AGENDA

QLife Regular Board Meeting

Wednesday, June 23, 2022 | 12:00 PM

Harding House Conference Room– 200 E 4th St., The Dalles, OR

Google Hangouts - meet.google.com/odb-tpys-xpq

12:00 Call to Order

12:00 **Introductions & 2021/2022 Strategic Plan**

12:05 Approval of Agenda

12:10 **RISI Presentation** – *Alex Kelley*

12:25 **Action Items**
- **Jefferson Damage Opinion of Probable Cost** – *Dan McNeely*

12:35 **Consent Agenda** *(items of a routine nature: minutes, documents, items previously discussed)*
- **May 26, 2022 Minutes**

12:35 **Finance**
- **Financial Report, Reconciliation and Analysis** – *Mike Middleton*

12:45 **Discussion Items**
- MCEDD/BAT Broadband Survey – *Carrie Pipinich, Natasha Blaircobb, Christina Phanthamany*
- Admin Updates – *Matthew Klebes*
- **Technical Management Report** – *John Amery*
- **Oregon Telecommunications Conference** – *Stephanie Krell*

Next Board Meeting Date: July 28, 2022 | 12:00 PM

Adjourn

**Agenda subject to change*

**Executive Session held as needed*

An executive session may, in the discretion of the presiding officer, be called based on one or more of the following: ORS 192.660 (2)(a) Consider employment issues; (2)(e) Real property' (2)(f) Consider exempt records or information; (2)(g) Competitive trade or commerce negotiations; (2)(h) Consult with counsel re litigation; (2)(n)(D) & (E) Discuss information regarding security of telecom systems and data transmission.

Q-LIFE NETWORK

Vision:

Every address in Wasco County can enjoy a higher quality of life and participate in education, healthcare, and the economy through a high speed* internet connection at a price point that they can afford.

*Ideally, 150 Mbps symmetrical

Mission:

Facilitate access to scalable telecommunication infrastructure to enable affordable broadband-level Internet across Wasco County much like a public utility.

Values:

Action-oriented, nimble, partnerships, proactive/sustainable, responsible, affordable, redundant and resilient.

Goals:	2021/2022 Strategies	Potential Projects
Goal 1: Maintain network and build redundancy and capacity of existing system	1.1 Maintain and update equipment per Qlife EOL schedule 1.2 Update Capital Improvement Plan (CIP) for The Dalles area 1.3 Identify single points of failure/network vulnerabilities 1.4 Develop Co-location room and redundant pathway east	- Downtown Overbuild -East Bisector/Grove Project
Goal 2: Expand our fiber network and employ alternative solutions and partnerships to serve areas in need	2.1 Identify areas with limited capacity/redundancy and develop fiber projects to address 2.2 Assess maintenance costs and damage risk (fires) of new builds 2.3 Explore partnerships with Warm Springs Telecom to serve the needs of South Wasco County 2.4 Develop Fiber to the Premises (FTTP) pricing structure 2.5 Explore options to serve Dallesport/Columbia Gorge Regional Airport and Business Park	- East Bisector/Grove Project -Shaniko/Avangrid -The Dalles Bridge River Crossing
Goal 3: Improve QLife's ability to secure local, state, and federal resources	3.1 Work with partners to coordinate efforts to seek funding 3.2 Participate in The Dalles Community Outreach Team (COT) 3.3 Support efforts to form a Broadband Action Team (BAT) in partnership with Wasco County EDC Broadband Committee 3.4 Gather data/analyze gaps in service to demonstrate need 3.5 Outreach to Legislators on Qlife's VMGs and specific projects	-South Wasco County Fiber Project (Tygh Valley/Pine Hollow) -Mosier Fiber Extension -BRIC Application
Goal 4: Support education & advocacy efforts related to broadband	4.1 Raise public awareness of role and value of Qlife in our Community and State 4.2 Annually provide scholarships to students attending CGCC studying a technology related field 4.3 Sponsor broadband events such as the Oregon Connections Telecommunications Conference	
Goal 5: Drive technological relevance by benchmarking and continuously evolving	5.1 Explore operational models for efficiencies to best fulfill mission 5.2 Continuously improve systems for Service Order response, customer setup, and Project Management/Implementation 5.3 Benchmark what is "high speed internet" annually to adjust ideal target speed and analyze progress. 5.4 Review and evaluate unique structure of Qlife for creative solutions	-Service Order Tracking Sheet -Project Management Improvements -Construction Standards Document

RISI Presentation

- QLife Broadband Planning: Board Update
- Strategic Expansion of Fiber-to-the-Premises Design and Cost Estimate
- QLife Rate Framework Tool & Strategy

RURAL INNOVATION STRATEGIES, INC.

QLife Broadband Planning: Board Update

JUNE 2022

RURAL INNOVATION STRATEGIES, INC.

AGENDA

01. PROJECT PURPOSE & BACKGROUND
02. DELIVERABLES + WORK PRODUCT
03. RECOMMENDATIONS
04. NEXT STEPS

BACKGROUND & PURPOSE

- Google Community Affairs funded
- Enable QLife to pursue universal coverage in Wasco County
- Create tools and resources to allow QLife to take advantage of upcoming opportunities and partnerships

DELIVERABLES & WORK PRODUCT

High Level Designs and Cost Estimates

- Middle mile and last mile designs designated and prioritized by QLife staff
- CTC Engineering provided designs, shapefiles, and bill of materials

Partnership Negotiation Excel Model

- Allows testing of variety of partnership frameworks
- Provides analysis of financial sustainability for target projects

Strategic Document to Accompany Excel Model

- Guide to using excel model
- Documentation of key challenges (e.g., tension between
- Strategic recommendations and next steps

Grant Writing Support

- To be provided at first targeted and likely opportunity

RECOMMENDATIONS

1. Approach network expansions with committed partner and draft agreement in place before funding is secured and construction begins
2. Let balance of risk and risk tolerance guide partnership framework and negotiations
3. Consider making QLife's rate framework private
4. Consider mechanisms to encourage long-term contracts to ensure stability and minimize risk

Next Steps

In Partnership

- Identify target grant opportunity
- Collaborate on excel model use

Recommendations for QLife

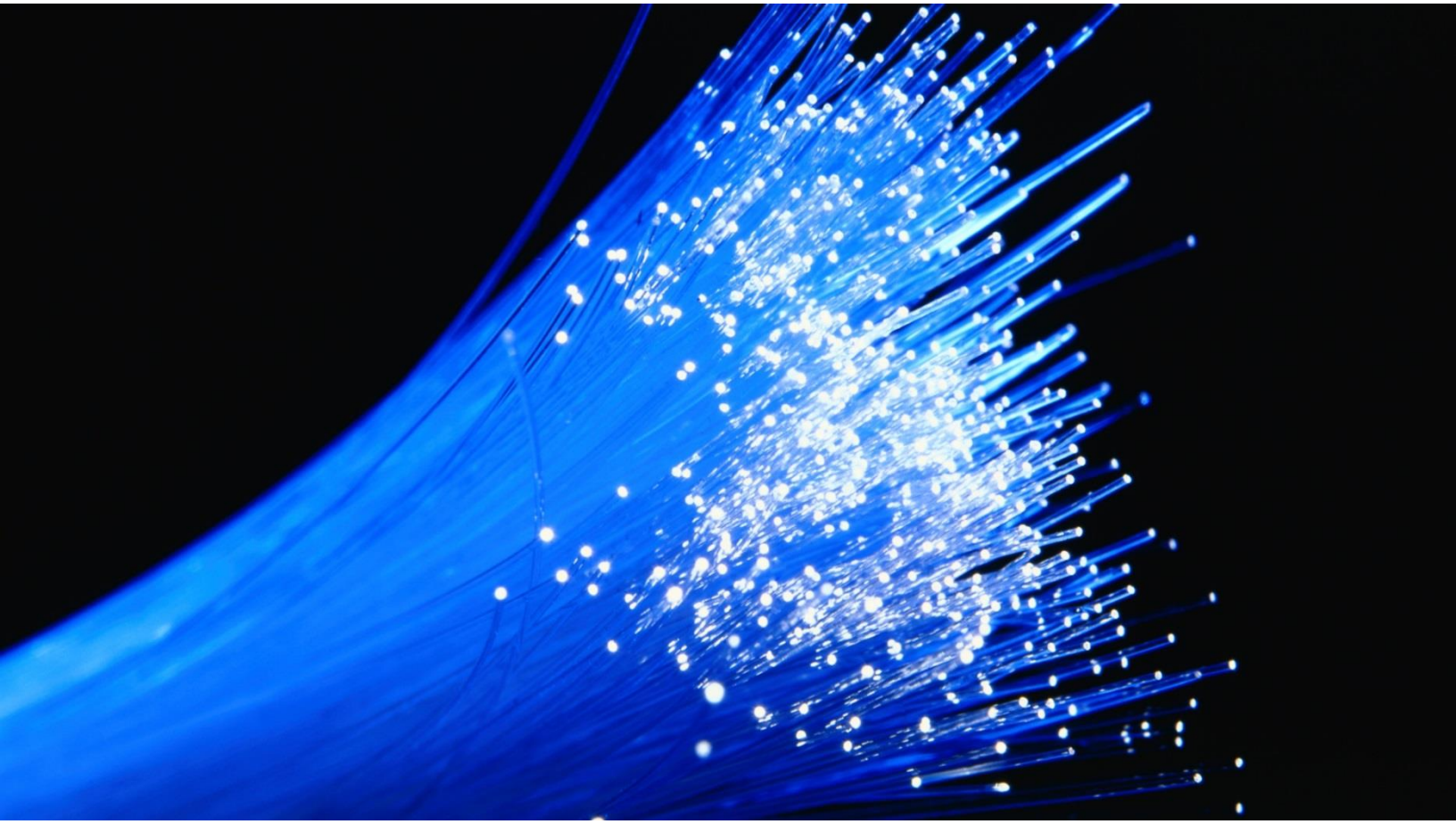
- Rate framework evolution
- Discuss expansion opportunities with potential ISP partners

RURAL INNOVATION STRATEGIES, INC.

Thank you!

ctc technology & energy

engineering & business consulting



Strategic Expansion of Fiber-to-the-Premises Design and Cost Estimate for Population Centers with Limited or No Fiber in Wasco County

Prepared for Wasco County, OR

April 2022

Contents

Figures

Tables

1 Strategic expansion of fiber-to-the-premises design and cost estimate

CTC developed a conceptual, high-level fiber-to-the-premises (FTTP) outside plant network design and cost model for strategic areas of Wasco County as identified as population clusters by Qlife with incomplete or inadequate fiber coverage. The design is aligned with industry best practices and would be able to support a variety of electronic architecture options and business plans. This document is intended to be used for communicating a vision of fiber buildout to strategic locations in Wasco County to develop partnerships and aid in seeking grant funding to complete the below buildouts.

Although this document details fiber expansions to larger population centers throughout Wasco County, constituents outside a feasible range of these expansions may continue to lack adequate service levels.

The network within the identified areas and the middle mile segments necessary to connect them is estimated to cost $35.0 million, including a 20 percent contingency on construction material. At a 60 percent take-rate, meaning only 60 percent of 864 eligible residents will choose to subscribe, the network will serve 518 passings at a cost of $68,670 per passing.

Table 1: Estimated total implementation costs

Estimated total implementation costs (60% take-rate)	
Number of passings (60% take-rate)	518
Total implementation costs (with a 20% contingency)	$35,600,000
Cost per subscriber	$68,670

We provide cost estimates for each segment of the middle-mile connecting the hubs and towns. The segments are estimated to cost between $650,000 and $7 million.

Table 2: Estimated costs for middle-mile segments

Estimated costs for middle-mile segments		
Segment	**Length (miles)**	**Cost**
BPA substation to Shaniko	15.2	$2.6 million
Chenoweth to The Dalles	3.8	$650,000
Maupin to Antelope	41.6	$7 million
Maupin to Pine Grove	12.7	$2.1 million
Mosier to Chenoweth	10.2	$1.7 million
Pine Grove to Simnasho	11.3	$1.95 million
Rowena to Mosier	7.6	$1.25 million
Shaniko to Antelope	6.7	$1.1 million
The Dalles to Tygh Valley	29.4	$4.95 million
The Dalles to Celilo Village	14.1	$2.35 million
The Dalles to Rowena	7.1	$1.25 million
Tygh Valley to Maupin	7.1	$1.35 million

We have also developed cost estimates for the infrastructure located inside specific towns, which range from $185,000 to $1.866 million, including 20 percent contingency costs on construction material. At a 60 percent take-rate, the cost per passing ranges from $6,780 to $37,370.

Table 3: Estimated total implementation costs for towns

Estimated total implementation costs for towns				
Town	**Length of distribution network (mi.)**	**Number of passings**	**Total implementation cost**	**Cost per passing (60% take-rate)**
Antelope	3	179	$728,000	$6,780
Celilo Village	0.4	15	$185,000	$20,560
Mosier	5.8	364	$1,500,000	$6,870
Pine Grove	9.7	105	$1,866,000	$29,620
Rowena	5	116	$1,047,000	$15,040
Shaniko	2	54	$469,000	$14,480
Simnasho	3.4	31	$695,000	$37,370

Additionally, QLife and Blue Mountain Networks have completed an FTTP designs for middle mile and last mile deployments for Tygh Valley, Wamic, and Pine Hollow. These cost estimates were provided to Wasco County and are included in this report in in Section 1.9.

The cost estimate for the Qlife FTTP design is estimated to be $4,796,616.94.

Table 4: Cost Estimate for Qlife FTTP Network Design for Tygh Valley, Wamic, and Pine Hollow

Fixed Costs	
Underground FTTP construction	$1,227,225
Aerial FTTP construction	$1,343,050
Facility Connections	$150,000
Cable, Splicing, and Termination	414,768.75
Sub-total	3,135,043.75
Engineering (18%)	$564,307.88
Contingency (20%)	$627,008.75
Prevailing Wage Premium (15%)	$$470,256.56
Cost per passing	**$4,796,616.94**

QLife has conducted outreach to existing providers currently servicing the Dufur area, who have expressed that current service levels are undergoing an upgrade for Dufur proper.

Blue Mountain Networks developed an FTTP cost estimate for the last mile deployments in Tygh Valley, Wamic, and Pine Hollow. The last mile FTTP design is estimated to cost $1,098,210.

