team of engineers; operations, outside plant and marketing professionals; and management team. They have a vast body of experience, knowledge, and capability that support UTOPIA’s public/private partnership, wholesale/retail-split, fiber-to-the-premises model. UTOPIA maintains strong public-private partnerships with 12 service providers and three long-haul circuit providers. UTOPIA has both local and national service providers offering traditional services, including internet connectivity between 10MB and 1 Gig, and next-generation technologies such as working cloud computing services, next-generation video products, and HD voice. UTOPIA currently supports infrastructure to nearly 50,000 addresses with well-established, scalable methods and procedures to meet its obligations to retail service providers and customers alike.

The requested middle mile infrastructure will not only accommodate the nearly 400 anchors institutions: 39 schools, 1 library, 55 medical or healthcare providers, 161 public safety entities or facilities, 3 salt lake community college locations, 13 public housing facilities, 104 government facilities, and 19 other institutions or organizations, but will enable the cities to extend the infrastructure through the sustainable last mile program to a high percentage of its nearly 400,000 citizens.

Historic collaboration has resulted in strong partnerships with many public safety and government entities such as the Utah Department of Transportation (UDOT) and the Utah Transit Authority (UTA). Extending the UTOPIA fiber infrastructure into the proposed service areas will allow expansion of UDOT’s and UTA’s capabilities while avoiding a requirement for them to seek additional funds for the telecommunications aspects of their projects. These connections will provide strategic locations for robust network access by EMS, police, and fire personnel not currently available and traffic signal monitoring and synchronization to coordinate safe traffic flows in and out of the city. The UTOPIA all-fiber true broadband network provides an exceptional platform to support emergency services and other municipal functions provided by UTOPIA’s member cities. UTOPIA has also formed a close linking partnership to provide infrastructure for the the Utah Education Network (UEN) which was recently awarded \$13.4 million in Recovery Act BTOP funds for “The Utah Anchors: A Community Broadband Project” in Round 1.



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Our partnerships within the UTOPIA cities, among these anchor institutions, and together with our service providers create a strong network. It's said that "Many hands make light work" but in UTOPIA's case, many hands do more than ensure our network will be a success. The many hands of our partnerships make innovation possible, make improvement possible, make economic growth possible, and make opportunities to extend meaningful services in our communities possible. We're accustomed to the kinds of partnerships in which our cities, providers, and anchor institutions work together to provide computer centers to the Boys' and Girls' Club and offer high quality services to non-profits at a reasonable cost. These partnerships allow forward-thinkers to bring new industries into the state. These partnerships enhance emergency services and improve public safety. These partnerships not only make our network a success, they make our communities a success. It's that end that will make the BTOP funds invested in UTOPIA the most successful – to the cities of Perry, Layton, Centerville, West Valley City, Midvale, Murray, Orem, and Payson, this needed infrastructure is just the beginning.

Project purpose:

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) seeks to address a compelling need for significantly better broadband services within multiple cities situated in the northern half of Utah. Critical demand wasn't initiated when BTOP announced its current funding opportunities. The critical needs expressed herein were strongly expressed years ago by the collective voice of the people and various state and other municipal organizations.

Today, there are nearly 400 anchor institutions located throughout these cities (consisting of educational facilities, healthcare facilities, public safety agencies, government facilities, and other community-serving organizations) that have not only expressed demand, but also provided support, intent and commitments to connect to better high-speed broadband services. However, without additional funds through BTOP, these anchor institutions will continue to be underutilized by patrons and will struggle to meet the needs and demands of their respective communities. The basic needs for communities to efficiently communicate and monitor utilities, for schools to provide quality education to students, and for police and fire agencies to transmit and receive critical information are currently very limited, as detailed in the numerous letters UTOPIA has received from these institutions and agencies – and which are included in this grant.

In light of these needs and demands, the cities of UTOPIA propose to offer a solution through this CCI project. This project will provide high-speed broadband access through fiber-optic lines



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directly connected to any given institution, facility or agency, and will provide high-speed symmetrical connections through multiple service providers at 10Mbps and higher. The open-access model creates an environment where services are available at very competitive rates – in many cases, lower costs than those currently available from incumbent providers. This competition creates other incentives for providers related to performance, cost, customer service and response times to better meet consumers’ needs. These benefits bolster economically depressed areas, stimulate job creation, and increase economic development.

The University of Utah, in partnership with the Utah Education Network (UEN), received ARRA funding through NTIA in Round One to directly connect educational facilities and libraries . Nine of these connections will be provided by UTOPIA. This project will not only extend this same type of connectivity to many more anchor institutions, public safety agencies and government facilities along the Wasatch Front, but by providing improved connectivity to existing service providers, the project will eventually allow for improved access and connections in the homes of students, parents and teachers associated with these educational facilities.

This project directly fulfills three primary statutory purposes of the BTOP program. Specifically, this project will provide awareness, access, and support to schools, libraries and health care providers, as well as other community support organizations along the Wasatch Front that have expressed a need for improved broadband services by providing them with dedicated, high-speed, symmetrical broadband service connections .

As demonstrated by supporting data, the incumbent service providers in these locations offer connection speeds and performance far below what is demanded by today’s consumers. Communities continue to express a need for significantly improved broadband speeds and availability at a reasonable cost. But cost isn’t the only factor; the incumbent’s services are so oversubscribed that consumers can only achieve a fraction of advertised speeds.

This project seeks to provide better Internet speeds to incumbent service providers (as they’re able to use our open network) and to install upgraded, direct connections to anchor institutions, including local and state public safety agencies such as fire, police, 911 dispatch, ambulance and other EMS services. UTOPIA will improve access to, and use of, broadband service by providing upgraded connections directly to key locations identified throughout the service areas. The proposed network will also provide improved access to, and use of, upgraded broadband service by local, county, and state government agencies including job-creating facilities located



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in state or federally designated economic development areas, as designated on the service area maps. In summary, this project will deliver reliable high-speed broadband connections to hundreds of community institutions and agencies and will stimulate the demand for broadband in order to promote economic growth throughout the proposed service areas and beyond, both in the short term and in the future.

Recovery Act and Other Governmental Collaboration:

As a political subdivision of the state and an extension of its member cities, UTOPIA has exceptional access to other recovery act initiatives in Utah. The Agency coordinates with other state and local entities – and recommends parallel telecommunications infrastructure when it complements the mission of the project’s sponsoring entity.

Historic collaboration has resulted in current joint-facility user agreements with the Utah Department of Transportation (UDOT) and the Utah Transit Authority (UTA). In addition to joint facilities use, UDOT and UTA use the UTOPIA infrastructure to enhance services. UDOT uses the UTOPIA network in its traffic monitoring and management systems. UTA uses the UTOPIA infrastructure to provide data services on its commuter rail system. Extending the UTOPIA fiber infrastructure into the proposed service areas will allow expansion of UDOT’s and UTA’s capabilities while avoiding a requirement for them to seek Federal funds for the telecommunications aspects of their projects. For example, many of the UDOT and community traffic signals along Utah State roads will be directly connected as part of this project and many of these roads are constructed using state and federal funds obtained through loans or grants. These connections will provide strategic locations for robust network access by EMS, police, and fire personnel not currently available and traffic signal synchronization to coordinate safe traffic flows in and out of the city. The UTOPIA all-fiber true broadband network provides an exceptional platform to support emergency services and other municipal functions provided by UTOPIA’s member cities.

UTOPIA has also formed a close linking partnership with the University of Utah and the Utah Education Network (UEN) which was recently awarded \$13.4 million in Recovery Act BTOP funds for “The Utah Anchors: A Community Broadband Project” in Round 1. The UEN project plans to enhance and expand the Utah Education Network (UEN) by deploying fiber-based Ethernet broadband services to 130 anchor institutions across the state, including elementary schools, public libraries, charter schools, and Head Start centers. The UEN project expects to enable these anchor institutions to move from copper-based T1 or slower connections to fiber-based Ethernet broadband connections with speeds of 100 to 1Gbps. UTOPIA is providing these fully scalable dedicated connections in member cities in conjunction with funds awarded through



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the UEN/University of Utah Recovery Act BTOP Round 1 application. This collaboration has eliminated the potential for duplicate applications for the same facility and expands the UTOPIA network to hundreds of additional anchor institutions within the communities.

