

# UTOPIA Comprehensive Community Infrastructure Budget Narrative

Applicant Name: Utah Telecommunications Open Infrastructure Agency (UTOPIA)

**EasyGrants Number: 5714** 

**Organization Type: Local or State Government** 

**Proposed Period of Performance: 8 quarters** 

**Total Project Costs: \$24,071,690** 

**Total Federal Grant Request: \$16,229,321** 

Total Matching Funds (Cash): \$7,357,319

**Total Matching Funds (In-Kind): \$485,050** 

Total Matching Funds (Cash + In-Kind): \$7,842,369

**Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 32.58%** 

#### 1. Administrative and legal expenses - \$60,925

- Provide a breakout of position(s) and time commitment(s) such as hours or levelof-effort, and salary information/rates with a detailed explanation, and additional information as needed.

The UTOPIA budget contains four separate administrative and legal expenses for the proposed project. This number represents 0.25% of the project total. The majority of administrative expenses for this project come from the preparation of this grant request. All costs within this section are going to be considered as in-kind contributions.

- 1. \$10,000 Legal expenses UTOPIA's general council will spend and estimated 100 hours of his time creating, reviewing and finalizing contracts supporting this project.
- 2. \$1,185 Billing Support Estimated costs of entering 395 anchor institutions customer data into our billing system by our Network Operation Center.
- 3. \$4,740 Other Support A one-time cost to provision 395 customer premise network interface devices for each anchor institution .
- 4. \$45,000 Grant Preparation The costs accumulated for grant preparation including time from internal GIS staff, operations staff, outside plant staff, consultants and grant writers

### Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

There are no cash matching funds for this section.

# - Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

The following table shows total in-kind matching funds for administrative and legal expenses.

Description	Unit Costs	Total units	Total Cost	Notes
Legal Expense	\$100	100	\$10,000	In-kind (a)
Billing Support	\$3	395	\$1,185	In-Kind (b)
Other Support	\$12	395	\$4,740	In-Kind (c)
Application Preparation Expenses	\$45,000	1	\$45,000	In-Kind (d)
TOTAL			\$60,925	

- a) The general council for UTOPIA will prepare and review contracts for engineering, materials, construction contractors and city facilities used for placement of pre-fab shelters.
- b) UTOPIA's network operations staff prepare all orders for the billing system including: Generating a work order, gathering all required customer information and ensuring requested match for work order and service expenses is properly accounted for. Expenses reflect services related to the 395 anchor institutions we will connect as part of this project.
- c) UTOPIA's Network Operation Center will be responsible for provisioning all 395 anchor institutions premise network interface devices with the services requested. It takes approximately 30 minutes to provision a device and to ensure all services are working properly.
- d) Application Expense incurred during application process (including travel, meetings, research, mapping, site surveys, etc.)

### 2. Land, structure, rights-of-way, appraisals, etc. - \$1,879,920

### - Provide description of estimated costs, proposed activites, and additional information as needed.

Because UTOPIA is owned by each member city, land space required for placing pre-fabricated cabinets and one hub was not added to the proposed project -- only the shelters themselves. UTOPIA is proposing the placement of two different types of shelters. This portion of the Budget represents about 7.81% of the project's budget.

Pre-fabricated Huts, also called Access Distribution Switch Aggregation Points, are 10 by 10 feet in diameter. There are 79 of these shelters planned. These shelters, when placed, will be able to serve all middle mile lateral anchor institutions, as well as 118,500 last mile residential subscribers.

The total cost of these shelters is \$1,856,421.

The Hut, also called a Distributive Core Switch Aggregation Point, will support the cabinets. The hub is planned for Centerville Utah. The cost of this shelter is \$23,499.

Description	Unit Cost	Total Units	Total	Notes
ADS Aggregation Point	\$23,499	79	\$1,856,421	Cash Match (a)
DCS Aggregation Point	\$23,499	1	\$23,499	Cash Match (b)
Total			\$1,879,920	

- a) Access Distribution Switch Aggregation Points, or cabinets, are used for both Middle Mile and Last Mile connections. These are the points at where fiber terminates and electronics are placed.
- Distribution Core Switch Aggregation Points, or hubs, are used to service ADS Aggregation Points. They also hold ADS switches for the area they are placed in.

# - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA's city partners will provide 100% of the funds in this category.

Percentage		Amount	
6.58%	\$	123,699	
29.12%	\$	547,433	
27.59%	\$	518,670	
9.38%	\$	176,336	
7.59%	\$	142,686	
14.68%	\$	275,972	
4.81%	\$	90,424	
0.25%	\$	4,700	
100%			\$1,879,920
	6.58% 29.12% 27.59% 9.38% 7.59% 14.68% 4.81% 0.25%	6.58% \$ 29.12% \$ 27.59% \$ 9.38% \$ 7.59% \$ 14.68% \$ 4.81% \$ 0.25% \$	6.58% \$ 123,699 29.12% \$ 547,433 27.59% \$ 518,670 9.38% \$ 176,336 7.59% \$ 142,686 14.68% \$ 275,972 4.81% \$ 90,424 0.25% \$ 4,700

 Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind Matching funds are included in this section.