Table 5: Cost Estimate for Blue Mountain Networks FTTP Middle Mile Design for Tygh Valley, Wamic, and Pine Hollow

Fixed Costs	
Administrative & Legal	$15,300
Right of Way, Structures, Land	$15,000
Relocation expenses	$7,641
Architectural & Engineering	$61,300
Construction	$998,969
Total	**$1,098,210**

1.1 Objectives and key attributes

The FTTP design would provide key population areas in the County that have limited or no fiber with cost-effective and flexible infrastructure—optimized for long-term use. The key design criteria for the network include:

- **Providing service to the key population centers in the County, with capacity for future growth**
- **Providing resilient and survivable service** – backbone routes interconnecting two hubs and seven active FDCs are strategically placed to minimize the length of lateral runs, creating improved resiliency at each edge site

- **Maximizing use of existing aerial infrastructure** – the design assumes the use of poles previously constructed by Wasco Electric Cooperative and North Wasco County PUD where applicable to reflect network routes outside roadways

The recommended architecture is a hierarchical data network that would provide scalability and flexibility, both in terms of initial network deployment and ability to accommodate the increased demands of future applications and technologies. The central characteristics of this hierarchical FTTP data network include:

- **Capacity** – ability to consistently provide efficient transport for subscriber data at advertised speeds, even at peak times
- **Availability** – high levels of reliability and resiliency; the ability to quickly detect faults
- **Scalability** – ability to grow in terms of physical service area and increased data capacity, and to integrate newer technologies without new construction

This architecture offers scalability to meet long-term needs. It is consistent with best practices for either a standard or an open-access network model to provide customers with the option of multiple network service providers. This design would support the current industry standard Gigabit Passive Optical Network (GPON) technology, as well as emerging 10 Gbps XGS-PON and NG-PON2 standards. It could also provide the option of direct Active Ethernet (AE) services on a limited basis, such as for business customers, using spare fiber capacity built into the designs.

1.2 Assumptions and criteria

The cost of building an FTTP network will depend in large part on what percentage of the network infrastructure is built on aerial poles as opposed to inside underground conduit. Due to the geography of Wasco County, we assumed the majority of the network would be aerial and we designated underground portions of the network based on the underground routes of existing fiber infrastructure designs provided to us by the County.

Most poles in Wasco County are owned by Wasco Electric Cooperative and North Wasco County PUD. The builder of the FTTP network will need an agreement for aerial attachments with the pole owners.

In addition, the network design and cost estimates assume the network will:

- Use existing publicly owned land or County-owned buildings as network hubs and active FDCs; the cost estimate includes the facility costs with adequate environmental systems and backup power generators.
- Use manufacturer-terminated fiber tap enclosures within the public right-of-way or easements, providing watertight fiber connectors for customer service drop cables, and

eliminating the need for service installers to perform splices in the field. This is an industry-standard approach to reducing both customer activation times and the potential for damage to distribution cables and splices.

The network design was defined based on the following criteria:

- Underground conduit and fiber will be installed in the public right-of-way or in an easement on the side of the road. The roads utilized were based on public roadway GIS shapefiles provided by the U.S. Census Bureau's TIGER/Line dataset.
- The aerial fiber design will make use of existing poles where possible.
- Backbone fiber sizes will range from 144- to 288-count cables; extended lateral fiber sizes will range from 48-to 144-count cable; and short lateral and drop fiber will contain 12 strands.
- The network will be capable of targeting up to 288 passings per secondary distribution point, each served from an active fiber distribution cabinet (FDC) containing optical splitters.
- Distribution plant will terminate at multi-port subscriber tap terminals (i.e., "taps") in underground handholes, each serving no more than 12 homes. The taps act as demarcation points for fiber at the edge of the County right-of-way.
- Access conduit will be placed in drop access handholes placed at the edge of the parcel for each serviceable passing (one handhole per one or two passings).
- Underground vault spacing will be no more than 750 feet along distribution routes.
- A powered distribution cabinet (called an "active FDC") will be deployed in towns located greater than 20 kilometers from a hub.
- The hubs and active FDCs will be constructed to support network electronics with redundant cooling systems, robust physical security, and inert gas fire-suppression systems, with the hubs having additional necessary equipment such as backup power generation. The design uses two hubs to account for the large distances of the middle mile segments of the network. For the network design, existing publicly owned locations, such as fire-stations or fuel stations, were considered for the hubs and active FDC sites.
- Where possible, the distribution plant network routes will avoid crossing major roadways, railways, and waterways.

- In the aerial design, we assume that the builder is able to obtain an attachment agreement from the pole owners.

Based on feedback from a local contractor, we estimated make-ready costs and determined the percentage of the network routes that can utilize aerial infrastructure.

We estimated 10 percent of the network had a small number of poles requiring make-ready or replacement; 40 percent of the network had a moderate number of poles requiring make-ready and some replacement; 40 percent of the network had poles requiring a large amount of make-ready and a moderate amount of replacement; and 10 percent of the network had poles requiring a large amount of make-ready and a large amount of replacement.

As not all potential subscribers on the network will opt to use service, we applied a 60 percent take-rate to certain costs—that is, we assumed 60 percent of the total passings of the network will choose to use the service. This quantity affects the costs of the network electronics needed to serve the network and the costs for deploying drops to subscribers on the network.

1.3 Conceptual design

Figure 1, below, shows the conceptual architecture for the physical plant in the FTTP network. A hub will feed primary distribution conduit through distribution vaults located throughout the County. Some distribution vaults will be designated as equipment vaults, which contains splitters to feed secondary distribution conduit to tap access handholes located near residents. Each tap access handhole will then connect to drop access handholes located on the edge of the parcel but still within the County's right-of-way. By installing infrastructure all the way to the edge of each premises parcel, costs are reduced for future installation to a subscriber.

Towns greater than 20 kilometers away from the hub exceed the distance limits of the electronic distribution equipment located in the hub, leading to diminished performance for those addresses. To counteract this limit, these towns will have their own active FDCs (i.e., powered cabinets containing electronic distribution equipment to serve the surrounding community). This will provide the desired network performance to addresses outside of the range of the electronic distribution equipment. The use of powered cabinets is a more cost-effective solution for the number of passings versus placing standalone buildings.

Figure 1: Conceptual design for the FTTP network

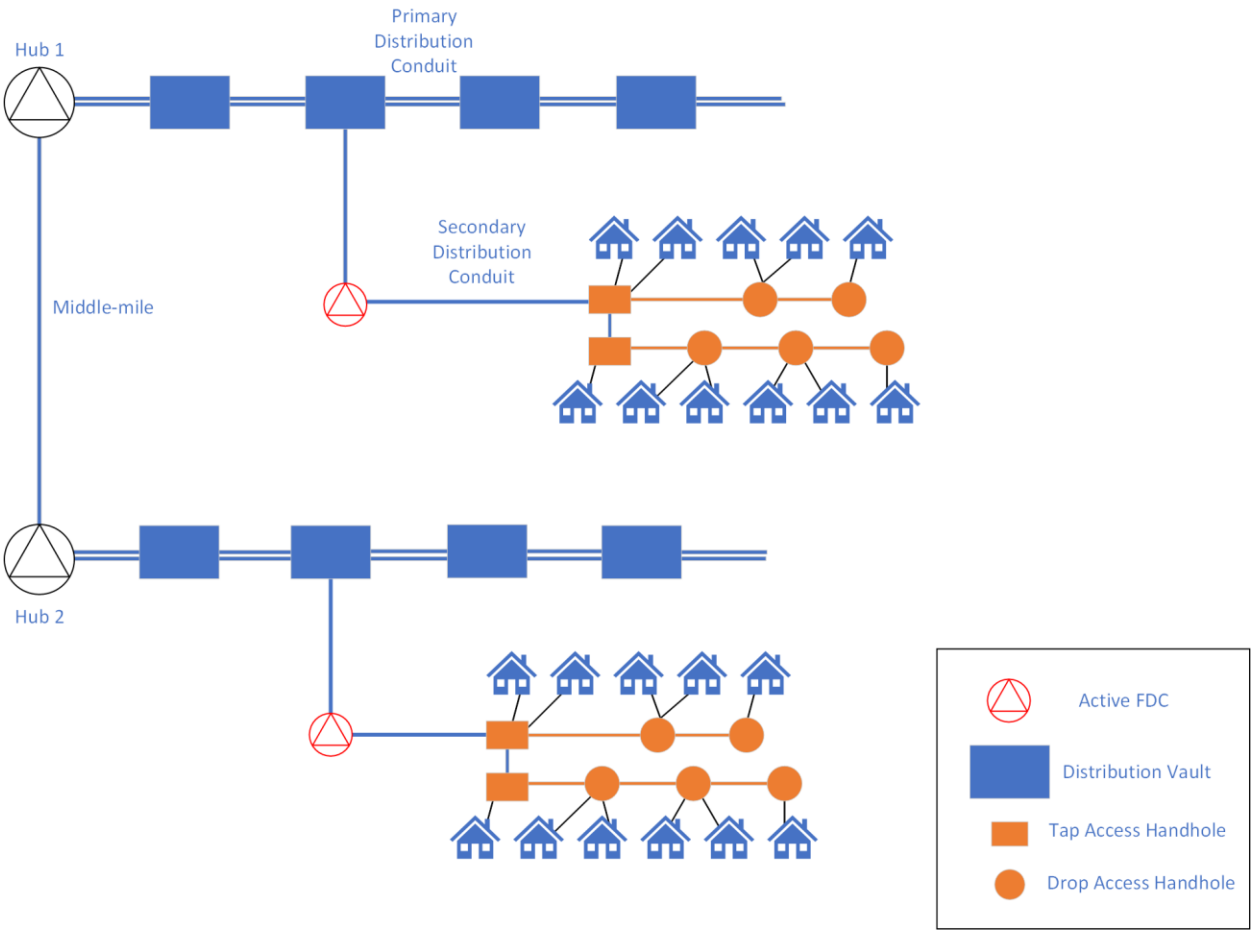
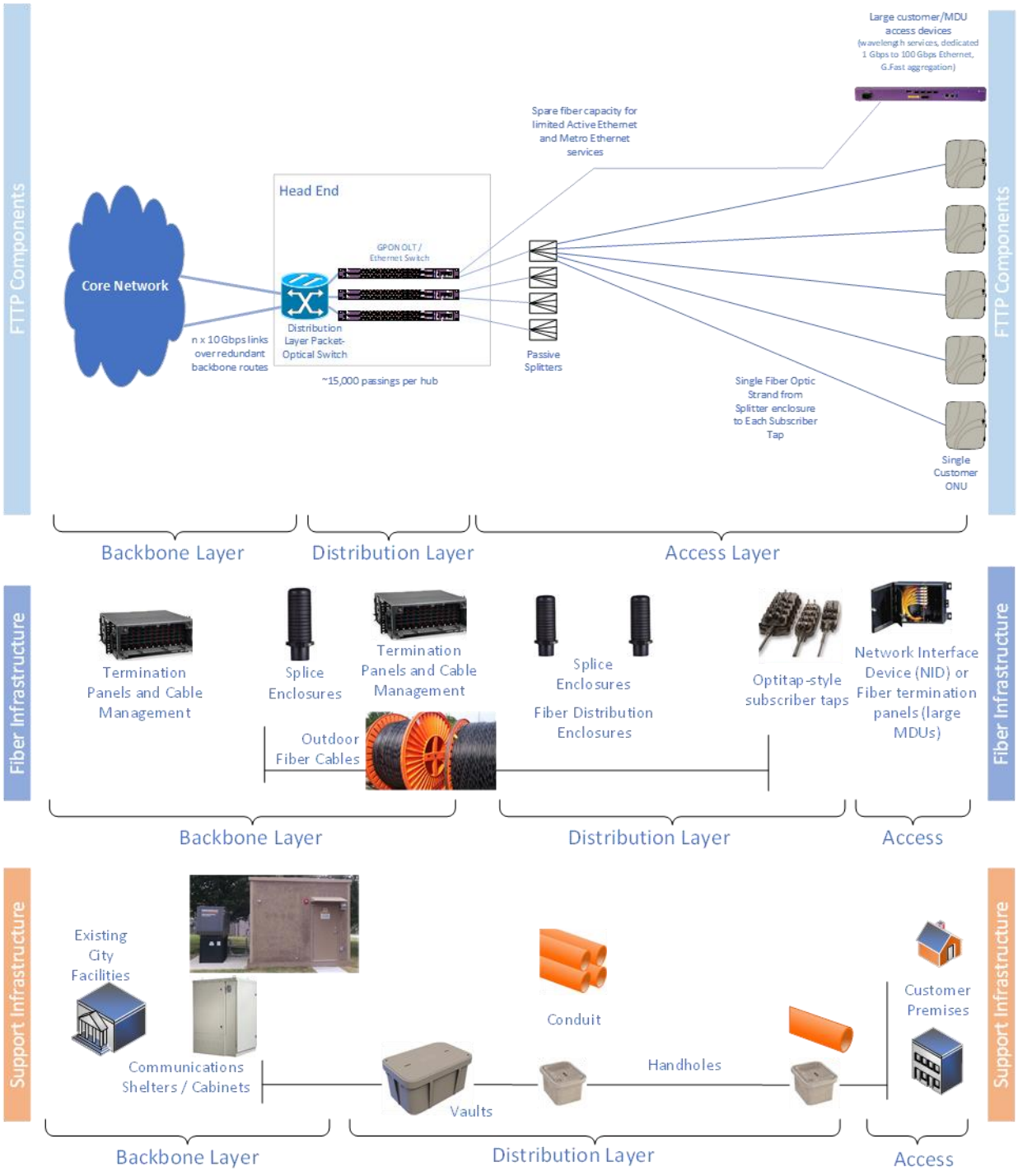


Figure 2, below, shows the logical representation of the FTTP network architecture we recommend based on the conceptual outside plant design above. This representation illustrates the primary functional components in the FTTP network, their relative position to one another, and the flexibility of the architecture to support multiple subscriber models and classes of service.

Figure 2: High-level FTTP architecture and components



1.4 Network design

Figure 3 illustrates the middle mile routes that connect the hubs to the towns in Wasco County.

The network design is shown in detail in Figure 4, which illustrates a close-up of the Antelope service area. This map highlights a rural service area. In the map, the red pentagon represents

the distribution cabinet acting as the active FDC location, blue circles represent the taps, and yellow triangles represent address points.

Red lines represent the primary distribution routes, purple lines represent secondary distribution routes, blue lines represent tertiary routes, and orange lines represent drops to subscribers' premises.