Fit with BTOP CCI Priorities:

All seven of the BTOP priorities are met by the key objective of this project, which is to deploy middle mile infrastructure by constructing new fiber optic broadband infrastructure and any associated laterals for direct connections required to connect organizations in need throughout multiple Utah communities. This project comes with a commitment from each community to provide, through UTOPIA, a significantly upgraded and accessible broadband connection at reasonable prices throughout their community to almost 400 anchor institutions including:

1. K-12 education facilities
2. Community colleges and other institutions of higher learning
3. Government and public safety agencies and facilities
4. Other key community support facilities and organizations

These anchor institutions have expressed a need through written letters and verbal conversations. Of the almost 600 potential anchor institutions only 33% have not presently expressed an interest to connect and may be connected after this initial project for only a modest expense.

This upgraded comprehensive community network will collectively strengthen education, health care, and public safety organizations by allowing key community stakeholders to share information and communicate efficiently with one another and other vital entities. It will also allow for innovative new approaches to community safety and support.

This improved and significantly upgraded access to very high speed, reliable broadband services will not only bolster economic growth for existing businesses, but will attract new businesses and home owners and will increase the value and attractiveness of the overall community.

UTOPIA's partner communities understand the value this project will bring, and they understood this many years ago when this consortium was formed. As part of their commitment to this project, they will provide more than a 30% cash match, as indicated by their letters of commitment and other supporting documentation.



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Is the applicant seeking a waiver of the Buy American provision pursuant to section x.Q of the NOFA?

- No

Is the applicant delinquent on any federal debt?

- No

If Yes, justification for delinquency:

Are you seeking a waiver of any requirement set forth in the NOFA that is not mandated by statute or applicable law?

- No

Is the applicant a current recipient of a grant or loan from RUS?

- No

C. Partners

Are you partnering with any other key institutions, organizations, or other entities for this project?

- Yes

If YES, key partners are listed below:

Project Role: Other Name: Pyle, Wayne Phone: 8019633438 Email: wayne.pyle@wvc-ut.gov Address 1: 3600 Constitution Boulevard Address 2: Address 3: City: West Valley City State: Utah Zip Code: 84119 Organization: West Valley City Organization Type: City or Township Government Small business: No Socially and economically disadvantaged small business concern: No
Project Role: Other Name: Reams, Jim



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Phone: 8012297035
Email: jareams@orem.org
Address 1: 56 North State Street
Address 2:
Address 3:
City: Orem
State: Utah
Zip Code: 84057
Organization: Orem City
Organization Type: City or Township Government
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Other
Name: Jensen, Alex
Phone: 8013363800
Email: ajensen@laytoncity.org
Address 1: 437 North Wasatch Drive
Address 2:
Address 3:
City: Layton
State: Utah
Zip Code: 84041
Organization: Layton City
Organization Type: City or Township Government
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Other
Name: Haacke, Blaine
Phone: 8012642715
Email: bhaacke@murray.utah.gov
Address 1: 4646 South 500 West
Address 2:
Address 3:
City: Murray
State: Utah
Zip Code: 84123
Organization: Murray City
Organization Type: City or Township Government
Small business: No
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<p>Project Role: Other Name: Loader, Kane Phone: 8015677206 Email: kbloader@midvale.com Address 1: 655 West Center Street Address 2: Address 3: City: Midvale State: Utah Zip Code: 84047 Organization: Midvale City Organization Type: City or Township Government Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Other Name: Lutz, Blaine Phone: 8012953477 Email: blainel@centervilleut.com Address 1: 250 North Main Street Address 2: Address 3: City: Centerville State: Utah Zip Code: 84014 Organization: Centerville City Organization Type: City or Township Government Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Other Name: Nelson, Rich Phone: 8014655207 Email: richn@payson.org Address 1: 439 W Utah Avenue Address 2: Address 3: City: Payson State: Utah Zip Code: 84651 Organization: Payson City</p>



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Organization Type: City or Township Government
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Other
Name: Murray, Duncan
Phone: 4357236461
Email: duncan.murray@perrycity.org
Address 1: 3005 South 1200 West
Address 2:
Address 3:
City: Perry
State: Utah
Zip Code: 84302
Organization: Perry City
Organization Type: City or Township Government
Small business: No
Socially and economically disadvantaged small business concern: No

Description of the involvement of the partners listed above in the project.

There are many key partners and agencies that will be involved in the successful funding and execution of this project. The Utah Telecommunication Infrastructure Agency (UTOPIA) is the prime applicant working on behalf of many municipal funding partners to construct, operate and maintain this advanced open access fiber optic network. For many years, UTOPIA has constructed, maintained, and operated a successful fiber network and is currently the largest municipal fiber-to-the-premises, open access network operator in the United States. Today, UTOPIA continues to provide very competitive wholesale broadband services to other government entities and many retail service providers. Local municipal funding partners for this project consist of eight cities: Payson, Orem, Murray, Midvale, West Valley, Centerville, Layton and Perry.

These cities have partnered with UTOPIA in proposing to extend significantly needed and upgraded broadband services to hundreds of organizations such as education institutions, public safety agencies, and other government facilities. As key funding partners, these cities are committed to provide a 30% cash match to the proposed project costs for middle mile line and construction within their respective communities.



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After many years of collaboration with these partner cities, UTOPIA provides a strong organization that is ready to execute, deploy and maintain the network to effectively provide high quality services to bolster these communities as a whole.

As a non-profit government agency, UTOPIA can provide wholesale services directly to other government institutions and agencies, but UTOPIA cannot currently provide open access retail services directly to households and businesses. In order to provide these services to as many users as possible within these service areas, UTOPIA has partnered with multiple, for-profit, last mile service providers that provide retail consumers with direct sales and customer support related to broadband services. The following is a description of each service provider.

Brigham.net: Brigham.net started as a dial-up Internet provider in 1996, began web hosting in 1999, added DSL service in 2001, and started offering high-speed Utopia fiber connections in 2009.

Connected Lyfe: Connected Lyfe has launched the next generation of residential television, Internet and phone service on the Wasatch Front. Imagine; digital TV/HDTV, high-speed Internet and digital voice delivered to any device — any time, any place.

Fuzecore: Headquartered in Pocatello, ID, FuzeCore is a company dedicated to customer service and performance. Specializing in advanced IT Services such as Internet, VOIP, system integration, and custom application development.

Nuvont: Nuvont Communications provides quality digital phone nationwide. It also provides highspeed Internet and digital television on various residential fiber optic networks. They are committed to providing the best possible service and products.

Prime Time Communications: Prime Time Communications is a leading provider of integrated, IP-based services – including the fastest digital Internet, the clearest digital television and the richest digital telephone packages – over a cutting-edge, fiber optic network. Established in 2005, Prime Time offers premium services that stream directly to the home through a single, lightning-fast connection.

Veracity Networks: Veracity Networks is a CLEC that was formed in 2002 by three partners with 50 years of combined experience in the telecommunication industry. They were all tired of the un-kept promises, hidden fees, surcharges and other negative traits that plague so many



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companies in the industry. The need was recognized for a company that truly values the small and medium-sized businesses.

XMission: Founded in November of 1993 by Pete Ashdown, XMission is Utah's oldest commercial Internet Service Provider (ISP) and supports the largest customer base of any independent ISP in the state.

Voonami: As application service providers and data-centric businesses continue to grow, the need for secure, scalable space with diverse upstream Internet access is a mission-critical decision. Voonami's Data Center provides a solution that enables you to reap the benefits of their facilities, network and support services instead of investing in additional overhead associated with maintaining your own infrastructure and support.

Fibernet: Fibernet specializes in delivering high-quality Internet solutions to businesses. Their continually expanding family of services includes Internet access, hosting, managed IT solutions, design services and colocation in our state-of-the-art Fibernet Data Center facility.