### 3. Relocation expenses and payment - \$0

- Provide explanation for the relocation, description of the person involved in the relocation, method used to calculate costs, and additional information as needed.

No Relocation expenses or related payments have been included in this project's budget.

 Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

No cash match has been allocated in this section.

 Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind match has been allocated to this section.

### 4. Architectural and engineering fees - \$1,213,358

- Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed.

The project budget contains \$1,213,358 for architectural and engineering fees. The fees cover the actual outside plant engineering, staking, aerial make-ready, walk-out engineering and permitting. The cost to perform these activities is \$1 per foot. There is a proposed total of 1,213,358 feet of new build construction. This represents 5.04% of the total budget.

Description	Unit cost	Units	Total cost	Notes
Engineering	\$1	1,213,358	\$1,213,358	Cash Match (a)

a) UTOPIA's member cities will provide a cash match for this section of the project. This represents outside plant engineering, staking, aerial make-ready, walk-out engineering and permitting.

# - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA's city partners will provide 100% of the funds in this category.

Percentage		Amount	
6.58%	\$	79,839	
29.12%	\$	353,330	
27.59%	\$	334,765	
9.38%	\$	113,813	
7.59%	\$	92,094	
14.68%	\$	178,121	
4.81%	\$	58,363	
0.25%	\$	3,033	
100%			\$1,213,358
	6.58% 29.12% 27.59% 9.38% 7.59% 14.68% 4.81% 0.25%	6.58% \$ 29.12% \$ 27.59% \$ 9.38% \$ 7.59% \$ 14.68% \$ 4.81% \$ 0.25% \$	6.58% \$ 79,839 29.12% \$ 353,330 27.59% \$ 334,765 9.38% \$ 113,813 7.59% \$ 92,094 14.68% \$ 178,121 4.81% \$ 58,363 0.25% \$ 3,033

# - Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind match has been allocated to this section.

### 5. Other architectural and engineering fees - \$0

 Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed.

No other architectural and engineering fees have been included in this section.

- Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

No cash matching funds have been included in this section.

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No in-kind match has been included in this section.

### 6. Project inspection fees - \$1,056,000

 Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed.

The project budget contains a total of \$1,056,00 for Project Inspection fees. Which represents 4.39% of the total budget for the project.

\$656,000 will be a cash match for project management and project inspection. These services include: Overall project management for the project and construction inspectors for underground cable construction crews, aerial cable construction crews, the splicing and testing crews, pre-fabricated shelter installation (aggregation points), as-built drawings, contract close-outs, etc. Included in these costs are inspection services required to:

- Inspect the progress of and quality of construction, in sufficient detail to provide reasonable assurance to UTOPIA of the adequacy of progress and quality of construction with regard to project plans and specifications
- 2. Confirm and accept materials and equipment for this project
- 3. Inspect the manner of incorporation of the material and equipment for this project
- 4. Conduct acceptance testing of all installed cable and equipment as required to determine compliance with performance requirements of the plans and specifications
- 5. Maintain a cumulative inventory of all units of construction incorporated in the project, showing unit prices and extended totals, for all such units of construction
- 6. Conduct a final inspection of completed construction (completed by the construction manager). If desired, representatives from NTIA will be notified prior to this inspection to allow them to be present
- 7. Provide final "as-Built" details including cable schematics, final maps showing facilities completed in the project area, and final and complete detailed construction sheets showing facilities completed in the project area, including the designation of assembled units from existing plant retained in place along existing plant lines segments on which modification work was performed as part of the project

This budget also contains \$400,000 of in-kind matching funds for for the salaries of the engineering and construction managers will be responsible for the coordination and quality assurance of the project

Description	Unit cost	Units	Total Cost	Notes
Project inspectors	\$52,000	8	\$416,000	Cach Match (a)
Project management	\$240,000	1	\$240,000	Cash Match (b)
Salaries for engineering and construction managers	\$200,000	2	\$400,000	Inkind Match (c)
TOTAL			\$1,056,000	

- a) UTOPIA's member cities will provide a cash match for inspectors to perform all manner of inspections with the deployment and completion of the project for the duration of the project.
- b) UTOPIA 's member cities will provide overall project management for the duration of the project
- c) UTOPIA will provide an In-Kind match for construction management. This number represents the salaries of 2 construction managers, an engineering manager and a construction manager, for the duration of the project.

## - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA's city partners will provide \$656,000 cash match in this category.

Matching Source	Percentage	Amount	
Centerville	6.58%	\$ 43,165	
Layton	29.12%	\$ 191,027	
West Valley	27.59%	\$ 180,990	
Murray	9.38%	\$ 61,533	
Midvale	7.59%	\$ 49,790	
Orem	14.68%	\$ 96,301	
Payson	4.81%	\$ 31,554	
Perry	0.25%	\$ 1,640	
TOTAL	100%		\$656,000

# - Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

UTOPIA will provide an In-Kind match for construction management, worth \$400,000. This figure represents the salaries of two construction managers -- an engineering manager and a construction manager, for the duration of the project.