Figure 3: Full middle-mile design

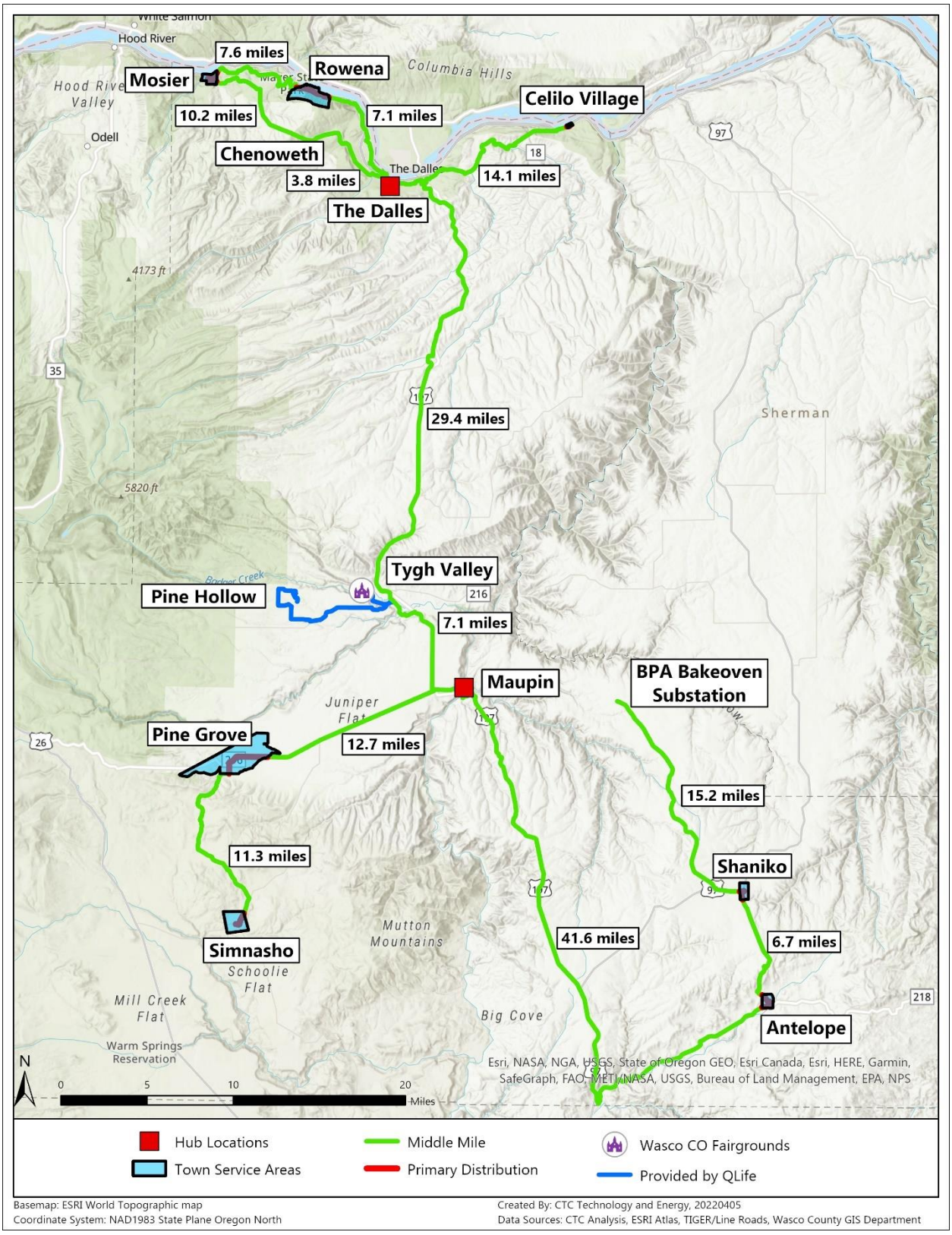
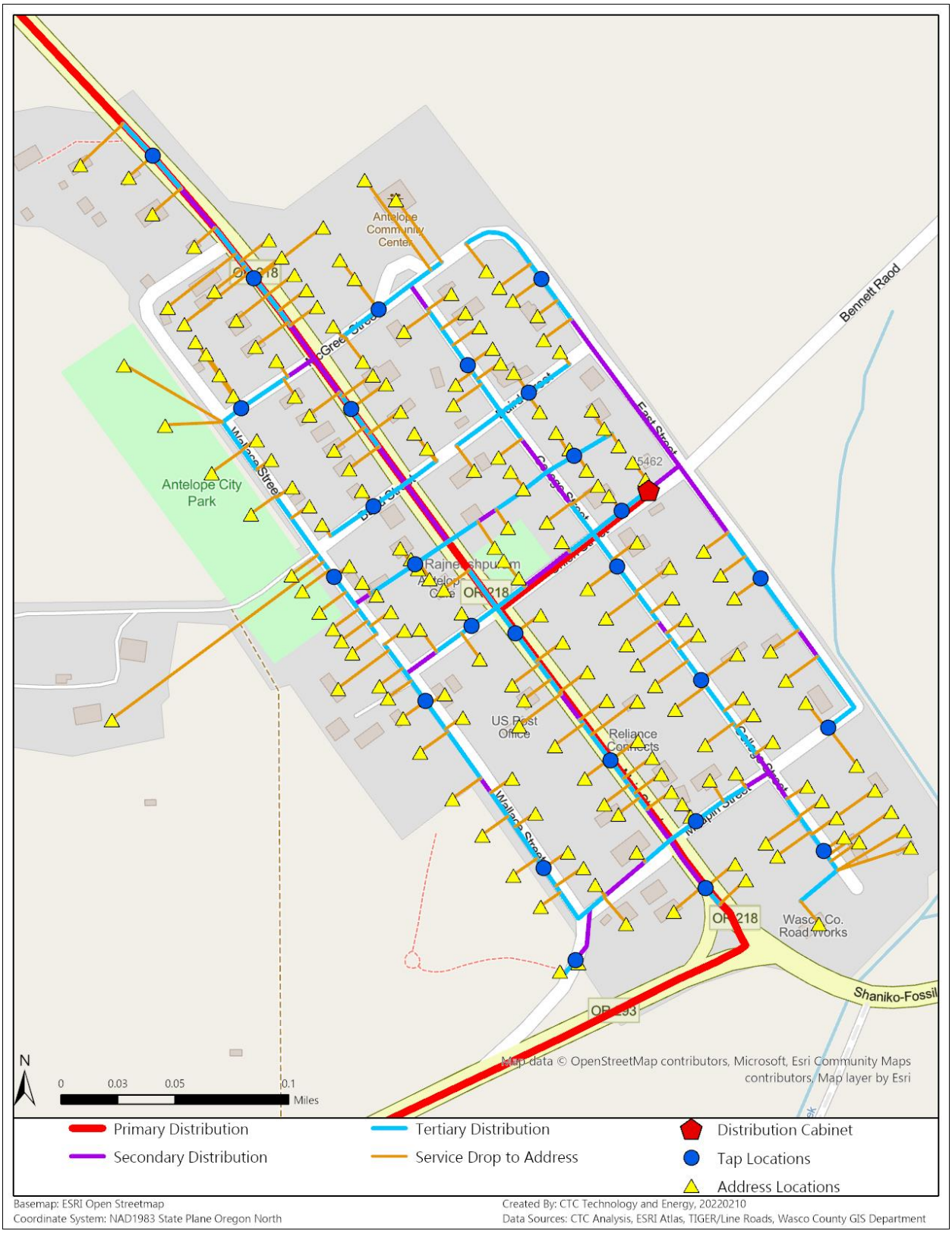


Figure 4: FTTP design for Antelope



1.5 Elements of capital costs for a strategic expansion of the FTTP network

The cost for the middle-mile and distribution plant includes the following elements:

- **Project management** – encompasses overall project and contract management, including oversight of the construction and engineering contractor(s), equipment suppliers, and right-of-way agreements; we assumed a 1-person project management team for three years to construct the entire network. We include this cost for only the cost estimate for the full design. We do not include this cost for the estimates for individual middle-mile segments and individual towns.

- **Engineering and as-builts** – includes system-level architecture planning, preliminary designs, and field walkouts to determine candidate fiber routing; development of detailed engineering prints and preparation of permit applications; and post-construction "as-built" revisions to engineering design materials.

- **Conduit and vault infrastructure** – consists of all labor and materials related to underground communications conduit construction, including conduit placement, vault/handhole installation, and surface restoration; includes all work area protection and traffic control measures inherent to roadway construction activities.

- **Utility pole make-ready** – consists of the labor needed for preparing poles for the addition of new aerial cabling. This includes moving existing cables to make room for new cables or replacing poles if the existing pole is at maximum capacity.

- **Fiber optic cables and components** – consists of the material and labor costs specific to the installation of fiber optic cables, taps, splice enclosures, and other related components, irrespective of the cable pathway (underground conduit or aerial placement).

- **Fiber splicing, testing, and documentation** – includes all labor related to splicing of outdoor fiber optic cables.

- **Hubs and active FDC facilities and systems –** consists of the material and labor costs of placing hubs and active FDC shelters and enclosures; related hub systems (backup power generation, cooling systems, etc.); and terminating middle-mile fiber cables within the hubs and active FDCs.

- **Post-Covid market demand contingency –** accounts for price increases on material due to supply chain interruptions during the pandemic. This contingency is not applied to the project management and engineering and as-builts categories since they do not incorporate construction material.

The estimated total cost for distribution electronics is listed separately. We also provide the estimated cost for subscriber drops. This represents the cost for material and labor for installing aerial or underground infrastructure across a subscriber's property, including customer premises equipment.

1.6 Cost estimate for full project design

The middle-mile and distribution plant design for key population areas identified by the Qlife is estimated to cost $35.0 million, or $40,510 per passing, including a 20 percent contingency cost on construction material. The network is 166.8 miles long and is capable of serving 864 residents in the target service areas. These costs are itemized in Table 6. Note that the costs have been rounded.

Table 6: Estimated middle-mile and distribution plant cost for the full FTTP design

Fixed Costs	
Project management	$900,000
Engineering and as-builts	$3,600,000
Conduit and vault infrastructure	$600,000
Materials	*$150,000*
Labor	*$450,000*
Aerial strand	$7,360,000
Materials	*$3,160,000*
Labor	*$4,200,000*
Utility pole make-ready	$10,200,000
Fiber optic cables and components	$6,800,000
Materials	*$2,650,000*
Labor	*$4,150,000*
Fiber splicing, testing, and documentation	$100,000
Hub and active FDC facilities and systems	$500,000
Middle-mile and distribution plant total cost	**$30,000,000**
Number of passings	864
Cost per passing	**34,720**
Post-Covid market demand contingency on construction material (20%)	$5,000,000
Middle-mile and distribution plant total cost with contingency	$35,000,000
Cost per passing	**$40,510**

Table 7 presents the estimated costs for the FTTP distribution network electronics while Table 8 presented estimated costs for subscriber drops and customer premises equipment. As not all addresses will choose to sign up for service, we have estimated a take-rate of 60 percent—that is, only 60 percent of residents will subscribe to the service. At this take-rate, the number of subscribers for the network is estimated to be 518.

The distribution electronics are estimated to cost $150,000, or $290 per subscriber. The subscriber premises costs, including drops and customer premises equipment, are estimated to be $450,000, or $870 per subscriber.

Table 7: Estimated cost of distribution network electronics for full FTTP design

Estimated Network Electronics and Subscriber Drop Costs	
Number of passings (60% take-rate)	518
FTTP distribution network electronics	$150,000
Total cost per subscriber	$290

Table 8: Estimated cost of subscriber drops and customer premises equipment for full FTTP design

Estimated Subscriber Premises Costs	
Number of passings (60% take-rate)	518
Subscriber drop costs	$200,000
Customer premises equipment	$250,000
Total cost	$450,000
Total cost per subscriber	$870

Table 9 presents the estimated total implementation costs of the FTTP network in the identified areas, assuming a 60 percent take-rate. The total implementation costs with a 20 percent contingency on construction material is estimated to be $35.6 million, or $68,670 per subscriber.

Table 9: Estimated total implementation costs

Estimated Total Implementation Costs (60% Take-rate)	
Number of passings (60% take-rate)	518
Total implementation costs (with a 20% contingency)	$35,600,000
Cost per subscriber	$68,670

1.7 Cost estimates for middle-mile segments

Table 10 shows the estimated costs for constructing each segment of the middle-mile. These represent long legs of the network between two towns or between a town and a hub. The segments are delineated by the two ends of the middle-mile segment and do not include the costs for any hubs. The costs for installing segments of the FTTP network's middle-mile range from $650,000 to $4.95 million.

Table 10: Estimated costs for middle-mile segments

Estimated costs for middle-mile segments		
Segment	**Length (miles)**	**Cost**
BPA Substation to Shaniko	15.2	$2.6 million
Chenoweth to The Dalles	3.8	$650,000
Maupin to Antelope	41.6	$7 million
Maupin to Pine Grove	12.7	$2.1 million
Mosier to Chenoweth	10.2	$1.7 million
Pine Grove to Simnasho	11.3	$1.95 million
Rowena to Mosier	7.6	$1.25 million
Shaniko to Antelope	6.7	$1.1 million
The Dalles to Tygh Valley	29.4	$4.95 million
The Dalles to Celilo Village	14.1	$2.35 million
The Dalles to Rowena	7.1	$1.25 million
Tygh Valley to Maupin	7.1	$1.35 million

1.7.1 Middle-mile cost estimate for BPA substation to Shaniko

The middle-mile plant for building a route from the BPA substation to Shaniko is estimated to cost $2.6 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 11. Note that the costs have been rounded.

Table 11: Estimated cost for middle-mile plant from BPA substation to Shaniko

Fixed Costs	
Engineering and as-builts	$300,000
Aerial strand	$600,000
Materials	*$250,000*
Labor	*$350,000*
Utility pole make-ready	$800,000
Fiber optic cables and components	$500,000
Materials	*$200,000*
Labor	*$300,000*
Middle-mile plant total cost	**$2,200,000**
Post-Covid market demand contingency on construction material (20%)	$400,000
Middle-mile plant total cost with contingency	**$2,600,000**

1.7.2 Middle-mile cost estimate for Chenoweth to The Dalles

The middle-mile plant for building a route from Chenoweth to The Dalles is estimated to cost $650,000, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 12. Note that the costs have been rounded.

Table 12: Estimated cost for middle-mile plant from Chenoweth to The Dalles

Fixed Costs	
Engineering and as-builts	$50,000
Aerial strand	$160,000
Materials	*$60,000*
Labor	*$100,000*
Utility pole make-ready	$200,000
Fiber optic cables and components	$150,000
Materials	*$50,000*
Labor	*$100,000*
Middle-mile plant total cost	**$550,000**
Post-Covid market demand contingency on construction material (20%)	$100,000
Middle-mile plant total cost with contingency	**$650,000**

1.7.3 Middle-mile cost estimate for Maupin to Antelope

The middle-mile plant for building a route from Maupin to Antelope is estimated to cost $7 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 13. Note that the costs have been rounded.