Additionally, the partner cities and UTOPIA have worked together for many years and will continue to work in close partnership with many local and state public safety agencies, governments, education and health networks. These include the Utah Department of Transportation, the Utah Transit Authority, the Utah Education Network, Utah school districts, the Utah Telehealth Network, the Valley Emergency Communication Center, Intermountain Health Care, the Utah Communication Association Network, many EMS providers, Water Conservancy districts, and more. They have and will continue to play a vital role in providing access to facilities through the partner cities by creating truly comprehensive community networks which provide real-time collaboration, integration, and control between entities. Most importantly, these partnerships provide for greater public safety and quicker response times to emergencies.

D. Congressional Districts

Applicant Headquarters

- Utah



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Project Service States

Utah

Project Service Areas

Utah - 1

Utah - 2

Utah - 3

Will any portion of your proposed project serve federally recognized tribal entities?

- No

Indicate each federally recognized tribal entity your proposed project will serve.

Have you consulted with each of the federally recognized tribal entities identified above?

- No

E. Service Area Details

Is the applicant seeking a waiver for providing less than 100% coverage of a service area?

- No

Project Details

Service Area Type:

Middle Mile



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Service Area Name: Layton
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 22
Total Population in Proposed Service Area: 65,500
Total Number of Households in Service Area: 19,761
Total Number of Businesses in Service Area: 1,153
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 153
Unemployment Rate in the Service Area: 8
Median Income in the Service Area: 60,351
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75

Service Area Type: Middle Mile
Service Area Name: Perry
Rural Classification of the Last Mile Service Area: Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 8
Total Population in Proposed Service Area: 2,383
Total Number of Households in Service Area: 1,524
Total Number of Businesses in Service Area: 53
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 2
Unemployment Rate in the Service Area: 8
Median Income in the Service Area: 65,246
Estimated Percentage of Households with Access to Broadband: 75
Estimated Percentage of Households Subscribing to Broadband: 60



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Service Area Type: Middle Mile
Service Area Name: Centerville
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 6
Total Population in Proposed Service Area: 15,720
Total Number of Households in Service Area: 4,623
Total Number of Businesses in Service Area: 333
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 32
Unemployment Rate in the Service Area: 6
Median Income in the Service Area: 80,740
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75

Service Area Type: Middle Mile
Service Area Name: West Valley City
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 26
Total Population in Proposed Service Area: 123,500
Total Number of Households in Service Area: 35,485
Total Number of Businesses in Service Area: 3,298
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 163
Unemployment Rate in the Service Area: 7
Median Income in the Service Area: 53,662
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75



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Service Area Type: Middle Mile
Service Area Name: Murray
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 10
Total Population in Proposed Service Area: 28,129
Total Number of Households in Service Area: 18,448
Total Number of Businesses in Service Area: 2,911
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 66
Unemployment Rate in the Service Area: 7
Median Income in the Service Area: 55,816
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75

Service Area Type: Middle Mile
Service Area Name: Midvale
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 6
Total Population in Proposed Service Area: 28,129
Total Number of Households in Service Area: 10,706
Total Number of Businesses in Service Area: 1,359
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 34
Unemployment Rate in the Service Area: 7
Median Income in the Service Area: 49,154
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75



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Service Area Type: Middle Mile
Service Area Name: Orem
Rural Classification of the Last Mile Service Area: Non-Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 18
Total Population in Proposed Service Area: 84,324
Total Number of Households in Service Area: 24,219
Total Number of Businesses in Service Area: 3,810
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 111
Unemployment Rate in the Service Area: 7
Median Income in the Service Area: 55,148
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75

Service Area Type: Middle Mile
Service Area Name: Payson
Rural Classification of the Last Mile Service Area: Rural
Service Status of the Last Mile Service Area: Served

If Service Status is "Underserved" please select at least one applicable option from this list.

Total Square Miles in Service Area: 5
Total Population in Proposed Service Area: 17,439
Total Number of Households in Service Area: 4,060
Total Number of Businesses in Service Area: 342
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 30
Unemployment Rate in the Service Area: 7
Median Income in the Service Area: 56,889
Estimated Percentage of Households with Access to Broadband: 98
Estimated Percentage of Households Subscribing to Broadband: 75



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F. Community Anchor Summary

Community Anchor Summary	
Schools (k-12)	39
Libraries	1
Medical and Healthcare Providers	55
Public Safety Entities	161
Community Colleges	3
Public Housing	13
Other Institutions of Higher Education	12
Other Community Support Organization	7
Other Government Facilities	104
TOTAL COMMUNITY ANCHOR INSTITUTIONS	395
Historically Black colleges and Universities	0
Tribal Colleges and Universities	0
Alaska Native Serving Institutions	0
Hispanic Serving Institutions	0
Native Hawaiian Serving	1



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Institutions	
TOTAL MINORITY SERVING INSTITUTIONS	1

G. Project Benefits

Demographics

Jobs	
How many direct jobs-years will be created from this project?	70
How many indirect jobs will be created from this project?	70
How many jobs will be induced from this project?	78

Methodology used to estimate jobs:

Direct job years created were estimated based on staff required in the project work plan. Indirect job-years created were estimated by describing the scope of work in the work plan to suppliers and asking them to estimate the resources required to support the project. Induced jobs were based on a 2007 Brookings Institution report that found that "for every one percentage point increase in broadband penetration in a state, employment is projected to increase by 0.2 to 0.3 percent per year." This Brookings Institute estimate was applied to employment within the project area based on the project's goal to increase broadband penetration by 5% or more. Because the project will not provide statewide ubiquitous service, we halved the Brookings Institute derived number.

Project Impact:

The comprehensive community infrastructure project proposed by the Utah Telecommunication Open Infrastructure Agency (UTOPIA) provides significant and positive impact within many service areas. The proposed funded service areas will, in part, see benefits by (more detailed explanations follow):

1. Anchor Institutions: Providing broadband connectivity for nearly 400 anchor institution locations, including schools, libraries, medical facilities, public safety sites, housing, colleges and other institutions for higher learning, government facilities, and other community support organizations.
2. Public-Private Partnerships: Enhancing UTOPIA's current public-private partnership and extending it to new key community stakeholders, thereby encouraging innovation without stifling competition.



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3. Economically Distressed Areas: Deploying middle mile infrastructure into economically distressed areas and providing economic development opportunities.
4. Community College Campus Locations: Connecting three Salt Lake Community College campus locations.
5. Public Safety: Significantly improving public safety connectivity by both increasing the number of public safety sites connected and the bandwidth available.
6. Last Mile Opportunity: Improving the opportunity for UTOPIA's member cities and private partners to continue last mile, fiber-to-the-premises deployments throughout proposed funded service areas.

Anchor Institutions

The proposed project includes broadband connectivity for 395 community anchor institutions, including:

- 39 K-12 schools
- One library
- 55 medical or healthcare provider facilities
- 161 public safety sites
- Three community college campus locations
- 13 public housing complexes
- 12 institutions of higher learning other than community colleges
- Seven other community support organizations
- 104 other government facilities.

UTOPIA has also identified more than 400 additional anchor institutions that may be interested in subscribing to services on the network once it is available.

As the list of participating anchor sites suggests, the nature of services provided by the anchor institutions committed to and/or interested in UTOPIA's services is very diverse. Not surprisingly, their need for broadband connectivity reflects their diversity of services. Some organizations see an opportunity to add new services and capabilities. Others are drawn to the efficiencies that improved data connectivity can provide. Still others look forward to significant cost savings promised by, and legitimately available through, the UTOPIA network. One thing is universal: excitement. The excitement surrounding the possibilities available through fiber-to-the-premises permeates every communication between the anchor sites and the project team.

Public-Private Partnerships:

The cities that make up the UTOPIA interlocal agency recognized the need for 21st century telecommunications over ten years ago. After extensive research, the cities came to the conclusion that the status quo telecommunications environment discouraged aggressive



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technology improvement and competition. To a large degree, this was because incumbent network owners controlled the market with a duopoly, which is still in place today. Their duopoly control encouraged them to maximize return on investment rather than upgrade services. Incumbent networks only considered technology upgrades after receiving maximum return from the existing infrastructure. Furthermore, the focus on ROI clearly offers incumbent network owners a strong incentive to minimize potential competition. This worked for the incumbents' pocketbooks, but not for these cities' needs.