### 7. Site work - \$1,560,000

### - Provide description of estimated fees, rates, explanation of proposed services, and additional information as needed.

The project budget contains a total of \$1,560,000 for site work. This represents 6.48% of the total project. This cost is contained in the site work preparation for the 79 ADS aggregation points and 1 DSC aggregation point. Typical site costs include labor and materials for site prep, grading, concrete pads, installation of 200 AMP power service and gas service for back-up generation for redundant power. The work performed in this section will be performed by contractors who will be awarded the work by a competitive bidding process.

Description	Unit cost	Units	Total Cost	Notes

Site Prep	\$2,500	80	\$200,000	Cash Match (a)
Concrete Pad	\$10,000	80	\$800,000	Cash Match (b)
200 Amp Power Service	\$2,500	80	\$200,000	Cash Match (c)
Natural Gas Service	\$4,500	80	\$360,000	Cash Match (c)
TOTAL			\$1,560,000	

- a) Labor and materials to prep for the installation of a pre-fabricated shelter (ADS and DCS aggregation points) and back up generator
- b) Labor and materials for the installation of concrete pad which will support shelter and the generator planned for the site.
- c) All agregation points will need power service to support electrnics being installed. A generator will supply the hut with a redundant power feed in case the local feed is ever interupted. The generator will require natural gas to operate. A natural gas service line will be installed to support this function.

### - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA's city partners will provide 100% of the funds in this category.

Matching Source	Percentage	Amount	
Centerville	6.58%	\$ 102,648	
Layton	29.12%	\$ 454,272	
West Valley	27.59%	\$ 430,404	
Murray	9.38%	\$ 146,328	
Midvale	7.59%	\$ 118,404	
Orem	14.68%	\$ 229,008	
Payson	4.81%	\$ 75,036	
Perry	0.25%	\$ 3,900	
TOTAL	100%		\$1,560,000

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind matching funds have been allocated for this section.

#### 8. Demolition and removal - \$0

- Provide description of estimated fees, rates explanation of proposed services, and additional information as needed.

No Demolition and Removal fees have been included to this section.

 Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

No cash matching funds have been allocated for this section.

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind matching funds have been allocated for this section.

#### 9. Construction - \$16,130,066

- Provide description of estimated fees, rates, explanation of proposed services, state whether the work is being completed by the applicant or an outside contractor, and additional information as needed.

The project budget contains \$16,130,066 for the construction, implementation and testing of a fiber optic infrastructure, inside wiring of 150 anchor institutions and 3 new construction trucks for use during inspection and project management. This budget number represents 67.01% of the entire proposed project. All of the work pertained in this section will be contracted through a competitive bidding process.

As part of the development of the construction estimate, the routes were inspected with great detail using GIS. Using various other utility's GIS data, we were able to identify all existing rights of way, both aerial and underground. Using this information and applying the design to it, we were able to apply it to the footages contained here in the proposed project. The proposed running lines were all driven out to confirm the GIS data. Applying known historical costs we have from building fiber over the past five years, we were able to create an estimating tool that calculates an accurate BOM. Using this estimating tool, you can input contractor rates with the Davis Bacon Wages applied to them and the price of materials at a granular level. You then apply it to the footages based on the GIS system. The labor and material units for the following elements are priced and included when developing the construction budget: fiber optic cable, 11/4 -foot conduit, handholes (3 separate sizes depending on its application,) strand and lashing wire, pole attachment hardware, splice closures, fiber termination panels, new poles (where required), underground construction methods including trenching, directional drilling, and nuematic boring. There are rocky soil conditions in the proposed funding area, so we have calculated a 65% rock adder to the price of the underground construction activities. We were reasonably able to apply this because of our historical work in the areas. Spare conduits have been included to facilitate the expansion of the network.

The fiber optic cables will be placed using a combination of underground and aerial methods using a mixture of value engineering concepts and hands-on proven deployment strategies. This is only one of

the three areas where we have asked for federal funding. The amount requested in the Outside plant section totals \$16,064,066.

Description	Unit Cost	Units	Total Cost	Notes
Middle Mile Backbone Construction underground	\$13.70	298173	\$4,084,970	Federal Funding request
Middle Mile Backbone Splicing & Testing underground	\$.53	298173	\$158,032	Federal Funding request
Middle Mile Backbone Materials underground	\$3.97	298173	\$1,183,747	Federal Funding request
Middle Mile Lateral Construction underground	\$14.94	286109	\$4,274,468	Federal Funding request
Middle Mile Lateral Splicing & Testing underground	\$1.07	286,109	\$306,137	Federal Funding request
Middle Mile Lateral Materials underground	\$5.01	286,109	\$1,433,406	Federal Funding request
Middle Mile Lateral Drop Construction Underground	\$5.40	96,600	\$521,640	Federal Funding request
Middle Mile Backbone Construction Overhead	\$2.66	311,658	\$829,010	Federal Funding request
Middle Mile Backbone Splicing & Testing Overhead	\$.53	311,658	\$165,179	Federal Funding request
Middle Mile Backbone Materials Overhead	\$2.30	311,658	\$716,813	Federal Funding request