Table 13: Estimated cost for middle-mile plant from Maupin to Antelope

Fixed Costs	
Engineering and as-builts	$750,000
Aerial strand	$1,580,000
Materials	*$680,000*
Labor	*$900,000*
Utility pole make-ready	$2,200,000
Fiber optic cables and components	$1,400,000
Materials	*$500,000*
Labor	*$900,000*
Middle-mile plant total cost	**$5,950,000**
Post-Covid market demand contingency on construction material (20%)	$1,050,000
Middle mile plant total cost with contingency	**$7,000,000**

1.7.4 Middle-mile cost estimate for Maupin to Pine Grove

The middle-mile plant for building a route from Maupin to Pine Grove is estimated to cost $2.1 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 14. Note that the costs have been rounded.

Table 14: Estimated cost for middle-mile plant from Maupin to Pine Grove

Fixed Costs	
Engineering and as-builts	$250,000
Aerial strand	$510,000
Materials	*$210,000*
Labor	*$300,000*
Utility pole make-ready	$650,000
Fiber optic cables and components	$400,000
Materials	*$150,000*
Labor	*$250,000*
Middle-mile plant total cost	**$1,800,000**
Post-Covid market demand contingency on construction material (20%)	$300,000
Middle-mile plant total cost with contingency	**$2,100,000**

1.7.5 Middle-mile cost estimate for Mosier to Chenoweth

The middle-mile plant for building a route from Mosier to Chenoweth is estimated to cost $1.7 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 15. Note that the costs have been rounded.

Table 15: Estimated cost for middle-mile plant from Mosier to Chenoweth

Fixed Costs	
Engineering and as-builts	$200,000
Conduit and vault infrastructure	$35,000
Materials	*$10,000*
Labor	*$25,000*
Aerial strand	$360,000
Materials	*$160,000*
Labor	*$200,000*
Utility pole make-ready	$550,000
Fiber optic cables and components	$300,000
Materials	*$100,000*
Labor	*$200,000*
Middle-mile plant total cost	**$1,450,000**
Post-Covid market demand contingency on construction material (20%)	$250,000
Middle mile plant total cost with contingency	**$1,700,000**

1.7.6 Middle-mile cost estimate for Pine Grove to Simnasho

The middle-mile plant for building a route from Pine Grove to Simnasho is estimated to cost $1.95 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 16. Note that the costs have been rounded.

Table 16: Estimated cost for middle-mile plant from Pine Grove to Simnasho

Fixed Costs	
Engineering and as-builts	$200,000
Aerial strand	$430,000
Materials	*$180,000*
Labor	*$250,000*
Utility pole make-ready	$600,000
Fiber optic cables and components	$400,000
Materials	*$150,000*
Labor	*$250,000*
Middle-mile plant total cost	**$1,650,000**
Post-Covid market demand contingency on construction material (20%)	$300,000
Middle-mile plant total cost with contingency	**$1,950,000**

1.7.7 Middle-mile cost estimate for Rowena to Mosier

The middle-mile plant for building a route from Rowena to Mosier is estimated to cost $1.25 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 17. Note that the costs have been rounded.

Table 17: Estimated cost for middle-mile plant from Rowena to Mosier

Fixed Costs	
Engineering and as-builts	$150,000
Aerial strand	$270,000
Materials	*$120,000*
Labor	*$150,000*
Utility pole make-ready	$400,000
Fiber optic cables and components	$250,000
Materials	*$100,000*
Labor	*$150,000*
Middle-mile plant total cost	**$1,050,000**
Post-Covid market demand contingency on construction material (20%)	$200,000
Middle-mile plant total cost with contingency	**$1,250,000**

1.7.8 Middle-mile cost estimate for Shaniko to Antelope

The middle-mile plant for building a route from Shaniko to Antelope is estimated to cost $1.1 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 18. Note that the costs have been rounded.

Table 18: Estimated cost for middle-mile plant from Shaniko to Antelope

Fixed Costs	
Engineering and as-builts	$100,000
Aerial strand	$260,000
Materials	*$110,000*
Labor	*$150,000*
Utility pole make-ready	$350,000
Fiber optic cables and components	$250,000
Materials	*$100,000*
Labor	*$150,000*
Middle-mile plant total cost	**$950,000**
Post-Covid market demand contingency on construction material (20%)	$150,000
Middle-mile plant total cost with contingency	**$1,100,000**

1.7.9 Middle-mile cost estimate for The Dalles to Tygh Valley

The middle-mile plant for building a route from The Dalles to Tygh Valley is estimated to cost $4.95 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 19. Note that the costs have been rounded.

Table 19: Estimated cost for middle-mile plant from The Dalles to Tygh Valley

Fixed Costs	
Engineering and as-builts	$550,000
Aerial strand	$1,130,000
Materials	*$480,000*
Labor	*$650,000*
Utility pole make-ready	$1,550,000
Fiber optic cables and components	$950,000
Materials	*$350,000*
Labor	*$600,000*
Middle-mile plant total cost	**$4,200,000**
Post-Covid market demand contingency on construction material (20%)	$750,000
Middle-mile plant total cost with contingency	**$4,950,000**

1.7.10 Middle-mile cost estimate for The Dalles to Celilo Village

The middle-mile plant for building a route from The Dalles to Celilo Village is estimated to cost $2.35 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 20. Note that the costs have been rounded.

Table 20: Estimated cost for middle-mile plant from The Dalles to Celilo Village

Fixed Costs	
Engineering and as-builts	$250,000
Aerial strand	$530,000
Materials	*$230,000*
Labor	*$300,000*
Utility pole make-ready	$750,000
Fiber optic cables and components	$450,000
Materials	*$150,000*
Labor	*$300,000*
Middle-mile plant total cost	**$2,000,000**
Post-Covid market demand contingency on construction material (20%)	$350,000
Middle-mile plant total cost with contingency	**$2,350,000**

1.7.11 Middle-mile cost estimate for The Dalles to Rowena

The middle-mile plant for building a route from The Dalles to Rowena is estimated to cost $1.25 million, including a 20 percent contingency cost on construction material. These costs are itemized below in Table 21. Note that the costs have been rounded.

Table 21: Estimated cost for middle-mile plant from The Dalles to Rowena

Fixed Costs	
Engineering and as-builts	$150,000
Aerial strand	$270,000
Materials	*$120,000*
Labor	*$150,000*
Utility pole make-ready	$400,000
Fiber optic cables and components	$250,000
Materials	*$100,000*
Labor	*$150,000*
Middle-mile plant total cost	**$1,050,000**
Post-Covid market demand contingency on construction material (20%)	$200,000
Middle-mile plant total cost with contingency	**$1,250,000**

1.7.12 Middle-mile cost estimate for Tygh Valley to Maupin

The middle-mile plant for building a route from Tygh Valley to Maupin is estimated to cost $1.35 million, including a 20 percent contingency cost on construction material. A map of the network is displayed in Figure 10 below. These costs are itemized in Table 22. Note that the costs have been rounded.

Table 22: Estimated cost for middle-mile plant from Tygh Valley to Maupin

Fixed Costs	
Engineering and as-builts	$100,000
Conduit and vault infrastructure	$400,000
Materials	*$100,000*
Labor	*$300,000*
Aerial strand	$180,000
Materials	*$80,000*
Labor	*$100,000*
Utility pole make-ready	$250,000
Fiber optic cables and components	$200,000
Materials	*$100,000*
Labor	*$100,000*
Middle-mile plant total cost	**$1,150,000**
Post-Covid market demand contingency on construction material (20%)	$200,000
Middle-mile plant total cost with contingency	**$1,350,000**

1.8 Cost estimates for FTTP in towns

Table 23 shows estimates for the total implementation costs in each town. To determine these cost estimates, we took the full FTTP design and clipped the network at the boundary of each town. Each cost estimate represents the cost for deploying infrastructure within that town only and includes a 20 percent contingency cost for materials. As not all eligible residents will choose to subscribe to the network these estimates assume a 60 percent take-rate, meaning only 60 percent of eligible residents will choose to subscribe.

The estimated total implementation costs for individual towns range from $185,000 to $1.866 million, and $6,780 to $37,370 per passing.

Table 23: Estimated total implementation costs for towns

Estimated total implementation costs for towns				
Town	**Length of distribution network (mi.)**	**Number of passings**	**Total implementation cost**	**Cost per passing (60% take-rate)**
Antelope	3	179	$728,000	$6,780
Celilo Village	0.4	15	$185,000	$20,560
Mosier	5.8	364	$1,500,000	$6,870
Pine Grove	9.7	105	$1,866,000	$29,620
Rowena	5	116	$1,047,000	$15,040
Shaniko	2	54	$469,000	$14,480
Simnasho	3.4	31	$695,000	$37,370

1.8.1 FTTP cost estimate for Antelope

The distribution plant for Antelope is estimated to cost $621,000 or $3,470 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 3 miles long and serve 179 passings. A map of the network is displayed in Figure 5 below. These costs are itemized in Table 24. Note that the costs have been rounded.

Figure 5: FTTP network design for Antelope

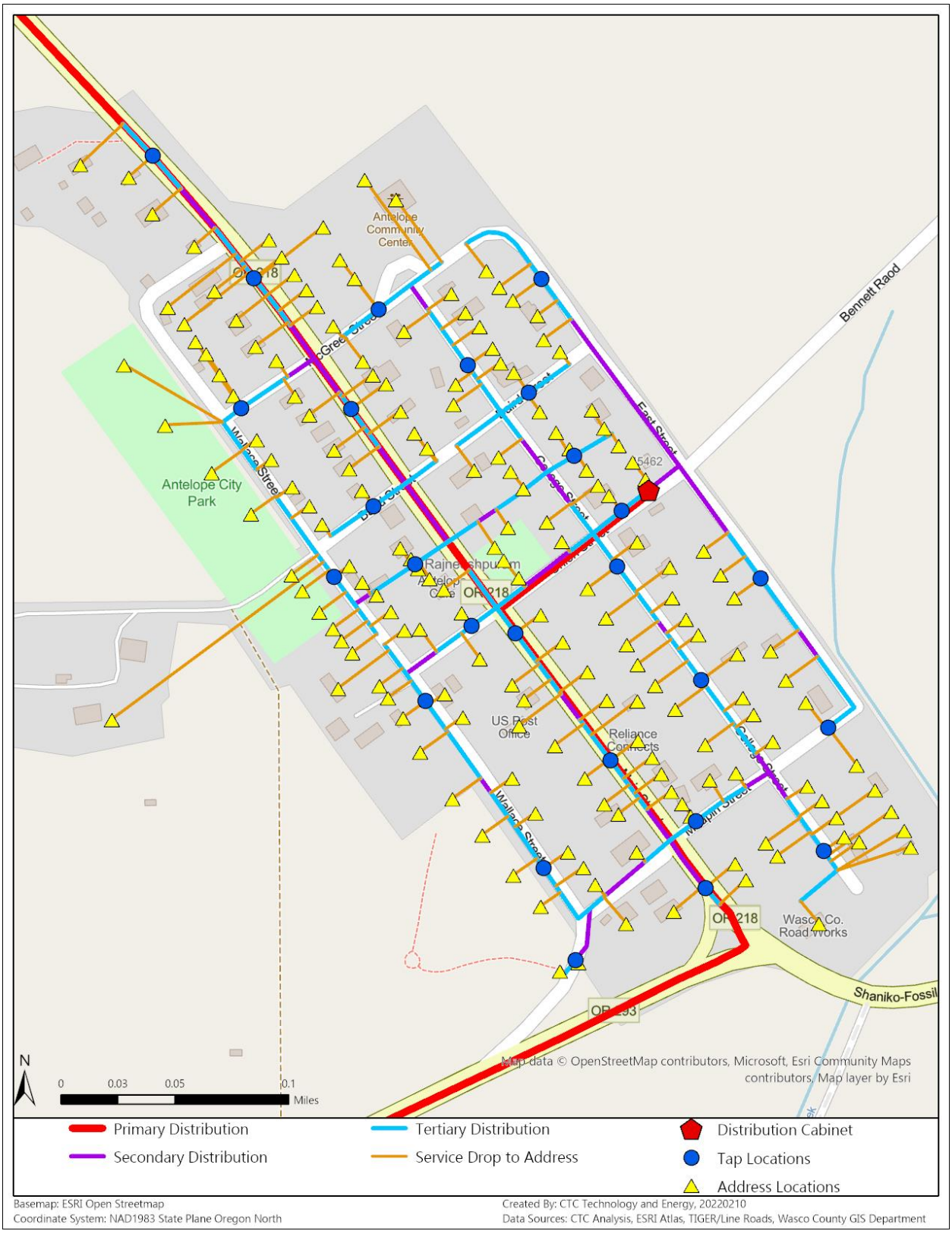


Table 24: Estimated costs for distribution plant for Antelope

Fixed Costs	
Engineering and as-builts	$56,000
Aerial strand	$115,000
Materials	*$49,000*
Labor	*$66,000*
Utility pole make-ready	$160,000
Fiber optic cables and components	$172,000
Materials	*$101,000*
Labor	*$71,000*
Fiber splicing, testing, and documentation	$24,000
Distribution plant total cost	**$527,000**
Number of passings	179
Cost per passing	**$2,940**
Post-Covid market demand contingency on construction material (20%)	$94,000
Distribution plant total cost with contingency	**$621,000**
Cost per passing	**$3,470**

As not all eligible residents will choose to subscribe, we have estimated a 60 take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 107. At a 60 percent take-rate, the estimated cost for distribution electronics is $27,000, or $250 per passing. These costs are shown in Table 25.

Table 25: Estimated cost for distribution electronics for Antelope

Fixed Costs	
Number of passings (60% take-rate)	107
FTTP distribution network electronics	$27,000
Cost per passing	**$250**

The cost for infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated at $80,000, or $740 per passing. These costs are shown in Table 26.

Table 26: Estimated costs for subscriber drops and customer premises equipment in Antelope

Fixed Costs	
Number of passings (60% take-rate)	107
Subscriber drops	$30,000
FTTP customer premises equipment	$50,000
Total cost	**$80,000**
Cost per passing	**$740**

The total implementation cost of infrastructure in Antelope is estimated to be $728,000, or $6,780 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 27.

Table 27: Estimated total implementation costs for Antelope

Fixed Costs	
Total implementation costs (no contingency)	$634,000
Cost per passing	$5,900
Total implementation costs (w/ contingency)	$728,000
Cost per passing	**$6,780**

1.8.2 FTTP cost estimate for Celilo Village

The distribution plant for Celilo Village is estimated to cost $163,000, or $10,870 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 0.4 miles long and serve 15 passings. A map of the network is displayed in Figure 6 below. These costs are itemized in Table 28. Note that the costs have been rounded.