Initially, the cities believed they could motivate the incumbent network owners to agree to upgrade by offering reduced franchise fees and other subsidization. However, a review of the probable outcomes of these efforts suggests that these incentives have little impact on the root of the problem—the need to maximize return on existing infrastructure investment.

As the cities continued their study, they determined that in order to accelerate upgrades and spur competition, they would need to examine offering telecommunications services themselves. Fiber-to-the-premises systems seemed to be the most attractive solution. However, the cities feared that offering such services might drive away competition.

And then? The solution. In the end, the cities determined that the best way to both provide 21st century telecommunications infrastructure and spur competition was to address the natural monopolistic elements of telecommunications services. By building a state-of-the-art network and making it available to private-enterprise service providers, they were able to meet their goals. It's a business model that is very similar to that established by airport authorities throughout the nation. The airport authority (a public entity) addresses the natural monopoly elements of runways and air traffic control and makes them available to multiple competing private service providers (the airlines).

It is this public-private partnership that the contemplated project proposes to extend to new areas.

Economically Distressed Areas:

A key reason these cities were intent on providing 21st century telecommunications services to their residents was to improve education and economic development opportunities in economically distressed areas. Each participating city has identified areas to be served by the proposed project that they consider to be economically distressed. While each city's definition of an "economically distressed area" may vary from that found in 42 U.S.C. 3161, the project serves areas defined by government tools as economically distressed areas. These tools include the mapping tool found at http://hepgis.fhwa.dot.gov/hepgis_v2/GeneralInfo/Map.aspx (which only defines economically distressed areas by county) and by the more granular map at <http://map.sba.gov/hubzone/init.asp> (which captures 42 U.S.C. 3161 defined economically distressed areas by census tract).



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Community College Campus Locations:

Since the project's inception, Salt Lake Community College has expressed interest in the bandwidth available from the fiber-optic connectivity UTOPIA offers. The proposed project will allow the project to bring fiber to the Meadowbrook campus, the Redwood Road campus, and the Gunderson facility.

Public Safety:

The cities' decision to deploy a wholesale fiber-optic network was made easier by the public safety opportunities it allowed. The cities recognize the obvious value of broadband connectivity to their police and fire stations, as well as other consolidated public safety sites. But more than that, the cities recognize the opportunities for new and enhanced public safety services (particularly those that allow them to retain human capital and expand roles through greater efficiencies) that ubiquitously deployed fiber allows. Police, fire, and transportation entities have all expressed their desire to deploy real-time cameras that can be monitored from a central location in parks, at dangerous intersections, and other high risk locations.

To date, financial constraints have prohibited adequate expansion of the network to meet the needs of the cities' public safety organizations. The proposed project accomplishes this goal.

Last Mile Opportunity:

The proposed project does not contemplate any last mile infrastructure. Nonetheless, the project significantly enhances last mile opportunities in two key ways: 1) opportunities along middle mile routes and 2) opportunities for last mile deployment.

UTOPIA has identified 5,000 residential addresses and 1,250 business addresses along the middle mile routes in the proposed funded service areas. UTOPIA's engineering standards allow for these businesses and residences to connect to the fiber network with only incremental additional cost to the agency.

As funding sources are available to the cities, they intend to continue deployment of middle mile infrastructure. In addition, the proposed project extends opportunities for new last mile deployments that do not currently exist.

Vulnerable Populations:

No vulnerable population groups are overrepresented in the project's proposed funded service area.

Level of Need:

The cities of the Utah Telecommunication Open Infrastructure Agency (UTOPIA) need broadband connectivity. The anchor institutions within the interlocal agreement need a financially responsible, ubiquitously deployed, public-private, open access, fiber-to-the-premises



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(FTTP) network. The member cities need support to deploy the technology identified as necessary several years ago.

These member cities have identified areas and institutions that are unable to obtain the needed level of services. Although the proposed funded service areas fall within the broadband service areas of Qwest, Comcast, and wireless service providers, these anchor institutions have found the level of services available to be inadequate.

While a certain level of services provided by incumbent service providers in the area are often sufficient for basic needs, many of the anchor institutions in these communities (particularly those expressing commitments to the proposed UTOPIA project) have found that the constrained upload speeds limit their flexibility. As technology has continued to advance, more features have become available on the Internet, particularly two-way and cloud computing applications, which aid in better communication and more efficient business practices. These require a faster connection speed. Such features include computer-aided dispatch (CAD), records management and transfer, web-based crime database access, street mapping systems, video monitoring, converged IP services, telemedicine, telehealth, telework, video on-demand, bundled and stand alone services, IP digital video and voice services and full motion bi-directional video phone.

Aside from the broadband needs of these institutions, these cities require support out of the federal government's desire to stimulate and create health economies. The recent economic downturn and some unexpected issues with project performance have put the cities that had embarked on this solution in a difficult position—they are unable to fund the connections requested by anchor institutions throughout their boundaries.

Current service availability

Available broadband providers in the proposed funded service area include Qwest, Comcast, and several wireless providers.

Qwest offers ADSL and QMOE services throughout most of the proposed funded service area. A review of Qwest's web site reveals Qwest's business pricing for ADSL starts at \$55 per month for 1.5 Mbps download and .896 Mbps upload speeds. Qwest offers residential DSL products starting at \$30 for a 1.5/.896 Mbps product and going to \$55 per month for a 20/.896 Mbps product. Distance from the switch has dramatic impact on Qwest's ADSL service. While Qwest advertises 7, 12, and 20 Mbps service throughout the proposed funded service area, the technical limit for 8 Mbps ADSL is 9,000 feet. Any potential subscribers outside this range are limited to slower products. Pricing for Qwest's QMOE product line is only available on a case-by-case basis. However, installation fees for QMOE have been reported to UTOPIA ranging from



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\$1,500 to \$3,000 or more. These high costs of installation are prohibitive for many of the public safety uses identified in the attached letters.

Comcast offers data services in most of the proposed funded service area on a DOCSIS 3.0 upgraded coaxial network. According to their web site, Comcast can offer business services starting at 6/1 Mbps for \$60 per month to 50/10 Mbps for \$195 per month. Comcast's residential data products start at \$29.95 per month for 1/.384 Mbps service and range up to \$100 per month for 50/10 Mbps.

While these are advertised speeds, the nature of a DOCSIS network results in significant variance in actual delivered speeds. Consistency in delivered speeds is highly dependent on the oversubscription policies on the network. In much of the proposed funded service area, the only competition Comcast faces is from Qwest and certain wireless providers. Therefore, Comcast is free to oversubscribe to a point where typical service competes with speeds available on the ADSL and wireless networks.

There are a number of wireless service providers offering services throughout the proposed funded service area. Some of them have very limited service areas while others are more fully deployed. Pricing and service offerings amongst them is similar. For the sake of this conversation, we will use Digis as a representative of wireless providers in the area.

A review of the Digis website reveals that it offers business services ranging from 1.5/.512 Mbps for \$50 per month to 4/2 Mbps for \$100 per month. Residential services range from 1.5/.512 Mbps for \$30 per month to 5/2 Mbps for \$35 per month. Wireless service speeds are impacted by oversubscription policies at aggregation antennae sites and can be impacted by weather conditions.

Most of the wireless offerings in the proposed funded service area are fixed wireless services requiring a fairly large (about a two-feet in diameter) receiver.

When considering the state of telecommunications services within their boundaries, the cities have identified certain objectives:

1. Encourage economic development through the availability of 21st century telecommunications services,
2. Improve available telecommunications services through innovation and pricing driven by private-sector competition,
3. Improve governmental efficiencies and public safety through enhanced online services and other network capabilities,
4. Improve quality of life by creating a richer communication and entertainment environment, enhancing home business opportunities, and improving telecommuting opportunities (perhaps mitigating traffic), and



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5. Ensure services are reasonably available to all residents.