Middle Mile Lateral Construction underground	\$4.34	317,418	\$1,377,594	Federal Funding request
Middle Mile Lateral Splicing & Testing underground	\$1.07	317,418	\$339,637	Federal Funding request
Middle Mile Lateral Materials underground	\$2.04	317,418	\$647,533	Federal Funding request
Middle Mile Lateral Drop Construction Overhead	\$1.85	14,000	\$25,900	Federal Funding request
2010 Dodge Truck	\$18,000	3	\$54,000	Cash Match (a)
Inside wiring for 150 Anchors	\$80	150	\$12,000	Cash Match (b)
TOTAL			\$16,130,066	

a) These 3 vehicles will be used for the inspection and construction management activities for the proposed project.

# - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA will provide \$66,000 as a cash match for this section.

b) The costs associated with this line includes the placement of Cat5 cable from the Network Access Point in the anchor institution to the ethernet demarcation point located within the anchor.

UTOPIA's city partners will provide 100% of the funds in this category.

Matching Source	Percentage	Amount	
Centerville	6.58%	\$ 4,343	
Layton	29.12%	\$ 19,219	
West Valley	27.59%	\$ 18,209	
Murray	9.38%	\$ 6,191	
Midvale	7.59%	\$ 5,009	
Orem	14.68%	\$ 9.689	
Payson	4.81%	\$ 3,175	
Perry	0.25%	\$ 165	
TOTAL	100%		\$66,000

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind matching funds have been allocated to this section.

#### 10. Equipment - \$2,171,421

 Provide a list of equipment in the form of a table with description, number of units, unit cost, state whether it is being purchased or leased, and additional information as needed.

The project budget contains a total of \$2,171,421 for equipment. This budget number represents 9% of the entire propsed project.

There is \$1,171,670 in the Network and Access Equipment fees in this budget that each member city will purchase as a catch matching funds. The electronics will allow us to facilitate bandtwidth and other unique services to the community. These electronics will be stored in the Aggregation points (huts) There will also be a genrator placed onstie to support emergeny redundant power to support all electronics at the aggregation point. To have better effeciencies with project management the purchase of a new printer/coppier and plotter

Of the total proposed budget in this section \$165,255 is being requested from federal funding. These electronics are described in better detail on the "Detail of Project Costs" in the "Testing Section" and "Customer Premise Equipment". The Network Testing equipment will allow us to verify the installation of the network and will help us to certify the circuits between the anchor institutions along the new fiber infrastructure all the way to service provider interconnection points. The other equipment requested is for the connection of 395 anchor institutions. This includes: 395 100 Mbps Bi-directional Optics (recieves and transmits the data from fiber) and 395 uninterruptible power supplies for use at anchor institutions for redundancy when there is a power outage.



Description	Unit costs	Units	Total Costs	Notes
Alcatel 7450 Chassis	\$24,000	2	\$48,000	Cash Match (a)
Alcatel 7450 10Gbps XFP	\$2,000	6	\$12,000	Cash Match (a)
Alcatel 7450 10Gbps MDA	\$22,500	2	\$45,000	Cash Match (a)
Alcatel 7450 IOM	\$10,000	12	\$120,000	Cash Match (a)
Alcatel 7450 10-port GigE MDA	\$6,000	16	\$96,000	Cash Match (a)
GigE SFP LR	\$698.25	320	\$223,440	Cash Match (a)
SmartOnline 5000VA	\$2,394	2	\$4,787	Cash Match (a)
Valere DC Rectifier	\$8,788	2	\$17,576	Cash Match (a)
Alcatel 7450 OS-6400- U24	\$998	160	\$159,680	Cash Match (a)
Stacking Cable	\$78	160	\$12,480	Cash Match (a)
GigE SFP LR	\$698.25	320	\$223,440	Cash Match (a)
IP Video Surveillance	\$400	80	\$32,000	Cash Match (a)
Terminal Server	\$360	80	\$28,800	Cash Match (a)
Alcatel OS6400-BP-SHLF	\$10	160	\$1,600	Cash Match (a)
Alcatel OS6400-BP	\$198	160	\$31,680	Cash Match (a)
Cyberpower OL2000RMXL2U	\$719.92	160	\$115,187	Cash Match (a)
25 KW Generac generator	\$9,459	80	\$756,720	Cash Match (b)
HP designjet 500 42"	\$2,489	1	\$2,489	Cash Match (c)