Figure 6: FTTP network design for Celilo Village

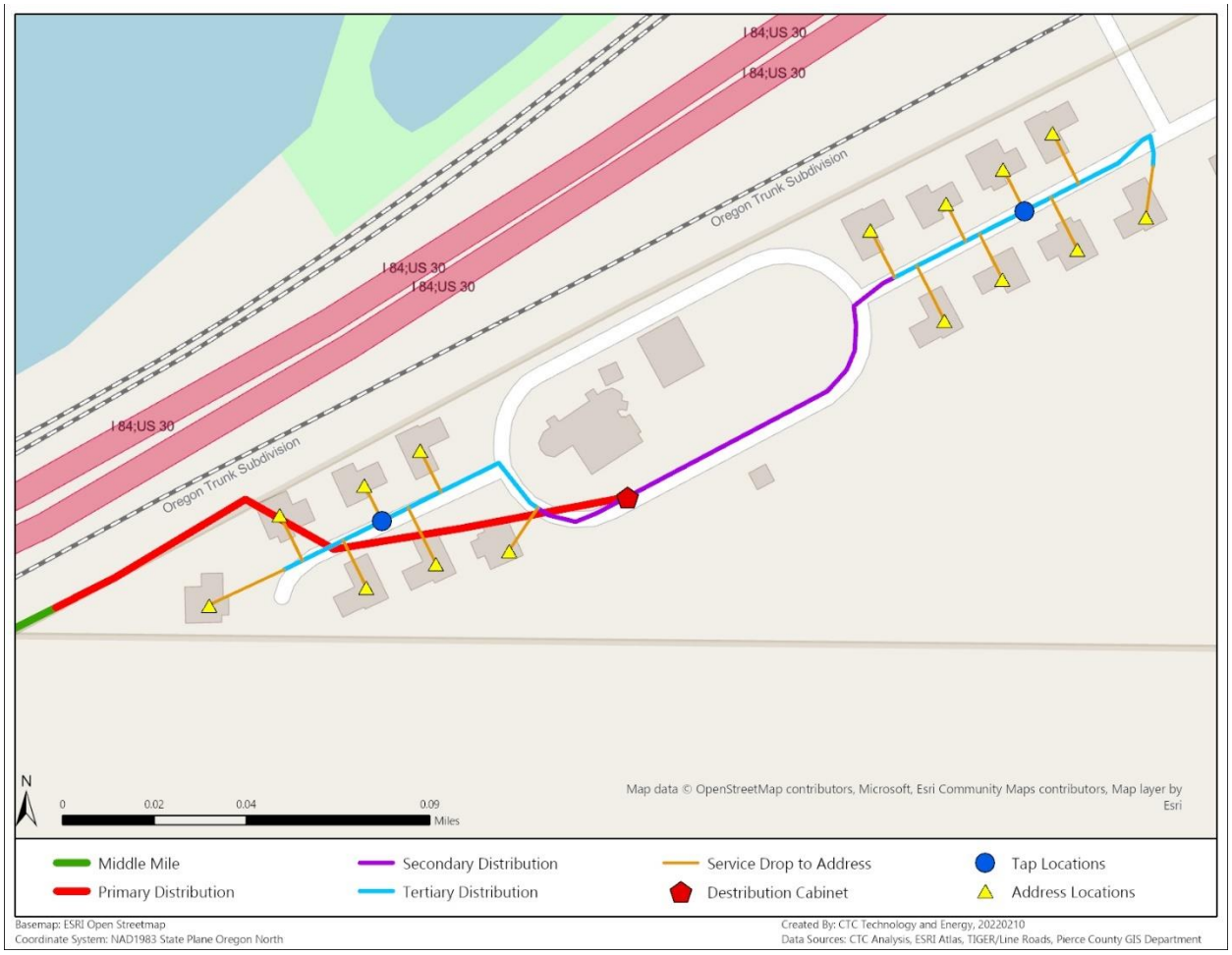


Table 28: Estimated costs for distribution plant for Celilo Village

Fixed Costs	
Engineering and as-builts	$8,000
Aerial strand	$16,000
Materials	*$7,000*
Labor	*$9,000*
Utility pole make-ready	$22,000
Fiber optic cables and components	$76,000
Materials	*$62,000*
Labor	*$14,000*
Fiber splicing, testing, and documentation	$15,000
Distribution plant total cost	**$137,000**
Number of passings	15
Cost per passing	**$9,130**
Post-Covid market demand contingency on construction material (20%)	$26,000
Distribution plant total cost with contingency	**$163,000**
Cost per passing	**$10,870**

As not all eligible residents will choose to subscribe, we have estimated a 60 take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 9. At a 60 percent take-rate, the estimated cost for distribution electronics is $15,000, or $1,670 per passing. These costs are shown in Table 29.

Table 29: Estimated cost for distribution network electronics for Celilo Village

Fixed Costs	
Number of passings (60% take-rate)	9
FTTP distribution network electronics	$15,000
Cost per passing	**$1,670**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $7,000, or $440 per passing. These costs are shown in Table 30.

Table 30: Estimated costs for subscriber drops and customer premises equipment for Celilo Village

Fixed Costs	
Number of passings (60% take-rate)	9
Subscriber drops	$3,000
FTTP customer premises equipment	$4,000
Total cost	**$7,000**
Cost per passing	**$440**

The total implementation cost of infrastructure in Celilo Village is estimated to be $185,000, or $20,560 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 31.

Table 31: Estimated total implementation costs for Celilo Village

Fixed Costs	
Total implementation costs (no contingency)	$159,000
Cost per passing	$17,670
Total implementation costs (w/ contingency)	$185,000
Cost per passing	**$20,560**

1.8.3 FTTP cost estimate for Mosier

The distribution plant for Mosier is estimated to cost $1.284 million, or $3,530 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 5.8 miles long and serve 364 passings. A map of the network is displayed in Figure 7 below. These costs are itemized in Table 32. Note that the costs have been rounded.

Figure 7: FTTP network design for Mosier

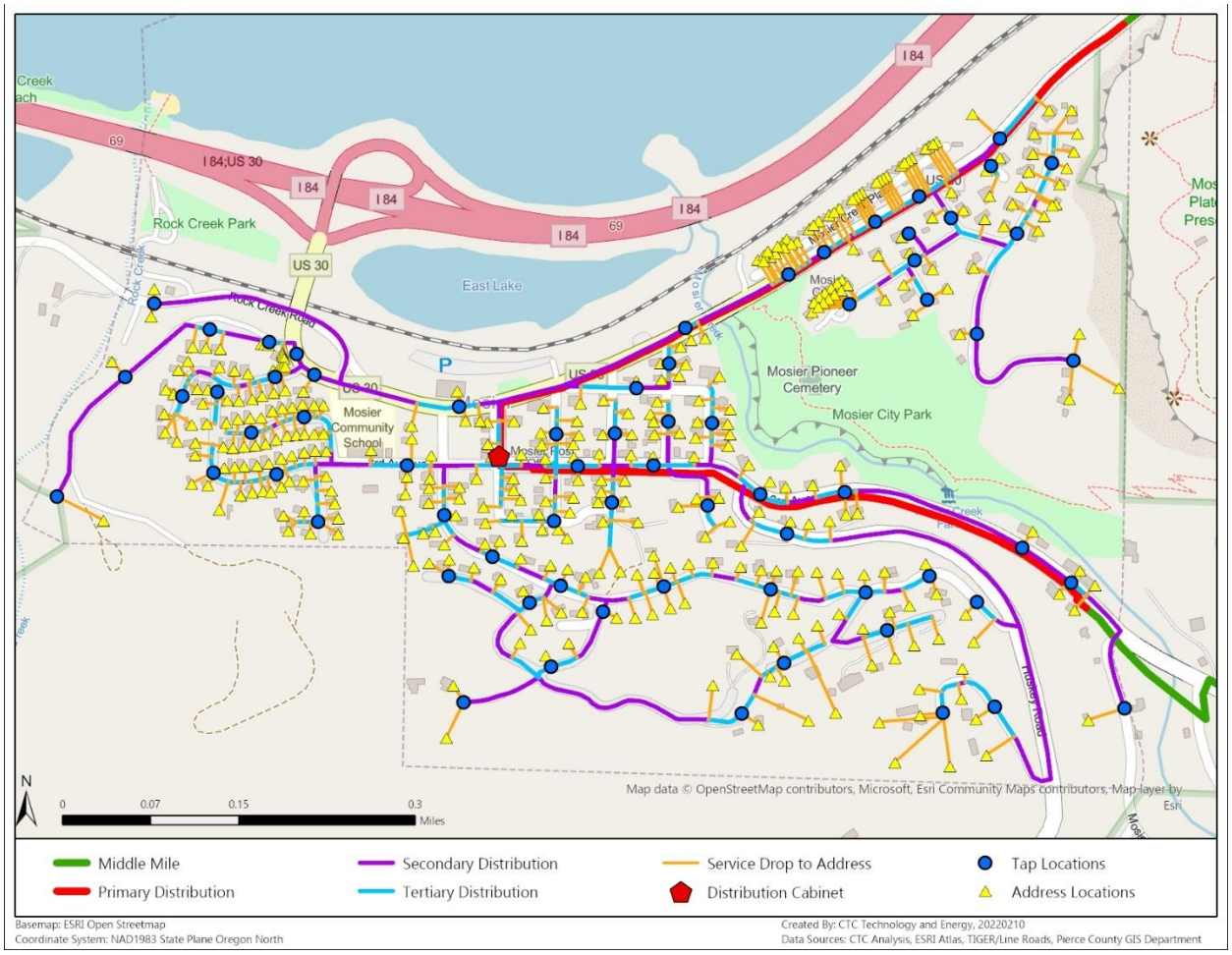


Table 32: Estimated costs for distribution plant for Mosier

Fixed Costs	
Engineering and as-builts	$110,000
Aerial strand	$154,000
Materials	*$30,000*
Labor	*$124,000*
Utility pole make-ready	$210,000
Fiber optic cables and components	$90,000
Materials	*$120,000*
Labor	*$292,000*
Fiber splicing, testing, and documentation	$289,000
Distribution plant total cost	**$1,088,000**
Number of passings	364
Cost per passing	**$2,990**
Post-Covid market demand contingency on construction material (20%)	$196,000
Distribution plant total cost with contingency	$1,284,000
Cost per passing	**$3,530**

As not all eligible residents will choose to subscribe, we have estimated a 60 percent take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 218. At a 60 percent take-rate, the estimated cost for distribution electronics is $52,000, or $240 per passing. These costs are shown in Table 33.

Table 33: Estimated cost for distribution network electronics in Mosier

Fixed Costs	
Number of passings (60% take-rate)	218
FTTP distribution network electronics	$52,000
Cost per passing	**$240**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $164,000 or $750 per passing. These costs are shown in Table 34.

Table 34: Estimated costs for subscriber drops and customer premises equipment for Mosier

Fixed Costs	
Number of passings (60% take-rate)	218
Subscriber drops	$62,000
FTTP customer premises equipment	$102,000
Total cost	**$164,000**
Cost per passing	**$750**

The total implementation cost of infrastructure in Mosier is estimated to cost $1.5 million, or $6,870 per passing, at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 35.

Table 35: Estimated total implementation costs for Mosier

Fixed Costs	
Total implementation costs (no contingency)	$1,304,000
Cost per passing	$5,970
Total implementation costs (w/ contingency)	$1,500,000
Cost per passing	**$6,870**

1.8.4 FTTP cost estimate for Pine Grove

The distribution plant for Pine Grove is estimated to cost $1.783 million, or $16,980 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 9.7 miles long and serve 105 passings. A map of the network is displayed in Figure 8 below. These costs are itemized in Table 36. Note that the costs have been rounded.

Figure 8: FTTP network design for Pine Grove

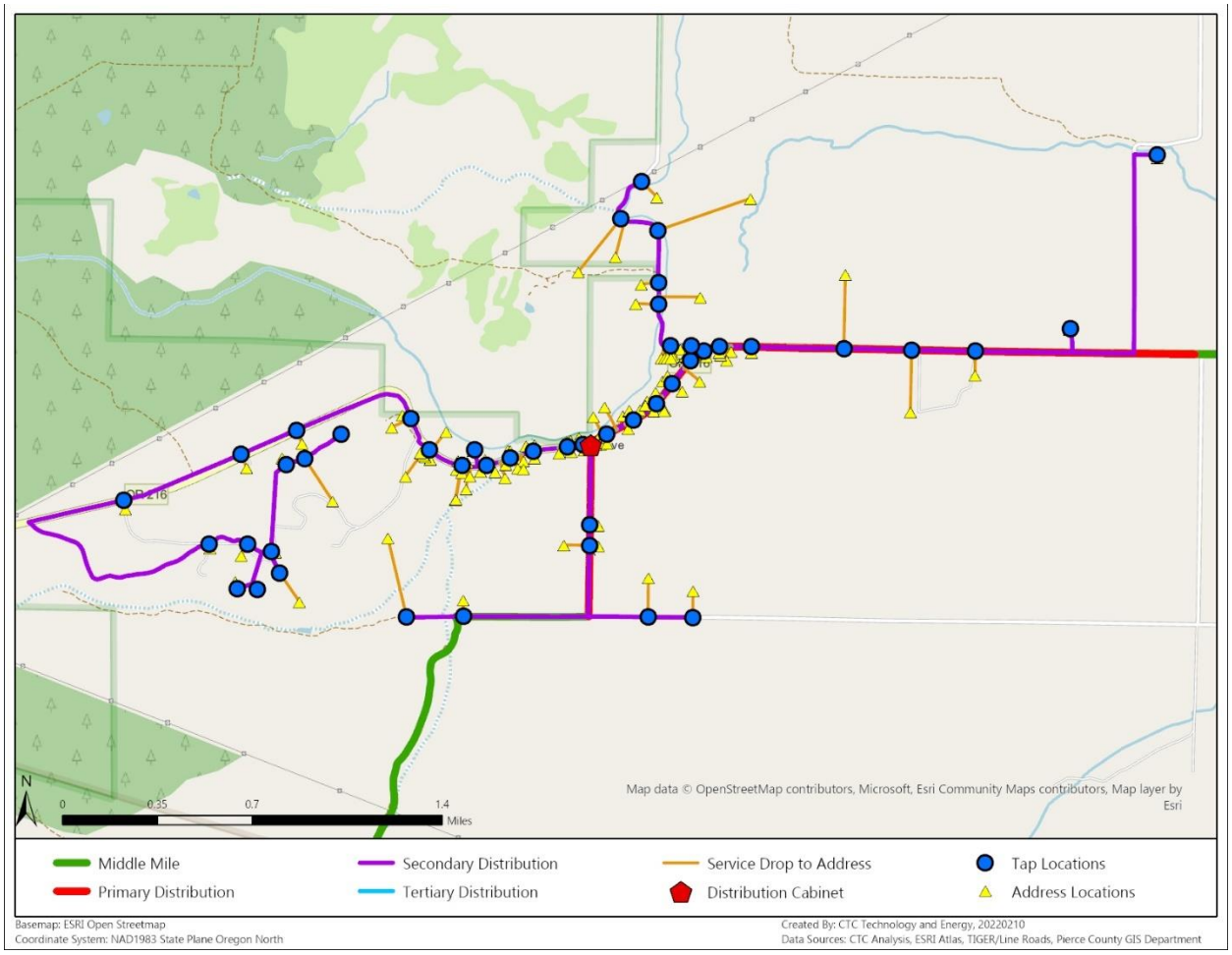


Table 36: Estimated costs for distribution plant for Pine Grove

Fixed Costs	
Engineering and as-builts	$179,000
Aerial strand	$370,000
Materials	$159,000
Labor	$211,000
Utility pole make-ready	$512,000
Fiber optic cables and components	$435,000
Materials	$223,000
Labor	$212,000
Fiber splicing, testing, and documentation	$20,000
Distribution plant total cost	**$1,516,000**
Number of passings	105
Cost per passing	**$14,440**
Post-Covid market demand contingency on construction material (20%)	$267,000
Distribution plant total cost with contingency	$1,783,000
Cost per passing	**$16,980**

As not all eligible residents will choose to subscribe, we have estimated a 60 percent take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 63. At a 60 percent take-rate, the estimated cost for distribution electronics is $21,000, or $330 per passing. These costs are shown in Table 37.