As the cities evaluate the incumbent network owners' ability and intent to meet these policy objectives they find that:

1. Incumbent network owners' networks neither encourage nor discourage economic development relative to all other incumbent network owner areas. The cities have found that incumbent network owners could not be adequately incentivized to upgrade networks because the private businesses must maximize their return on their network investment. With limited competition, the incumbent network owners are more likely to err on the side of conservative network upgrades.
2. Private-sector competition in the proposed funded service area is limited by the duopoly nature of incumbent network owners. The cities also found that the tendency of the network providers is to upgrade their networks when they have an opportunity to preclude third-party providers.
3. Certain government facilities are simply not cost effective to connect to private networks. One of the cities' governmental efficiency objectives is to increase their ability to monitor public spaces and dangerous intersections. This is necessary to allow police departments and other local law enforcement agencies to extend their reach and effectiveness with the limited resources assigned to the task. Currently none of the incumbent network services are effective for using cameras needed for such an operation.
4. Because of limited incentives to improve existing networks and restricted competition for subscribers, incumbent network owners fail to innovate at a pace that effectively differentiates quality of life factors. Furthermore, any innovations would fail to distinguish the cities from other communities with the same incumbent providers.
5. Franchise agreements require incumbent network owners to be reasonably available to all residents; however, they do not drive quality of service guarantees in all areas. Oversubscription and other incumbent network owner policies have created pockets of substandard connectivity within the cities.

What would meet our objectives?

After the cities established the gap between their policy objectives and the incumbent network owners' ability or the desire to help meet them, they asked themselves the question, "What would meet our objectives?" In answering this question, the cities determined that the primary contributor to the gap was the need for incumbent network owners to realize maximum returns from their expensive network deployments. This need causes the network owners to minimize competition when they legally can and to postpone upgrades as long as possible. The cities further realized that if they were to enter into the telecommunications market, it would likely



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have a dampening effect on competition. The cities determined the only way to meet the need defined by their policy objectives was to establish a financially responsible, ubiquitously deployed, public-private, open service, fiber-to-the-premises (FTTP) network. From this solution, the UTOPIA project was born.

Having established a real need, the cities took on the duty to finance and build the network. The project experienced funding challenges, which have been exacerbated by the financial circumstances of the last two years, and is now in a position where new construction has halted. The need has not changed since the cities initially started the project, except that it has become more urgent. Only with grant funding can the project continue to grow to meet the cities' established needs.

In addition to meeting the policy objectives, the proposed comprehensive community infrastructure project creates an opportunity to generate new revenue to offset UTOPIA's current shortfalls. The project estimates that it will reach revenues to meet its monthly obligations once it has passed 80,000 to 100,000 addresses. Currently the project only has 50,000 passed addresses. The proposed project not only connects nearly 400 anchor institutions but directly passes 5,000 residential addresses and 1,250 businesses.

New subscribers will not only be gained initially through this project, but there will be new potential to add many more addresses at affordable service fees, either by private investment or by new city investment, at such time as the economy allows them to do so. These new subscribers will generate new revenue that will offset some of UTOPIA's existing shortfall.

H. Technology

Technology Type

Indicate the technology that will be used to deliver last mile services. The following items were selected:

Wireline - Fiber-optic Cable

Other:

Technology Questions

Methodology for Area Status:

The communities served by this project have demonstrated a significant need for substantially upgraded broadband connections. While the services provided by commercial service providers



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in the area are good, many of the anchor institutions expressing commitments to the proposed project have found that the constrained upload speeds limit their flexibility. As technology has continued to advance, more features available on the Internet which aid in better communication and more efficient business practices require a faster speed. Such features include computer-aided dispatch (CAD), records management and transfer, web-based crime database access, street mapping systems, video monitoring, converged IP services, telemedicine, telehealth, telework, video on demand, bundled and stand alone services, IP digital video and voice services and full motion bi-directional video phone.

In part, our methodology to determine these areas are underserved comes from within the community itself, based on the demands indicated above. Public safety agencies, local and state governments, key project partners, healthcare providers, and education facilities—including three locations owned by Salt Lake Community College—have all written letters demonstrating a need for improved connectivity, and outlining some of the consequences of poor connectivity. Although the service areas proposed for this CCI project are not “underserved” or “unserved” as defined in this NOFA, these letters clearly demonstrate that the needs of these communities and anchor institutions are not being met by the incumbent providers, it is apparent that this project will significantly impact and benefit these communities. These project partners are willing to put their money where their mouth is and match funds to connect these anchor institutions to high-capacity broadband through the Utah Telecommunication Open Infrastructure Agency (UTOPIA).

Description of Network Openness:

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) was founded specifically to create an environment where consumers are presented with competition and choice among network, application, content and service providers. By virtue of its very charter, nondiscrimination and interconnection underpin every one of UTOPIA’s technical and business decisions.

There is a revolution growing around access to information. A brief lesson from the personal computing industry sets the stage: for more than 40 years, IBM dominated the computing industry, maintaining market share by tying application software to specific hardware and by tying individual hardware components together in proprietary packages. Their focus on keeping control led them to misread the growing demand for smaller, more accessible computing services. In the 1970’s, a grassroots revolution to create “personal” computers with interchangeable components and application software that could run on multiple vendors’ hardware grew in basements and garages across the country. This “open” model was a disruptive



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force. Ultimately, it led to the marginalization of mainframe computers and of IBM as a computer manufacturer.

Today, a similar revolution around broadband telecommunications informs our decisions. For decades, Bell Telephone, the “Baby Bells,” and a handful of cable providers have maintained monopolistic control of the country’s networks. Obviously a telecommunications network can’t be easily built in one’s garage, but the sentiment is similar and pervasive. The cities of UTOPIA joined by creating an open service provider, or open access, network.

UTOPIA exists to enable 21st-century applications by giving true choice on true broadband. There are few networks or service providers who more fully epitomize nondiscrimination and interconnect as defined by the FCC’s Internet Policy Statement and the NOFA’s nondiscrimination and interconnection obligations.

UTOPIA maintains best practice network management policies to ensure their transport does not discriminate against content or applications. Additionally, UTOPIA encourages their service providers to ensure that consumers can access lawful Internet content of their choice, run applications and use services of their choice, and connect their choice of legal devices to the network (as long as they’re not harmful).

Nonetheless, UTOPIA leaves ISP business practices to the free market, so a service provider could choose to block lawful content (such as pornography) or discriminate against applications and services their consumers desire (such as BitTorrent). If a subscriber is unhappy with a provider’s non-discrimination policy, the subscriber has the opportunity to select another provider on the network.

To help service providers provide their consumers with the very best experience available, UTOPIA provides interconnect points at multiple “carrier hotels,” where large capacity connections can be had to the global Internet.

System Design:

Physical Design

The UTOPIA network spans several cities, as found in the attached design maps and network diagram.

The UTOPIA network has several Internet Points of Presence (PoP). They include the following:

- Level 3 - 572 S Delong St, Salt Lake City UT 84104
- Center 7 – 357 South 670 West, Lindon, UT 84042
- Kearns Building – 136 South Main Street, Salt Lake City, UT
- Tonaquint Data Center - 1108 West 1600 South Street, St George, UT 84770



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- Veracity Networks Operations Center – 744 North 800 West, Provo, UT 84601
- Fibernet Data Center – 1155 South 800 East, Orem, UT
- Voonami Data Center - 510 East Technology Ave, Bldg C, Suite 1100, Orem, UT 84097

Network Hardware Design

The Internet PoPs are connected to the UTOPIA Core network. The core network links run on an Adva Optical Network RayExpress II DWDM platform. The equipment allows up to 40 channels of 10 Gig Ethernet on long distance fiber infrastructure. These links provide connectivity for all of the core switches consisting of four Alcatel-Lucent 7450 ESS-12 switches that act as Regional Core Switches (RCS) and fourteen Alcatel-Lucent 7450 ESS-7 switches that act as Distribution Core Switches (DCS) with two additional DCSs being proposed for Centerville. All DCS and RCS interconnections are 10 Gige links.