Plotter				
Toshiba E-Studio 282 Copier	\$6,162	1	\$6,162	Cash Match (c)
Network Interface Device (NID) Customer Premise	\$175	395	\$69,125	Inkind Match (d)
Cyber Power UPS (uniteruptable power supply)	\$55	395	\$21,725	Federal funding request
EXFO FIP 400 Scope Kit	\$1,950	2	\$3,900	Federal funding request
EXFO FIP 400 tips and adapters	\$460	2	\$920	Federal funding request
EXFO FTB-8510G	\$33,500	2	\$67,000	Federal funding request
EXFO FTB 500	\$8,000	2	\$16,000	Federal funding request
EXFO FTB-85902	\$4,800	2	\$9,600	Federal funding request
EXFO FTB-85901	\$1,500	2	\$3,000	Federal funding request
EXFO TK-200	\$3,780	2	\$7,560	Federal funding request
TOTAL			\$2,171,421	

- All of these electronic costs have been through a competitive bidding process. Cash matching funds will be provided by the member cities.
- b) These are on-site generators that will provide redundant power for all 80 aggregation points (multiple vendor quotes have been received.) Cashing matching funds will be provided by the member cities
- c) This office equipment will support the proposed projects construction activities and help with efficiencies. Cash Matching funds will be provided by the member cities.

d) These are Allied Telesis iMG606BD network interface device. They are capable of providing 100 Mbps symetrical bandwidth to all anchors proposed in this project.UTOPIA will be providing in-kind matching funds for the project

# - Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

UTOPIA's city partners will contribute \$1,937,041 cash matching funds for this section.

Matching Source	Percentage	Amount	
Centerville	6.58%	\$ 127,457	
Layton	29.12%	\$ 564,066	
West Valley	27.59%	\$ 534,430	
Murray	9.38%	\$ 181,694	
Midvale	7.59%	\$ 147,021	
Orem	14.68%	\$ 284,358	
Payson	4.81%	\$ 93,172	
Perry	0.25%	\$ 4,843	
TOTAL	100%		\$1,937,041

# - Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

UTOPIA has 395 allied telesis access portals currently instock and will allocate \$69,125 of In-Kind matching funds for this section. These devices will support broadband connections at all anchor institutions proposed in this project.

#### 11. Miscellaneous - \$0

- Provide additional information as needed.

No Miscellaneous fees have been included in this section.

- Provide detailed description, calculation, and basis of evaluation for each Cash Matching Funds source.

No cash matching funds have been allocated for this section.

- Provide detailed description, calculation, and basis of evaluation for each In-Kind Matching Funds source.

No In-Kind matching funds have been allocated to this section.

### 12. Contingencies - \$0

- Contingencies are an unallowable expenditures under BTOP.

No Contingencies have been included in this section.

### 13. Project (program) income - \$0

- The value for this line-item on the SF-424C is \$0. Please do not provide an estimated Project (program income) on the SF-424C.

#### Addendum

- Very few indirect costs are allowable through BTOP. If any allowable indirect costs and/or fringe benefits are included in the budget, please provide a copy of your existing Negotiated Indirect Cost Recovery Agreement (NICRA), if available. If

the NICRA is applied accordingly in the budget, there is no need to justify the costs. If a NICRA is not available or is not consistent with the rates/calculations in the budget, please provide an explanation of how the amounts were calculated. Please clearly list the manner in which indirect costs are calculated in the budget.

Note: Verify that indirects are calculated correctly and are eligible BTOP costs. To clarify, reasonable indirect costs under BTOP are only allowable for Full Time Employees (FTEs) associated with the construction, deployment, or installation of facilities or equipment used to provide broadband service.

### **Proposed Middle Mile Service Offerings**

Name of Service Offering	Distance Band or Point to Point	Minimum Peak Load Network Bandwidth Capacity (Mbps)	Monthly/Yearly Pricing (\$) (Wholesale)Retail	Other Comments/Description/Features or Limitations
				Wholesale MM/Last mile for Service Provider/
				Symetrical Connection Speeds
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### **Proposed Middle Mile Service Offerings**

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### **Proposed Middle Mile Service Offerings**

		Wholesale Middle Mile
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### **Competitor Data**