Table 37: Estimated costs for distribution network electronics for Pine Grove

Fixed Costs	
Number of passings (60% take-rate)	63
FTTP distribution network electronics	$21,000
Cost per passing	**$330**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $62,000, or $980 per passing. These costs are shown in Table 38.

Table 38: Estimated costs for subscriber drops and customer premises equipment for Pine Grove

Fixed Costs	
Number of passings (60% take-rate)	63
Subscriber drops	$32,000
FTTP customer premises equipment	$30,000
Total cost	$62,000
Cost per passing	**$980**

The total implementation cost of infrastructure in Pine Grove is estimated to be $1.866 million, or $29,620 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 39.

Table 39: Estimated total implementation costs for Pine Grove

Fixed Costs	
Total implementation costs (no contingency)	$1,599,000
Cost per passing	$25,380
Total implementation costs (w/ contingency)	$1,866,000
Cost per passing	**$29,620**

1.8.5 FTTP cost estimate for Rowena

The distribution plant for Rowena is estimated to cost $968,000, or $8,340 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 5 miles long and serve 116 passings. A map of the network is displayed in Figure 9 below. These costs are itemized in Table 40. Note that the costs have been rounded.

Figure 9: FTTP network design for Rowena

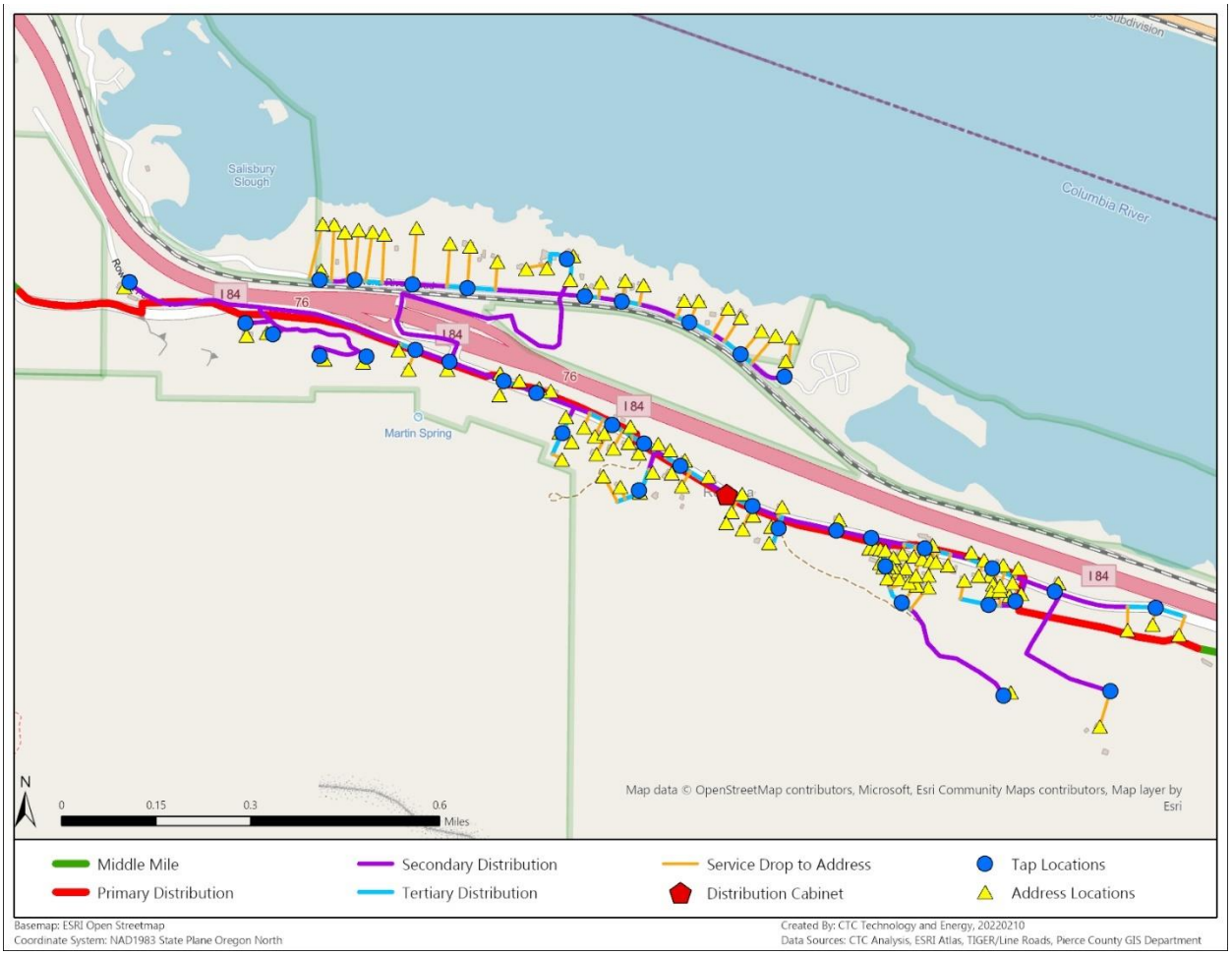


Table 40: Estimated costs for distribution plant for Rowena

Fixed Costs	
Engineering and as-builts	$92,000
Aerial strand	$190,000
Materials	$82,000
Labor	$108,000
Utility pole make-ready	$264,000
Fiber optic cables and components	$255,000
Materials	$142,000
Labor	$113,000
Fiber splicing, testing, and documentation	$21,000
Distribution plant total cost	**$822,000**
Number of passings	116
Cost per passing	**$7,090**
Post-Covid market demand contingency on construction material (20%)	$146,000
Distribution plant total cost with contingency	$968,000
Cost per passing	**$8,340**

As not all eligible residents will choose to subscribe, we have estimated a 60 percent take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 70. At a 60 percent take-rate, the estimated cost for distribution electronics is $23,000, or $330 per passing. These costs are shown in Table 41.

Table 41: Estimated costs for distribution network electronics for Rowena

Fixed Costs	
Number of passings (60% take-rate)	70
FTTP distribution network electronics	$23,000
Cost per passing	**$330**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $53,000, or $800 per passing. These costs are shown in Table 42.

Table 42: Estimated costs for subscriber drops and customer premises equipment for Rowena

Fixed Costs	
Number of passings (60% take-rate)	70
Subscriber drops	$23,000
FTTP customer premises equipment	$33,000
Total cost	$53,000
Cost per passing	**$800**

The total implementation cost of infrastructure in Rowena is estimated to be $1.047 million, or $15,040 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 43.

Table 43: Estimate total implementation costs for Rowena

Fixed Costs	
Total implementation costs (no contingency)	$901,000
Cost per passing	$12,950
Total implementation costs (w/ contingency)	$1,047,000
Cost per passing	**$15,040**

1.8.6 FTTP cost estimate for Shaniko

The distribution plant for Shaniko is estimated to cost $426,000, or $7,890 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 2 miles long and serve 54 passings. A map of the network is displayed in Figure 10 below. These costs are itemized in Table 44. Note that the costs have been rounded.

Figure 10: FTTP network design for Shaniko

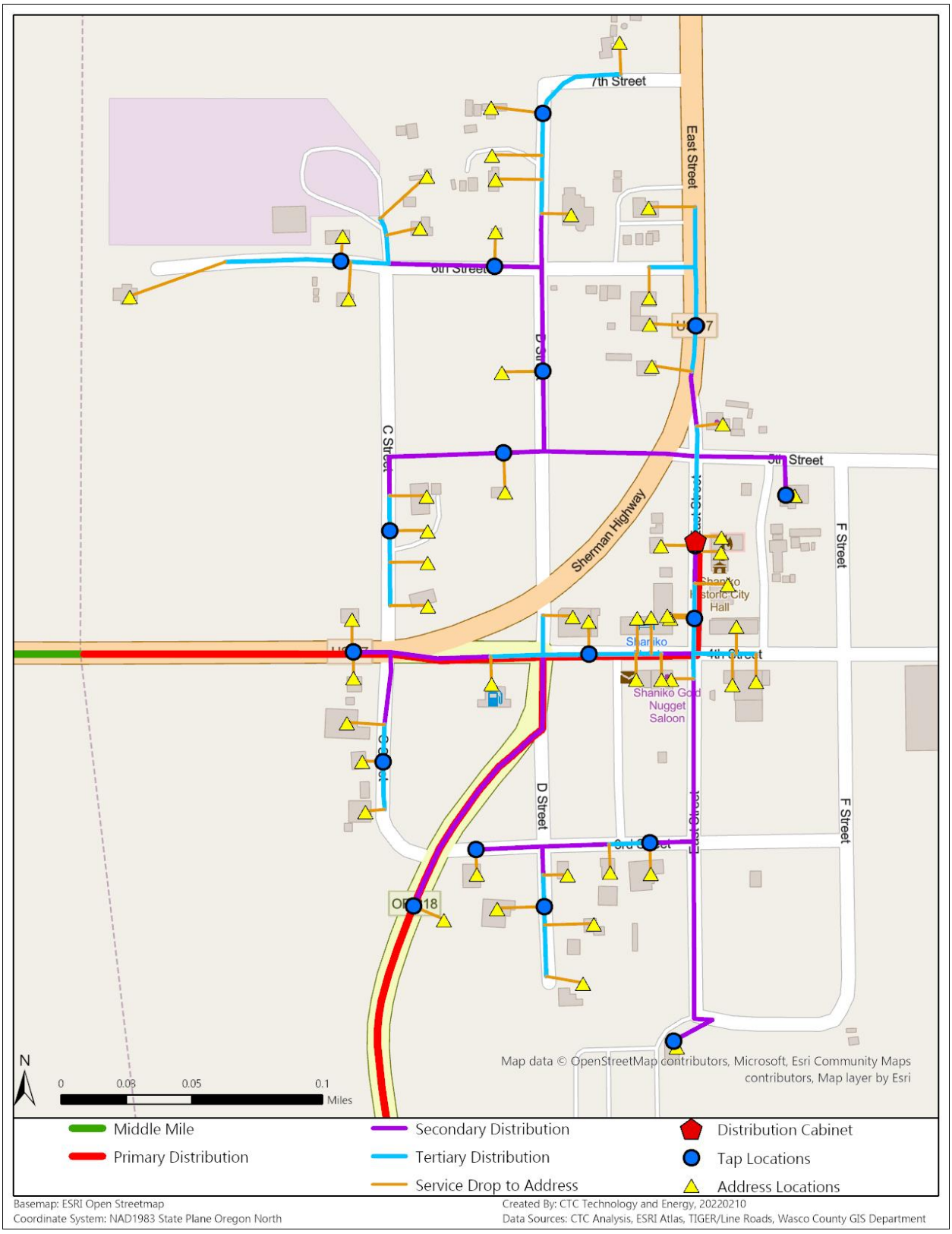


Table 44: Estimated costs for distribution plant for Shaniko

Fixed Costs	
Engineering and as-builts	$36,000
Aerial strand	$75,000
Materials	$32,000
Labor	$43,000
Utility pole make-ready	$104,000
Fiber optic cables and components	$129,000
Materials	$81,000
Labor	$48,000
Fiber splicing, testing, and documentation	$17,000
Distribution plant total cost	**$361,000**
Number of passings	54
Cost per passing	**$6,690**
Post-Covid market demand contingency on construction material (20%)	$65,000
Distribution plant total cost with contingency	$426,000
Cost per passing	**$7,890**

As not all eligible residents will choose to subscribe, we have estimated a 60 percent take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 32. At a 60 percent take-rate, the estimated cost for distribution electronics is $19,000, or $590 per passing. These costs are shown in Table 45.

Table 45: Estimated costs for distribution network electronics for Shaniko

Fixed Costs	
Number of passings (60% take-rate)	32
FTTP distribution network electronics	$19,000
Cost per passing	**$590**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $24,000, or $740 per passing. These costs are shown in Table 46.

Table 46: Estimated costs for subscriber drops and customer premises equipment for Shaniko

Fixed Costs	
Number of passings (60% take-rate)	32
Subscriber drops	$9,000
FTTP customer premises equipment	$15,000
Total cost	$24,000
Cost per passing	**$740**

The total implementation cost of infrastructure in Shaniko is estimated to be $469,000, or $14,480 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 47.

Table 47: Estimated total implementation costs for Shaniko

Fixed Costs	
Total implementation costs (no contingency)	$404,000
Cost per passing	$12,470
Total implementation costs (w/ contingency)	$469,000
Cost per passing	**$14,480**

1.8.7 FTTP cost estimate for Simnasho

The distribution plant for Simnasho is estimated to cost $661,000, or $21,320 per passing, including a 20 percent contingency cost on construction material. The plant is estimated to be 3.4 miles long and serve 31 passings. A map of the network is displayed in Figure 11 below. The costs are itemized in Table 48. Note that the costs have been rounded.