The DCSs serve as aggregation devices for all of the downstream Access Distribution Switches (ADS). The ADSs are Riverstone 8600 switches in older areas, and Alcatel-Lucent OS-6400 switch stacks in newer areas. In older areas each ADS is connected to a pair of upstream DCSs using single Gige links. The DCSs are configured with multi-chassis Link Aggregation Control Protocol (LACP) to enable automatic failover in the case of a fiber cut or device failure. In newer areas, the links between each ADS and upstream DCS are increased to 2 Gbps using a pair of bonded Gige links on each path.

Network Interface Devices (NID) serve as the final demarcation point for customer services. These devices are typically Allied Telesis iMG606BD media gateways. They have a 100 Mbps uplink to the upstream ADS, and six 100 Mbps customer facing ports. These devices are remotely managed and feature per-port rate limiting, priority queuing, multiple VLANs, and other features that enable various combinations of services to be delivered to each demarcation location. They are installed with a Cyberpower UPS that gives them up to 8-12 hours of power in the case of the power outage.

In the design, the typical path from a service provider Internet connection uses the following path.

PAS -> RCS -> DCS -> ADS -> NID

Logical Network Design

The UTOPIA network is designed as a Carrier Ethernet network. This type of network delivers circuits using standard Ethernet-based mechanisms that make the network architecture transparent to the service provider and end user.

In the UTOPIA network, the service provider interconnections are made using Ethernet Gige interfaces using 802.1q VLAN tags to separate different services and/or end customers. The



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Ethernet circuits are then delivered through the MPLS-based network core using Virtual Private LAN Services (VPLS). This includes all RCS and DCS devices. From the DCS, the circuit is then translated to a VLAN on the ADS and traverses through the ADS and NID on this same VLAN. At the egress port of the NID, the VLAN tag is removed and the customer can communicate on the circuit with untagged VLAN traffic. This design allows each port on the NID to deliver circuit endpoints that may originate from various service providers and/or various physical locations.

The design eliminates the need for Layer-3 routers within the UTOPIA provided circuits and is highly advantageous in an open-access network, because it allows each service provider or customer the freedom to use any IP addressing schema that they choose. Service providers may even use overlapping private IP address space because they are logically separated into different Layer-2 domains. This design also increases performance because it uses only Layer-2 switching mechanisms with no Layer-3 routing hops along the transport path.

Is the applicant seeking a waiver pursuant to section IX.C of the NOFA so as to sell or lease portions of the award-funded broadband facilities during their life?

No

I. Project Budget

Project Budget		
	Federal Grant Request	Match
Last Mile	0	0
Middle Mile	16,229,321	7,842,369
Total	16,229,321	7,842,369

Project Budget Total: \$24,071,690

Match Percent: 32.6%

Projects Outside Recommended Funding Range:



Outside Leverage



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Applicant is providing matching funds of at least 20% towards the total eligible project costs?	Yes
Matching cost detail	<p>The Total Project Budget is \$ 24,071,690 Cash and in-kind matches provided for this project will consist of the following contributions:</p> <p>Centerville City will provide a cash amount of \$484,112, or 2.01%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>Layton City will provide a cash amount of \$ 2,142,451, or 8.9%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>West Valley City will provide a cash amount of \$2,029,884, or 8.43%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>Murray City will provide a cash amount of \$690,117, or 2.87%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>Midvale City will provide a cash amount of \$558,421, or 2.32%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>Orem City will provide a cash amount of \$1,080,054, or 4.49%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p>



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	<p>Payson City will provide a cash amount of \$353,887, or 1.47%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>Perry City will provide a cash amount of \$18,393, or .08%, of the project budget as a grant match for equipment, buildings, professional services, and other upfront costs applied as direct costs to the project.</p> <p>The Utah Telecommunication Open Infrastructure Agency (UTOPIA) will provide an in-kind grant match valued at \$484,050, or 2.01%, of the project budget for premise equipment, operations support, and professional services as direct costs to the project.</p>
Unjust enrichment	This project is not receiving any Federal support for non-recurring costs in the area for which we are seeking an award.
Disclosure of federal and/or state funding sources	This project is not using any other Federal or state funds including all Universal Service Funds.
Budget reasonableness	<p>UTOPIA began construction of its municipal fiber-to-the-premises network in 2004 and has placed fiber infrastructure in front of more than 60,000 addresses during two major construction phases over the last five years. Throughout the project’s history, the Agency has used government best practice competitive bid procedures to select vendors offering the best prices for the highest quality. To ensure the bid processes are generating the best value, UTOPIA regularly turns to third-party experts to validate prices and identify cost reduction opportunities. To further ensure budget reasonableness, UTOPIA staff and contractors constantly review industry standards and practices to find cost saving efficiencies.</p> <p>UTOPIA’s extensive outside plant engineering guidelines are very effective at producing expected unit counts based on the construction scenarios typically encountered in a fiber-to-the-premise overbuild environment. By applying engineering guidelines to the proposed project areas, the Agency has developed very reasonable unit counts. Not only has UTOPIA executed due diligence in validating previous bids, the Agency is constantly vigilant for opportunities to reduce</p>



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	<p>costs and improve efficiencies. UTOPIA’s staff of technical experts constantly researches construction and network deployment trends. Vendor presentations of cost saving methods are regularly evaluated and prioritized to ensure implementation budgets remain reasonable in the context of new developments.</p> <p>UTOPIA has gathered an immense amount of data with regards to utility Rights-of-Way and easements within each of our member cities to help us estimate the proposed cost of the project \$24,071,690 with more accuracy than ever before.</p> <p>UTOPIA has based cost and unit estimates on benchmarks established through five years of history, competitive bid processes, expert advice on cost reduction and efficiency, and constant vigilance. The Agency is confident that the unit prices and total numbers of units estimated for this project are reasonable to deliver the proposed services in the designated proposed funded service areas on time and on budget.</p> <p>All of the estimated unit costs were based on the following: past RFP awards, multiple vendor quotes, industry standard wages or current wages of staff that is already in place, being an agency, UTOPIA has the ability to issue work based on the state contract policy. All of these best practices are part of a competitive bidding process, to which we strictly adhere.</p>
Demonstration of need	<p>UTOPIA has no alternative sources of funding to support a construction project on the level of the proposed comprehensive community infrastructure project. Furthermore, but for the contemplated federal funding, UTOPIA’s goal to build distribution rings to interconnect anchor institutions and support future last mile construction cannot move forward.</p> <p>UTOPIA’s vision of financially responsible, ubiquitously deployed, public-private open service, fiber-to-the-premises to meet public policy objectives has been partially realized to date by 11 municipalities leveraging future sales tax revenues. UTOPIA would not exist otherwise. The participating cities have maximized their ability to borrow against sales tax revenue to the extent allowed by Utah state laws restricting borrowing against a sales tax pledge to no more than 50% of funds needed for a municipal telecommunications</p>



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build. Even if the cities were not legally restricted in the amount they could borrow to grow the network and connect critical community anchor institutions, the covenants in place with existing bondholders would make it very difficult to add new debt to complete the proposed project. The cities have considered using general fund and other resources for the project but are constrained by the realities of the very financial situations that led to the passage of the ARRA. In sum, UTOPIA has no alternative sources of funding to support a construction project on the level of the proposed comprehensive community infrastructure project.

Furthermore, the contemplated project is not a fiscally responsible venture for the cities to undertake without grant funds or some other source of subsidization. As can be seen in the net present value analysis, without BTOP funding, the project has a negative \$17.2m net present value. Even with the requested 70% BTOP funding, the project has a negative net present value of \$3.9m. Only with BTOP grant funds and by the participating cities lending the project matching funds from their general fund in exchange for services and/or on deferred principal and interest payments can this project be completed. While the cities' general funds are not adequate to support the entire project, the public policy benefits derived from the project are sufficient to compel them to provide matching funds.