#### Competitor Data - Last Mile Service Providers

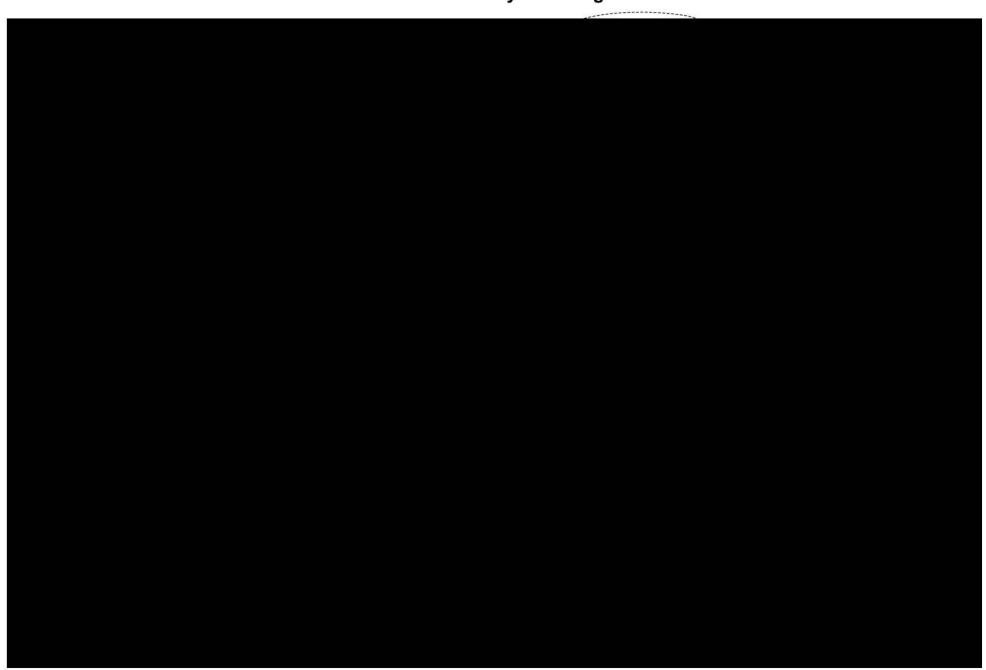
Service Provider	Service Areas Where Service Available	Technology Platform	Service Tiers	Downstream /Upload Speed	Monthly Pricing	Other Comments/Description/Features or Limitations
			Economy	1 Mbps/384 kbps	\$ 29.95	Retail pricing / Non- Symetrical connection speeds
Comcast	All areas	Fiber to the Node/Cable	Performance	12/2 Mbps	\$ 47.95	Retail pricing / Non- Symetrical connection speeds
Comcast	All aleas	Fiber to the Node/Cable	Performance Plus	16/2 Mbps	\$ 57.95	Retail pricing / Non- Symetrical connection speeds
				50/10 Mbps	\$ 100.00	Retail pricing / Non- Symetrical connection speeds
		Fiber to the Node/Cable	Entry Level Plan	1.5 Mbps/896 kbps	\$ 30.00	Retail pricing / Non- Symetrical connection speeds
				20 Mbps/896 kbps	\$ 55.00	Retail pricing / Non- Symetrical connection
Qwest	All areas			7 Mbps/896 kbps	\$ 65.00	Retail pricing / Non- Symetrical connection speeds
				12 Mbps/896 kbps	\$ 85.00	Retail pricing / Non- Symetrical connection speeds
			High End Plan	20 Mbps/896 kbps	\$ 110.00	Retail pricing / Non- Symetrical connection speeds
Nígis	All areas	Wireless	Entry Level Plan	1.5 Mbps/512 kbps	\$ 29.95	Retail pricing / Non- Symetrical connection speeds
<b>и</b> віз	Digis All areas	Wireless	High Tier Plan	2-May	\$ 34.95	Retail pricing / Non- Symetrical connection speeds

### **Competitor Data**

#### **Competitor Data - Middle Mile Service Providers**

Service Provider	Service Areas Where Service Available	Technology Platform	Service Tiers	Distance Band or Point-to-Point	Minimum Peak Load Network Bandwidth Capacity (Download	Pricing	Other Comments/Description/Features or Limitations
			DS3	Point to Point	45 Mbps	\$ 2,050.00	Retail Pricing
			100 Mbps Ethernet	Point to Point	100 Mbps	\$ 3,200.00	Retail Pricing
l xo	All areas	Fiber to the	1 Gig Ethernet	Point to Point	1 Gig	\$ 3,150.00	Retail Pricing
	, a da	Node/Ethernet	10 Gig Ethernet	Point to Point	10 Gig	\$ 9,800.00	Retail Pricing
			10 Gig Ethernet	Point to Point	10 Gig	\$ 28,000.00	Retail Pricing (Two physical diverse paths)
		Fiber to the	1 Gig Ethernet	Point to Point	1 Gig	\$ 3,300.00	Retail Pricing
ELI	All areas	Node/Ethernet	10 Gig Ethernet	Point to Point	10 Gig	\$ 9,000.00	Retail Pricing
		All areas Fiber to the	ADSL	Point to Point	1.5/896 Mbps	\$ 55.00	
Qwest	All areas		1 Gig Ethernet	Point to Point	1 Gig	\$ 2,300.00	Retail Pricing
		Node/Ethernet	10 Gig Ethernet	Point to Point	10 Gig	\$ 10,200.00	Retail Pricing
Comcast	Most areas	DOCSIS 3.0	Entry Level	Point to Point	6/1 Mbps	\$ 60.00	Retail Pricing
Conicast	INIO31 di Cas	DOC313 3.0		Point to Point	50/10 Mbps	\$ 195.00	Retail Pricing
District			Entry Level Plan	1.5 Mbps/512 kbps	\$ 49.95	Retail pricing / Non- Symetrical connection speeds	Retail Pricing
DIRIZ	Digis All areas	All areas Wireless		4/2 Mbps	\$ 99.95	Retail pricing / Non- Symetrical connection speeds	Retail Pricing

### **UTOPIA Network System Diagram**



#### Attachment to Q17g

List of Structures on the National Historic Registry within One Mile of Proposed Construction