Figure 11: FTTP network design for Simnasho

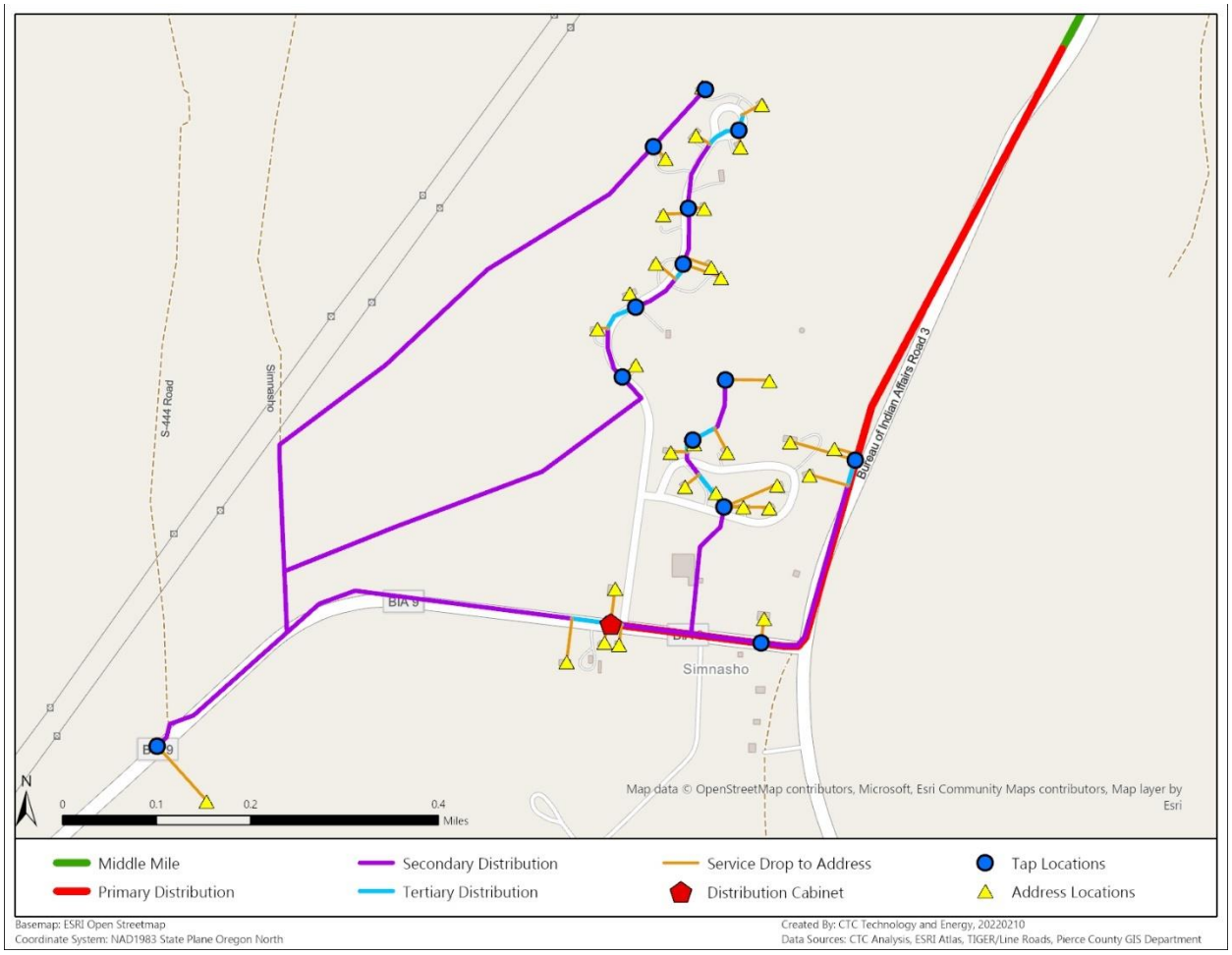


Table 48: Estimated costs for distribution plant for Simnasho

Fixed Costs	
Engineering and as-builts	$62,000
Aerial strand	$128,000
Materials	$55,000
Labor	$73,000
Utility pole make-ready	$178,000
Fiber optic cables and components	$177,000
Materials	$99,000
Labor	$78,000
Fiber splicing, testing, and documentation	$16,000
Distribution plant total cost	**$561,000**
Number of passings	31
Cost per passing	**$18,100**
Post-Covid market demand contingency on construction material (20%)	$100,000
Distribution plant total cost with contingency	$661,000
Cost per passing	**$21,320**

As not all eligible residents will choose to subscribe, we have estimated a 60 take-rate—that is, 60 percent of residents will choose to subscribe. This reduces the estimated number of subscribers in this service area to 19. At a 60 percent take-rate, the estimated cost for distribution electronics is $17,000, or $910 per passing. These costs are shown in Table 49.

Table 49: Estimated costs for distribution network electronics for Simnasho

Fixed Costs	
Number of passings (60% take-rate)	19
FTTP distribution network electronics	$17,000
Cost per passing	**$910**

The infrastructure on a subscriber's premises, including drops and customer premises equipment, is estimated to cost $17,000, or $910 per passing. These costs are shown in Table 50.

Table 50: Estimated costs for subscriber drops and customer premises equipment for Simnasho

Fixed Costs	
Number of passings (60% take-rate)	19
Subscriber drops	$8,000
FTTP customer premises equipment	$9,000
Total cost	**$17,000**
Cost per passing	**$910**

The total implementation cost of infrastructure in Simnasho is estimated to be $695,000, or $37,370 per passing at a 60 percent take-rate, including a 20 percent contingency cost on construction materials. These costs are shown in Table 51.

Table 51: Estimated total implementation costs for Simnasho

Fixed Costs	
Total implementation costs (no contingency)	$595,000
Cost per passing	$31,990
Total implementation costs (w/ contingency)	$695,000
Cost per passing	**$37,370**

1.9 Cost estimates for Tygh Valley, Wamic, and Pine Hollow

Qlife developed cost estimates for middle mile FTTP connecting Tygh Valley, Wamic, and Pine Hollow, while Blue Mountain Networks developed cost estimates for last mile fiber for those communities. These cost estimates were provided to Wasco County and are included on this report.

Qlife developed FTTP cost estimates to build middle mile and serve communities in Tygh Valley, Wamic, and Pine Hollow. Figure 12 shows the middle mile design.

Figure 12: Qlife FTTP Middle Mile Design for Tygh Valley, Wamic, and Pine Hollow

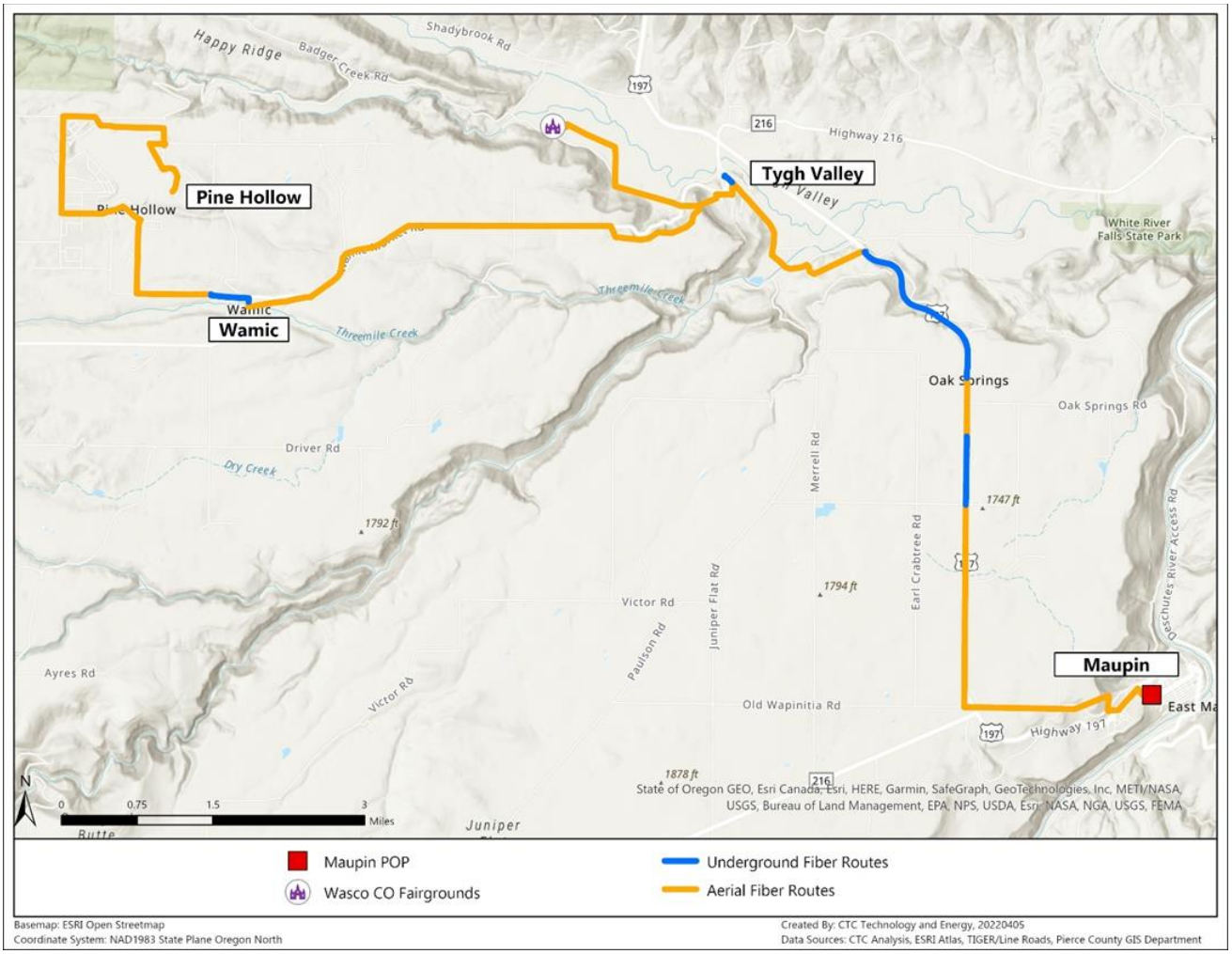


Table 52 summarizes the middle mile costs developed by QLife.

Table 52: Cost Estimate for Qlife FTTP Middle Mile Design for Tygh Valley, Wamic, and Pine Hollow

Fixed Costs	
Underground FTTP construction	$1,227,225
Aerial FTTP construction	$1,343,050
Facility Connections	$150,000
Cable, Splicing, and Termination	414,768.75
Sub-total	3,135,043.75
Engineering (18%)	$564,307.88
Contingency (20%)	$627,008.75
Prevailing Wage Premium (15%)	$$470,256.56
Total	**$4,796,616.94**

Blue Mountain Networks developed an FTTP cost estimate for the last mile deployments in Tygh Valley, Wamic, and Pine Hollow. Figure 13 shows the FTTP design Blue Mountain Networks created for Tygh Valley, and Figure 14 shows the FTTP design it developed for Pine Hollow and Wamic.

Figure 13: Blue Mountain Networks last mile FTTP design for Tygh Valley

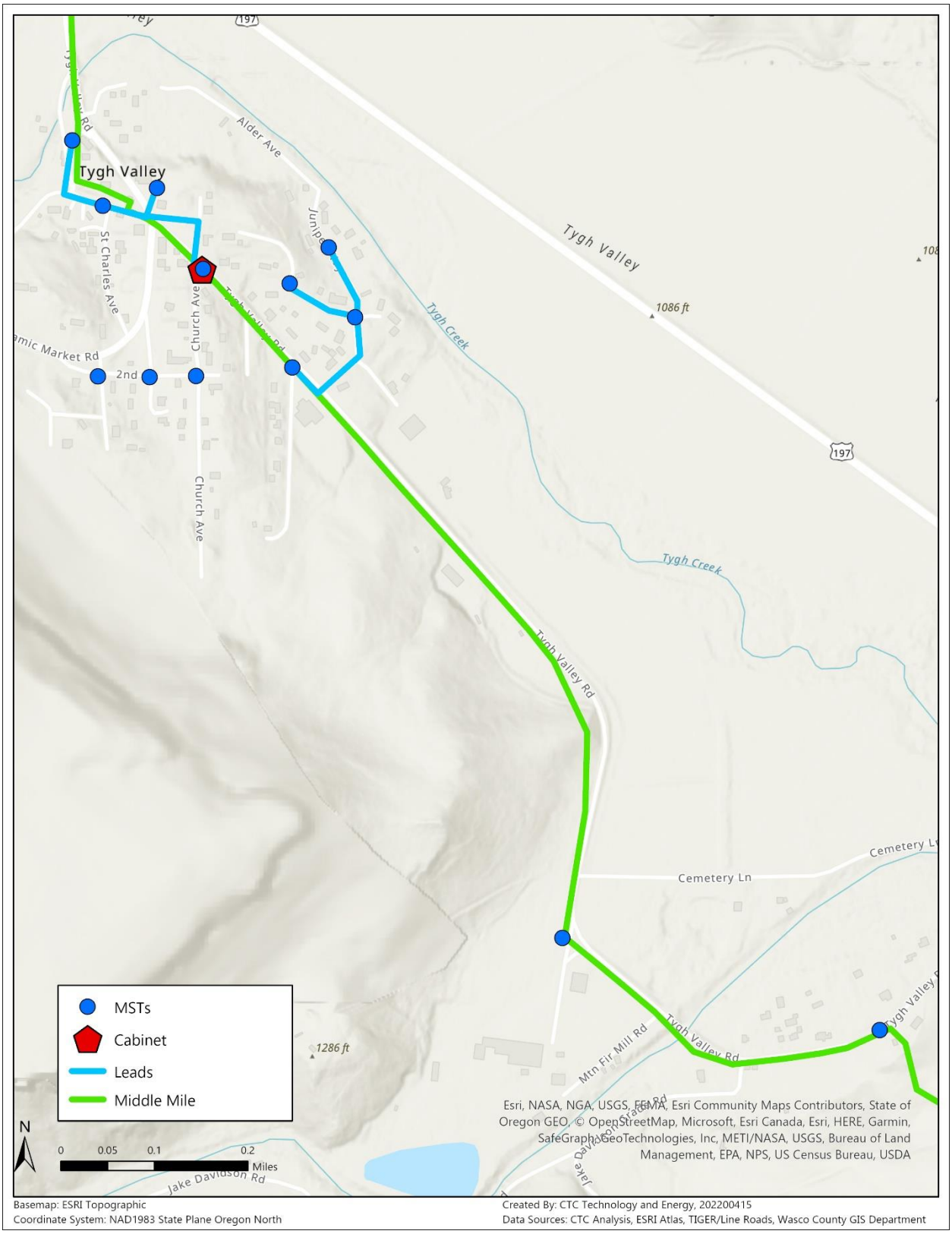


Figure 14: Blue Mountain Networks last mile FTTP design for Pine Hollow and Wamic