Not considered in the project financial analysis are revenues from future last mile deployments enabled by the proposed infrastructure. The proposed infrastructure significantly reduces the cost for future last mile deployments in the affected areas. The last mile implementation cost savings may eventually bring last mile deployment within reach of the cities or third-party network owners. New revenue generated by usage of the proposed infrastructure by potential last mile deployments could accelerate the project's ability to repay matching fund loans and could provide capital for future investments in other projects.

Funds to States/Territories



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States	Amount of Federal Grant Request
Utah	16,229,321

Funds to States/Territories Total: \$16,229,321

J. Historical Financials

Matching Funds			
	2007	2008	2009
Revenue	3,326,971	4,588,629	3,881,043
Expenditures	20,812,308	41,865,547	55,102,187
Net Assets	-17,485,337	-37,276,918	-51,221,144
Change in Net Assets from Prior Year	-37,933,929	-75,210,847	-126,431,991
Bond Rating (if applicable)			

K. Project Readiness

BTOP Organizational Readiness

The Utah Telecommunications Open Infrastructure Agency (UTOPIA) is an interlocal agency comprised by 16 cities. The Agency is governed by a Board of Directors made up of professional public servants and elected representatives from each member city, and selects from among itself an Executive Committee. The Executive Committee selects business professionals to serve as the Executive Director and other officers. In turn, the officers recruit and retain technical experts who manage the diverse aspects of the network, including network engineering, outside plant, operations, and marketing support.

Utah state law and the UTOPIA charter prevent the Agency from offering retail services. Rather, UTOPIA is similar to an airport authority. An airport authority provides and supports infrastructure to enable flights but it flies no planes. Private airlines offer the flights and interface with customers. Likewise, UTOPIA provides a state-of-the-art, fiber-to-the-premise network and



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supports it with network engineering, outside plant management, operations, and marketing, but provides no end-user services. Private service providers implement and support services and applications and offer their own unique sales and marketing, customer service, retail billing, and other services.

UTOPIA comes to this application with a vast body of experience, knowledge, and capability supporting public/private partnership wholesale/retail split fiber-to-the-premises. UTOPIA currently supports fiber-to-the-premises infrastructure to nearly 50,000 addresses. The Agency has well established scalable methods and procedures to meet its obligations to retail service providers and customers alike.

UTOPIA's engineering team maintains the logical layers of the network, and the outside plant team cares for the physical layers. Using remote management and other automated tools, UTOPIA's engineering team manages its geographically dispersed network largely from its West Valley headquarters. The outside plant team has divided itself into regional support teams that readily respond to issues. Through the Agency's relationship with the International Brotherhood of Electrical Workers Local 354 (IBEW), UTOPIA can easily expand or contract outside plant teams to meet seasonal and expansion needs.

UTOPIA's operations team maintains a 24x7x365 Network Operations Center (NOC) to respond to network alerts and to support the service providers. The NOC constantly monitors the performance of the network and proactively responds to potential issues. The NOC also provides order management and order fulfillment support using tools customized to match the Agency's business practices. As the network expands, Utah's technically savvy population provides excellent candidates for growing the team.

While UTOPIA offers no retail services itself, the Agency does provide marketing support. UTOPIA's marketing support team is instrumental in recruiting and supporting anchor institution connections.

Construction and Vendor Contracts

UTOPIA relies heavily on contractors and vendors to deploy this network and will rely on them to implement this project. As a government-based organization, by law, UTOPIA is required to have a competitive bidding process in order to secure the best contractors or vendors. Over the last five years building the network, we've built relationships with multiple contractors and vendors. Because our partnerships in the past have been positive, we know we have a strong base of contractors and vendors that are ready to take on new projects with our network and begin deploying quickly. Our Network Engineering Standards succinctly describe the network



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deployment standards, technology to be used and engineering formats required when designing the network.

Moreover, UTOPIA has current contracts with some of these contractors and vendors. While current vendors and contractors are not guaranteed work, we are ready for a quick proposal process.

Our engineering contractors were qualified through a Request for Qualifications process. If awarded the grant, we could immediately award the project to the best-qualified Engineering contractor.

In anticipation of the project, we have already written an RFP that would secure the materials designed for the network. We also have an RFP ready to be released for any other contractors wishing to participate in the competitive bidding process.

Customer Base

The UTOPIA Network is currently designed for use by multiple service and content providers who provide Internet/data, voice and video services, as well as providing enhanced services. These include enabling secure point-to-point connections, telecommuting, telemedicine and video conferencing. The wholesale transport allows multiple service providers to connect to our network and provide services anywhere on the UTOPIA network, including the locations that will be built as part of the Proposed Funded Service Area. UTOPIA has a large existing customer base connected through existing service providers, but there are no existing customers in the proposed funded service area. The scope of the project is to extend network infrastructure into areas where infrastructure is not currently constructed and extend the network to a new customer base.

UTOPIA provides the ability for service providers to interconnect at strategic regional and local locations. From there we carry or transport their connection and services over our fiber into the premise. Our fiber extends inside the building/premise and terminates inside at a UTOPIA-managed switch. The switch allows the customer to connect to their services. The switch also gives UTOPIA the capability to change/upgrade services at a moment's notice – at the customer's/provider's request and the ability for customers to get telecommunications services from several different service providers, if desired.

Licenses, Regulatory Approvals and Agreements

The majority of UTOPIA's infrastructure is placed within public rights-of-way or privately negotiated easements of licenses for the use of property.



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Tower leases: N/A

Equipment leases: UTOPIA is currently in the third year of a five-year equipment lease for construction equipment.

Building leases: UTOPIA currently leases its primary office location in West Valley City, Utah, and other collocation and cross-connection facilities.

Land leases: UTOPIA leases space for each of its community Central Offices and neighborhood hut locations, or separately negotiates for them through its engineers.

FCC Authorizations: N/A

State Authorizations: UTOPIA has contracts in place with the Utah Department of Transportation and the Utah Transit Authority to exchange the use of mutually-beneficial conduits and other facilities.

Video Franchising Agreements: UTOPIA's charter document, an interlocal cooperative agreement signed by all 16 UTOPIA cities, grants UTOPIA the right to use each city's rights-of-way, provided that UTOPIA service providers continue to remit such taxes and franchise fees to appropriate authority.

Leasing of Local Loops: Not applicable. Leasing of Other Necessary Facilities: UTOPIA has already obtained rights to use certain facilities under long-term leases or indefeasible rights of use.

Pole Attachment Agreements: UTOPIA has existing pole attachment agreements with all electrical entities, as well as with Qwest.

SPIN Number

Utah Telecommunication Open Infrastructure Agency
SPIN# 143031199

L. Environmental Questionnaire

Project Description

The proposed project will install middle mile distribution rings and middle mile laterals to anchor institutions in eight communities along the Wasatch Front, including Payson and Orem in Utah County; Murray, Midvale and West Valley City in Salt Lake County; Centerville and Layton in Davis County; and Perry in Box Elder County. The distribution rings provide middle



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mile infrastructure for potential last mile deployment of fiber-to-the-premises technology. The project will also provide high-speed broadband service connections directly to at almost 400 anchor institutions and agencies in these communities.

Proposed construction is characterized as urban overbuild upon already developed land. Where possible, UTOPIA constructs its lines via overhead attachments to power and communications poles owned by third parties. UTOPIA has existing pole attachment agreements with all electrical entities, as well as with Qwest—the second largest owner of poles within UTOPIA’s footprints.

Where underground installation of fiber optic lines is required, it will be done along utility easements next to roadsides in order to minimize environmental disturbance.

Property Changes

For each of the 79 huts proposed in this project, small parcels of land within municipal city limits will be leased, purchased, or traded for land or services with a business, church, school, or other land owner.

UTOPIA’s member cities are currently working to identify the needed locations. Each identified property will likely be zoned for commercial or agricultural use, depending on the respective cities’ requirements and the land available. All land parcels will be located on previously disturbed land. No federal land will be used for this project. UTOPIA will comply with all municipal zoning laws and other restrictions.