#### PAYSON CITY:

Dixon, Christopher F., Jr., House

248 N. Main St.

Dixon, John, House

218 N. Main St.

Douglass, Samuel, House

215 N. Main St.

Payson Historic District

Roughly bounded by 500 North, 300 East, 500 South and 400 West

Payson Presbyterian Church

160 S. Main St.

Peteetneet School

50 N. 500 East - ANCHOR

#### OREM:

Adams, George and Temperance, House

196 W. 400 South

Baxter, David and Drusilla, House

206 W. 1600 North

Bunnell, Stephen and Mary, House

970 S. 800 West

Utah Valley State College

Carter-Terry-Call House

815 E. 800 South

Christeele Acres Historic District

Roughly bounded by State Street, 900 South, 450 East, and 1010 South

Clinger-Booth House

468 S. Main St.

Cordner, Alexander and Nellie P., House

415 S. 400 East

Cordner, William James and Edna, House

440 S. State St.

Cordner-Calder House 305 S. 900 East

Cullimore, William J. and Lizzie, House 396 W. 1600 North

Davis, Joshua, House 1888 S. Main St.

Davis-Ercanbrack Farmstead 2044 S. Main St.

Dimick, Cecil I. and Mildred H., House 575 W. 800 North

Gappmayer, Roy H. and Florence B., House 95 E. 1200 South

Jensen, Lars and Agnes, House 87 N. 800 West

Knight-Finch House 212 S. State St.

Lewis, John S. and Izola, House 343 E. 720 South

McBride-Sims Garage 600 N. State St.

Olsen, Lars and Christina, House 417 S. 800 East

Skinner, Alfred and Rosy, House 232 W. 800 S.

Stewart-Hills House 275 E. 2000 South

Stratton House-Orem City Hall (former) 870 W. Center St. - ANCHOR

Washburn, Alvin and Grace, House 753 N. 100 West

MIDVALE: Midvale City Hall 12 E. Center St.

Salt Lake County Library 80 E. Center St.

MURRAY: Cahoon, John P., House 4872 S. Poplar St.

Iris Theater, Apartments and Commercial Building 4861 S. State St.

Murray Downtown Historic District Roughly bounded by 4800 South, Poplar Street, Vine Street and Center Street

Murray Downtown Residential Historic District Roughly bounded by 4800 South, Clark Street, Vine Street and Center Street

Murray LDS Second Ward Meetinghouse 5056 S. 300 West

Murray Theater 4961 S. State St.

Warenski-Duvall Commercial Building and Apartments 4867 South State St.

WEST VALLEY CITY:

None

CENTERVILLE: Barnard-Garn-Barber House 1198 N. Main St.

Brandon, Thomas and Margaret, House 185 E. Center St.

Capener, William, House 252 N. 400 East

Deuel, Osmyn and Emily, House 271 S. 200 East

Duncan, John, Harriet, and Eliza Jennett, House 445 N. 400 East

Ford, Joseph N. and Algie, House 1394 N. Main St.

Ford-Rigby House 1592 N. Main St.

Harris, Thomas and Caroline, House 275 S. 200 East

Harris-Tingey House 269 E. Center St.

Holland-Smith-Brown House 19 S. 200 East

Kilbourn-Leak House 170 N. 200 East

Mills-Hancock House 571 S. 400 West

Porter, Nathan and Rebecca Cherry and Eliza Ford, Farmstead 370 W. 400 South

Porter, Nathan T. and Anna, House 224 S. 210 West

Randall, Melvin Harley, House 390 E. Porter Ln.

Rich-Steeper House 415 S. Main St.

Roberts, B.H., Louisa Smith and Cecilia Dibble, House 315 S. 300 East

Smith-Larsen House 280 E. Center St.

Streeper, William Henry and Mary, House 1020 N. Main St.

Thurston-Chase Cabin

975 N. Main St.

Tingey, Thomas, House 20 N. 300 East

Walton, Franklin and Amelia, House 98 W. 280 South

Whitaker, Thomas and Elizabeth Mills, House 168 N. Main St.

Young Men's Hall-Tingey House 85 S. 300 East

LAYTON:

Adams, Joseph, House 300 N. Adamswood Rd.

Farmer's Union Building State Street and W. Gentile Street

First National Bank of Layton 50 W. Gentile St.

Layton, George W., House W. Gentile St.

PERRY:

None

### Comprehensive Community Infrastructure Key Metrics Dashboard

Please refer to the CCI Grant Guidelines for instructions on completing this form.

Applicant Profile	
Applicant Name	Utah Telecommunication Open Infrastructure Agency (UTOPIA)
Title	Utah Telecommunication Open Infrastructure Agency Community Partnership Project
Easygrants ID	5714
Headquarters	West Valley City, Utah
Size (2009 Data) of Applicant Entity	<ul><li>Current Year Revenues: 3,881,043</li><li>Employees: 30</li></ul>
Technology Type	Underground and Aerial Middle Mile backbone and Lateral Fiber to the Premise connections
Key Partners	Layton City, Centerville City, West Valley City, Murray City, Midvale City, Orem City, Payson City, Perry City

Project Economics			
<b>Budget Information</b>		Project Financials	
Project Budget	\$24,071,690	Project Revenues (Yr 8)	\$998,628
Federal Contribution (%)	67.42%	Net Income and Margin (Yr 8)	\$(258,601) (25%)
Cash Match Amount (%)	30.56%	EBITDA and Margin (Yr 8)	\$773,666 (77%)
In Kind Match Amount (%)	2.02%	Rate of Return (w/o BTOP Funds)	-18.72%
Middle Mile/Last Mile Budge	t Allocation	Rate of Return (w/ BTOP Funds)	-1.55%
Middle Mile Percentage (%)	100%	Cost Efficiency	
Last Mile Percentage (%)	0%	Cost per Mile (MM)	\$64,064
Rural Last Mile Percentage	0%	Cost per Household (LM)	N/A

Market Territory	
Geographic Area(s)	Cities of Perry, Layton, Centerville, West Valley, Murray, Midvale, Orem, and Payson
Middle Mile Network Compo	sition
Total Proposed Network Miles (MM only)	<ul> <li>Total Miles: 371.46</li> <li>Backbone Miles: 214.93</li> <li>Lateral Miles: 156.53</li> </ul>
New Construction Network Miles (MM only)	<ul> <li>Total Miles: 250.74</li> <li>Backbone Miles: 115.49</li> <li>Lateral Miles: 135.25</li> </ul>
Existing Applicant Network Miles Utilized (MM only)	<ul> <li>Total Miles: 120.72 used to connect to PFSA</li> <li>Backbone Miles: 99.44 used to connect to PFSA</li> <li>Lateral Miles: 21.28 used to connect to PFSA</li> </ul>

### Comprehensive Community Infrastructure Key Metrics Dashboard

Leased Network Miles Utilized (MM only)	Total Miles: 0 in PFSA
	Backbone Miles: 0 in PFSA
	Lateral Miles: 0 in PFSA
Underserved/Unserved	Percentage of Backbone Miles in Underserved/Unserved Areas: None
	Percentage of Lateral Miles in Underserved/Unserved Areas: None
Existing Customer Base	
Existing Residential/Individual	0 (there are 6048 existing residential/individual customers outside the PFSA)
Customers within PFSA	
Existing Business Customers within PFSA	0 (There are 405 existing business customers outside the PFSA)
Existing Community Anchor	Total CAI's: 0 (There are 24 existing CAI's outside the PFSA)
Institution Customers within	Community Colleges: 0
PFSA	Public Safety Entities: 0 (There are 3 existing CAI's outside the PFSA)
Existing Third Party Service	0 (There are 2 existing Third Party Service Provider's outside the PFSA)
Provider Customers within	
PFSA	
Potential Customer Base	
Market Potential Households	• Total HH's: 118826
(within PFSA)	Located in Underserved/Unserved Areas: None
Market Potential Businesses (within PFSA)	Total Businesses: 13259
	Located in Underserved/Unserved Areas: None
	Total CAI's: 591
Market Potential Community Anchor Institutions (within PFSA)	Located in Underserved/Unserved Areas: None
	Community Colleges: 3
	Public Safety Entities: 222
Market Potential Third Party	Total Third Party Service Providers in PFSA: 0 new providers
Service Providers (within	Expressing Commitment or Letter of Interest: 0 new providers
PFSA)	
Funded Network Coverage	
Households Connected to	Total Households Connected: 1117
Network (via BTOP Funds by	Located in Underserved/Unserved Areas: None
end of Year 3)	, and the same of
Businesses Connected to	Total Businesses Connected: 159
Network (via BTOP Funds by	Located in Underserved/Unserved Areas: None
end of Year 3)	
Community Anchor	Total Directly Connected CAI's: 395
Institutions Directly	Located in Underserved/Unserved Areas: None
Connected (via BTOP Funds	Community Colleges: 3
by end of Year 3)	Public Safety Entities: 161

### Comprehensive Community Infrastructure Key Metrics Dashboard

Projected Subscribers by Year Five	Directly Served by Applicant
	Community Anchor Institutions: 395
	Households: 1497
	Businesses: 193
	<ul> <li>Third Party Service Providers: 0 New Providers</li> </ul>
	Served by Proposed Network Via Third Party Service Provider
	Community Anchor Institutions: None
	Households: None
	Businesses: None

Other	
Proposed MM Network	Backbone: 15040 connections without activating dark fibers
Capacity	Laterals: 6255 connections without installing new laterals
Proposed LM Network Speed	Highest offered speed tier: N/A
	Estimated Average speed for highest speed tier: N/A
Total Points of Interconnection	Total Pol's: 80
	Pol's in Underserved/Unserved Areas: None
	Environmentally-controlled, non-passive Pols: 80
Jobs Created	Direct Job-years: 70
	Indirect Job-years: 70
	Induced Job-years: 78
Required Time for Project	
Completion (Number of	
Required Quarters to Fully	9 Outputous
Build-out and Test Network	8 Quarters
and Make Ready for	
Commercial Service)	