Buildings

The 80 10-by10-foot pre-fab huts used in the proposed project will be built on concrete slabs. One facility yields from 5-20 fiber cables which are buried underground to connect to the nearest overhead or buried utility line. All will be located on previously disturbed land parcels located within municipal city limits. The huts will support the almost 400 anchor locations within the project, as well as future last mile deployments.

Wetlands

UTOPIA’s construction project involves the installation of overhead and buried fiber optic cables in urban overbuild in the utility easement along existing roads. The project does not enter any wetlands areas as defined by the U.S. Fish and Wildlife Service. However, the project comes near wetlands in a number of places. Great care will be taken to avoid impacts to



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wetlands during construction. The following are construction sites by community that come near wetland areas.

WEST VALLEY CITY

Underground middle mile lines will be installed along Lake Park Boulevard (2400-2650 South) just south of Decker Lake, a marshy area west of a large office complex near Bangerter Highway.

CENTERVILLE

Overhead middle mile lines that will be installed along 1250 West will pass a small wetlands area just north of 75 North.

LAYTON

A proposed hut aggregation point will be located just north of a small wetlands area on the northeast corner of Golden Road and 1700 West. This aggregation point is approximately two blocks from an office complex and a Utah Career College location.

In addition, Middle mile laterals installed along Antelope Road will pass a small wetland area on the northeast corner of Antelope Road and Fort Lane.

Critical Habitats

UTOPIA's project lies within the broader habitat of two listed species, including the Peregrine Falcon and the June Sucker.

The June sucker, an endangered fish endemic to the Utah Lake system, spawns and raises its young along the Provo River late in the spring run-off.

The Peregrine falcon, a carnivorous species of concern, lives along the Wasatch Front. It nests along tall cliffs, usually below 6,000 feet elevation near or often directly above streams, rivers or reservoirs, though some sites can be several miles from water. It forages upon smaller birds in wetlands and open meadows.

All construction in the project is characterized as urban overbuild and will be installed on previously developed land. The project in Orem, Utah County, will not touch the Provo River or Utah Lake, where the June sucker lives. No critical habitat rules have been published for the Peregrine falcon.

Floodplain

UTOPIA's member cities are working closely with UTOPIA staff to determine final construction locations of fiber optic lines, 79 huts, and the one interconnector hub to be built along the Wasatch Front in Utah. Final engineering of construction plans is still under development and is



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subject to change in order to meet municipal, state and federal requirements. City planning and zoning officers who are working with UTOPIA have assured the organization that it will not be encroaching upon floodplains as identified by FEMA.

Protected Land

National Historic Buildings: With two exceptions, the project will not encroach upon historic properties. The Peteetneet Museum, Cultural Arts and Social Center, located in Payson, and the former Orem City Hall, in Orem, are anchor institutions to which the project will connect fiber optic lines. The former Orem City Hall, is presently used as the Telos Academy. However, the building was recently delisted from the registry

The Peteetneet building was restored in the last decade to serve as the community center. UTOPIA has contacted Chris Hansen at the Office of Utah State History to inform him of the proposed work at the Peteetneet building and will work closely with him regarding any changes to the property needed. A list of all buildings, as listed in the National Historic Registry, within one mile of proposed construction is included as an attachment to this application.

Archaeological Sites: Although most fiber optic lines will be installed on existing utility poles, some will need to be buried. Buried lines will stay within the public utility easement land strips along roadways, previously disturbed land. UTOPIA has provided Lori Hunsaker of the Office of Utah State History with maps of the proposed locations of the buried cable. Ms. Hunsaker has not expressed concern regarding UTOPIA's proposed project.

Tribal Lands: No project construction will take place on tribal lands.

Coastal Area

None of the Wasatch Front (the greater area encompassing the proposed project) is considered a coastal zone management area by the National Oceanic and Atmospheric Administration. The project will not take place within the boundaries of a coastal zone management area.

Brownfield

Construction for the project will occur at or near two cleanup sites under observation by the EPA. In both cases, the sites near or at construction locations are RCRA Corrective Action sites. RCRA Corrective Action involves the removal of contaminated soil, sealing the ground with a protective barrier, and adding new, clean soil upon which new buildings can be safely constructed. In this project, underground lines installed at or near the site will be buried at a maximum depth of 36 inches, which is too shallow to puncture the protective barrier. In addition,



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any buried lines would be installed only along utility easement corridors next to existing roadways. Human exposure and migration of contaminated ground water are under control at these sites. The following is a description of sites listed by city:

Midvale

Proposed middle mile laterals to anchors and proposed huts/interconnects will be built on the RCRA Corrective Action site, Midvale Slag located along 700 West. The site has been cleaned up, and new development is presently under construction; including a subdivision and a shopping center.

Orem

Underground middle mile laterals will be built along the street outside the former Geneva Steel, a site of RCRA Corrective Action. The steel plant, which closed in 2001, has completed the cleanup process.



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Uploads

The following pages contain the following uploads provided by the applicant:

Upload Name	File Name	Uploaded By	Uploaded Date
Service Offerings and Competitor Data	CCI Service Offerings and Competitor Data Attachment Final.xlsx	Marriott, Todd	03/26/2010
Network Diagram	UTOPIA Network Diagram Final.pdf	Marriott, Todd	03/26/2010
Build Out Timeline	Build-Out Timeline Attachment Final.docx	Marriott, Todd	03/25/2010
List of Community Anchors and Points of Interest	CCI Anchor Detail and POI Attachment Final.xlsx	Marriott, Todd	03/24/2010
Management Team Resumes and Organization Chart	Q18e - Management Resumes Final.pdf	Marriott, Todd	03/24/2010
Management Team Resumes and Organization Chart	Q18e - Organizational Charts Final.pdf	Marriott, Todd	03/24/2010
Government and Key Partnerships	FINAL OF ALL PARTNER LETTERS.pdf	Marriott, Todd	03/25/2010
Historical Financial	FY07 Final UTOPIA	Marriott, Todd	03/24/2010



**Broadband Infrastructure Application
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Submitted Date: 3/26/2010 6:04:06 PM		Easygrants ID: 5714	
Funding Opportunity: Broadband Technology Opportunities Program		Applicant Organization: UTOPIA	
Task: Submit Application - BTOP		Applicant Name: Mr. Todd W Marriott	

Statements	Audit Report.pdf		
Historical Financial Statements	FY08 Final UTOPIA Audit Report.pdf	Marriott, Todd	03/24/2010
Historical Financial Statements	FY09 UTOPIA FINAL Audit Report 12-16-09.pdf	Marriott, Todd	03/24/2010
Budget Narrative	CCI Budget Narrative Attachment Final.docx	Marriott, Todd	03/26/2010
Detailed Budget	CCI Detailed Budget Final.xlsx	Marriott, Todd	03/24/2010
Pro-forma Forecast	CCI Pro Forma Financial Projections Attachment Final.xlsx	Marriott, Todd	03/24/2010
Subscriber Estimates	CCI Subscriber Estimates Attachment Final.xlsx	Marriott, Todd	03/25/2010
Dashboard Metrics	CCI Key Metrics Dashboard Attachment Final.docx	Marriott, Todd	03/26/2010
Service Area Data	UTOPIA Service Areas Attachment Final.xlsx	Marriott, Todd	03/25/2010
Network Maps	Final-NetworkMap-MMSA.pdf	Marriott, Todd	03/25/2010



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Network Maps	Final-Centerville-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-LaytonMMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-Midvale-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-Murray-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-Orem-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-Payson-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-Perry-MMSA.pdf	Marriott, Todd	03/25/2010
Network Maps	Final-WestValley-MMSA.pdf	Marriott, Todd	03/25/2010
BTOP Certifications	BTOP Certificate.pdf	Marriott, Todd	03/22/2010
SF-424 C and D	Form SF-424C&D.pdf	Marriott, Todd	03/24/2010
Supplemental Information	Q17g - National Historic Registry Buildings Attachment Final.docx	Marriott, Todd	03/26/2010



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Supplemental Information	FINAL OF ALL SUPPLEMENTAL LETTERS.pdf	Marriott, Todd	03/26/2010
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