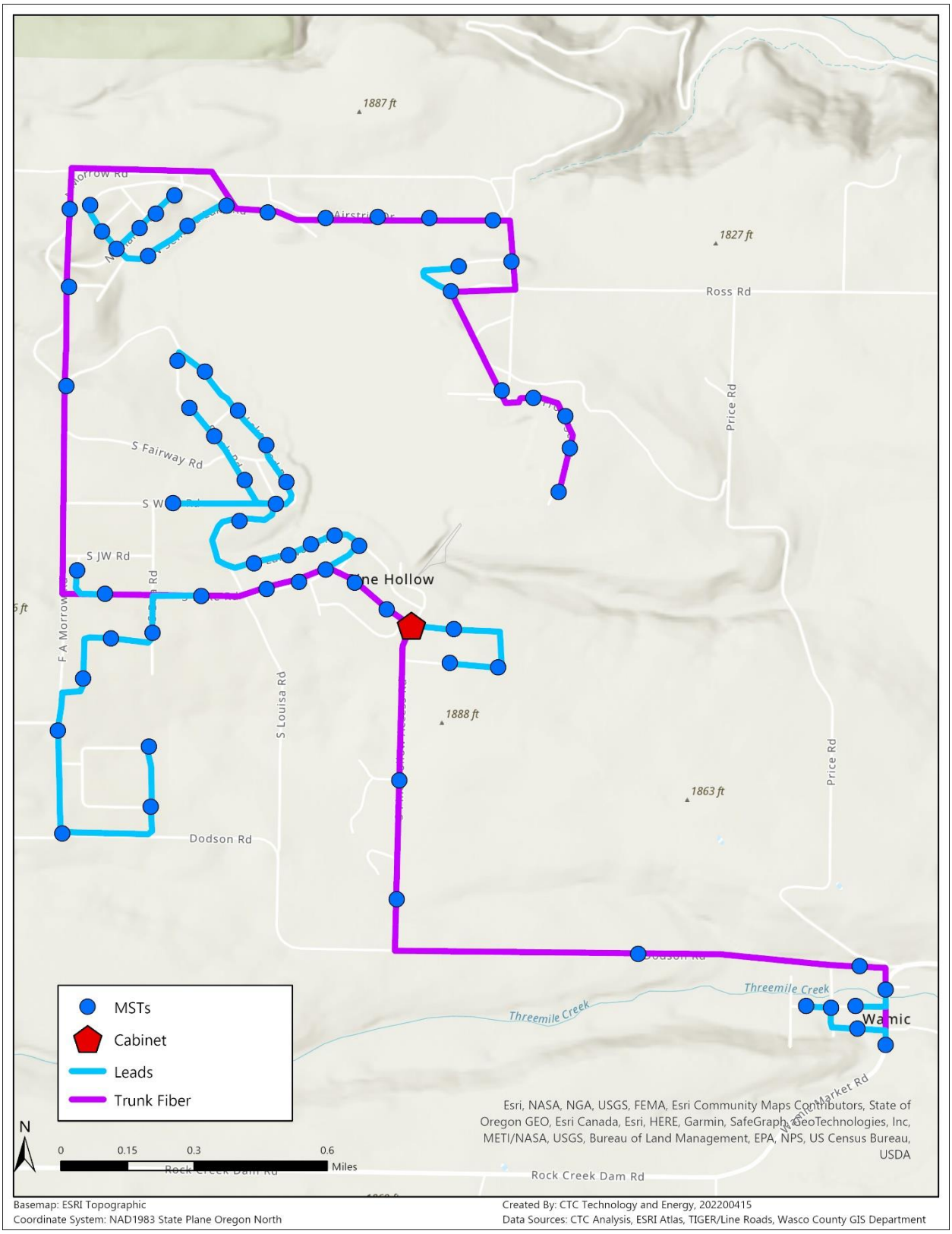


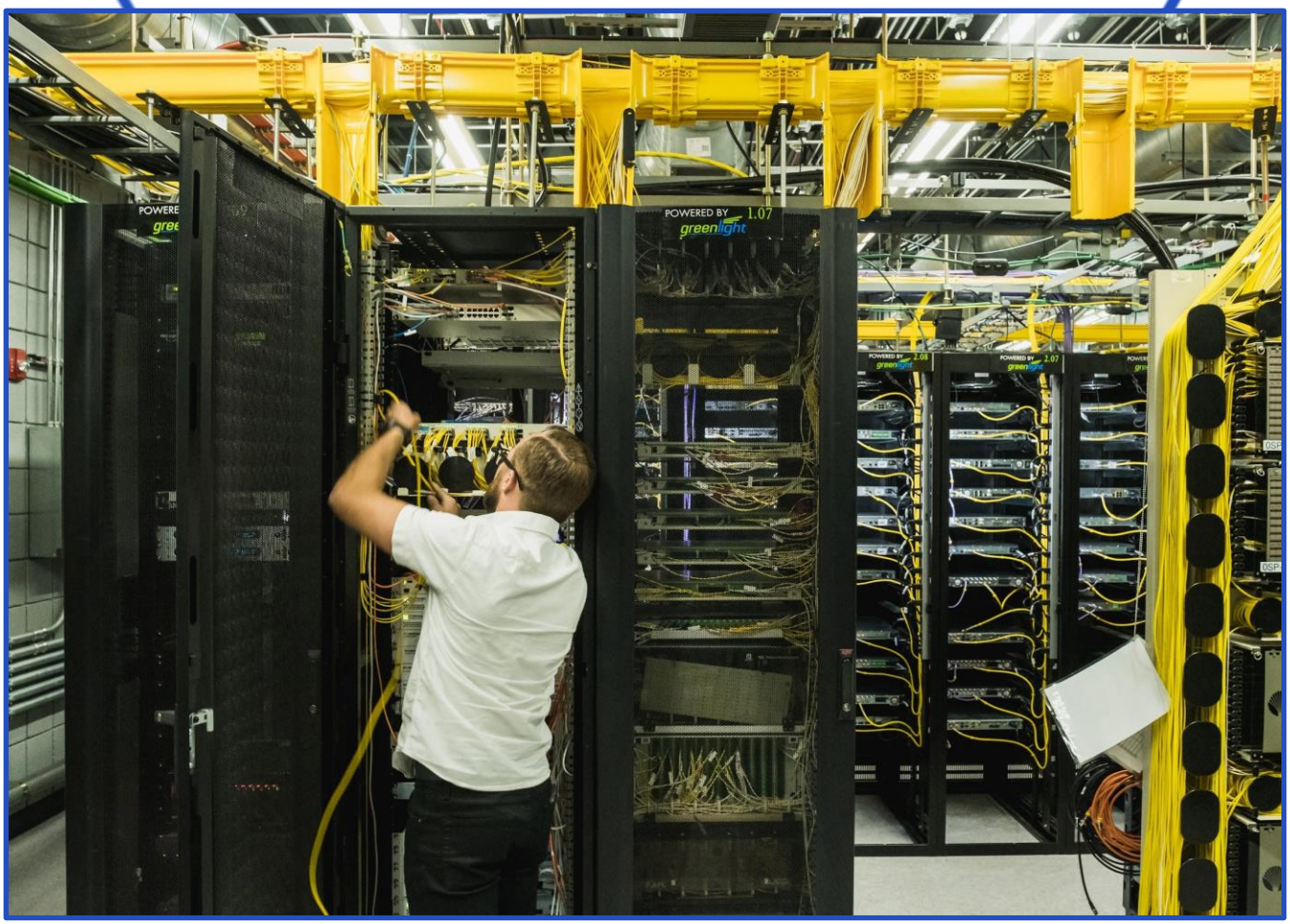
Table 53 summarizes the last mile costs developed by Blue Mountain Networks.

Table 53: Cost Estimate for Blue Mountain Networks FTTP Middle Mile Design for Tygh Valley, Wamic, and Pine Hollow

Fixed Costs	
Administrative & Legal	$15,300
Right of Way, Structures, Land	$15,000
Relocation expenses	$7,641
Architectural & Engineering	$61,300
Construction	$998,969
Total	**$1,098,210**

Rate Framework Tool & Strategy

March 2022



Produced for QLife

by Rural Innovation Strategies, Inc

Rural Innovation Strategies Inc.

Table of Contents

QLife Rate Framework Evaluation

Introduction

This document, the provided Rate Structure Analysis Tool, and the associated high level network designs have been created to provide QLife with a toolkit for evaluating the feasibility of future fiber deployments and rate frameworks that could sustain those deployments for the long term.

Together they should be used to inform: 1. The alignment of new fiber deployments with QLife's strategic goals 2. Potential negotiations with last mile providers 3. The expected financial impact of different rate structures in new and existing deployments. With this data, the QLife team and Board will be able to prioritize funding, deployments, and partnerships that will allow all of Wasco county to be served with high-speed, future-proof broadband.

Rate Structure Analysis Tool

Rate Structure Analysis Tool - Overview

The Rate Structure Analysis Tool (the Tool) provides QLife with an opportunity to review the financial feasibility of potential fiber deployments. The first sheet shows summary outputs of the scenario being modeled, namely; the rate structure, the first breakeven year, and the first profitable year. The second sheet contains inputs needed to populate the model, and the remaining pages comprise financial documents including an Income Statement, Balance Sheet, and Cash Flow Statement, based on Qlife's existing financial documentation.

The above image depicts the sheets included in the Rate Structure Analysis Tool..

The scenario's Breakeven Year and First Profitable Year are key indicators in determining whether a potential fiber deployment will be viable as a stand alone project, or if QLife will need to subsidize the operation of new network deployments with other funding.

Financial Markers

Metric	Output	Notes
Breakeven Year	7	If "Project does not breakeven" is shown, it means the project does not breakeven in the first 25 years
First Profitable Year	2	If "Project is not profitable" is shown, it means the project does not generate a profit in the first 25 years. (Note, this excludes year 1 grant funding)

The above "Financial Markers" table is a key element to be reviewed when verifying the viability of a fiber deployment scenario.

The Breakeven Year is specifically identifying the year in which QLife will make back the amount of money it invests in the new deployment. This is determined by a formula that identifies the first year with a positive Ending Cash balance in the model's Cash Flow Statement. If the proposed fiber

deployment will not generate the amount of profit back that it takes to build it in the first 25 years, an error statement ("Project does not breakeven") will be displayed instead of a year.

Similarly, the scenario's First Profitable Year is identified as the year that revenues from the deployment exceed the ongoing costs associated with that deployment (maintenance, depreciation, insurance, right of way fees, and debt service). If the new fiber deployment will not earn a profit in the first 25 years after it is built an error statement ("Project is not profitable") will be displayed.

Rate Structure Analysis Tool - Considerations

Because the tool was built to be flexible across a wide variety of scenarios, tool users must take care to double check inputs. Specifically, users should pay attention that they are not using multiple lease structures at once, which can lead to double counting revenue. Verifying the lease structure can be accomplished by reviewing the "Lease Structure" table on the "Outputs" sheet. All structures that are not being used should be "0" except for the lease structure(s) chosen for the particular scenario being modeled.

Lease Structure

Metric	Output	Notes
Annual revenue per customer	$9	
Revenue per mile (aerial)	$0	
Revenue per mile (underground)	$0	
Percent (%) of revenue from Last Mile Provider Revenues	0%	
Additional Annual Revenue	$ -	E.g, from enterprise or cell tower contracts; anything not captured in the above structure

The above "Lease Structure" table outlines the section to be reviewed when verifying that only one rate structure is being used in the scenario.

It is important to note that all content on the "Outputs" sheet simply reflects the inputs from the "Cost and Expense input" sheet and the three financial statements. No changes should be made to any numbers on the "Outputs" sheet, as they will not be carried through to the rest of the model. If lease structures need to be updated, they must be changed on the "Cost and Expense input" sheet for all other sheets to update in the model.

One other feature of note on the "Outputs" sheet in the "Financial Markers" table is the occasional appearance of the "Project does not breakeven" and "Project is not profitable" results. When either of these show up in a scenario being run, it is advisable to verify that the model "Check" functions on Row 38 of the Balance Sheet and Row 35 of the Cash Flow Statement are $0 across all 25 years of the proposed project. If they are, it can be assumed the Tool is functioning as it should and that the proposed project will either not be profitable in the first 25 years and/or it will not break even in the first 25 years.

If one or more of the cells in the "Check" function (Row 38 of the Balance Sheet and Row 35 of the Cash Flow Statement) is *not* "$0" at any point when a scenario is being run, it indicates the tool has been broken, an earlier version of the tool should be restored, and the scenario should be run again.

The tool will most likely break if a cell outside of the "Cost and Expense input" sheet is edited manually. Any cells edited outside of the "Cost and Expense input" sheet will not flow through the rest of the model.

Rate Structure Analysis Tool - Electronics Considerations

In CTC's deliverable, Countywide Fiber-to-the-Premises Design and Cost Estimate for Wasco County, the network electronics that terminate middle mile stretches (e.g., routers) are accounted for in the FTTH designs, and not included as part of the middle mile design. This was done to avoid double counting any electronics. If you wish to include the electronics at the terminating end of a middle mile build when using the rate framework, those costs should be added to the middle mile estimates.

Rate Structure Analysis Tool - Updating Costs

During the development of the Tool, known regional costs were added to many line items on the "Cost and Expense input" sheet to provide the most accurate models for future scenarios. However, a variety of factors from material and supply shortages to increasing labor costs and rising inflation will continue to impact many of the costs associated with new fiber deployments. It is recommended that the original assumptions be reviewed periodically and updated to reflect the most recent and regionally appropriate estimates. This could be accomplished by a combination of reviewing costs associated with operations and maintenance of QLife's existing network and gathering data from potential project partners including Blue Mountain Network, LSN, or other last mile providers.

Goals and Strategies for New Deployments

As part of the process of designing the Tool, the Qlife team spent substantial time discussing the fundamental strategies that their organization should take when pursing and establishing new deployments. The process of modeling and assessing new deployments can only partially be assessed using a financial modeling tool; it is often the case that Qlife will need to weigh competing priorities, and compromise on goals or outcomes. Because of this, we are including here a documentation of the goals and priorities expressed by Qlife so that the tool can be used in alignment with those goals.

Goals of Each New Deployment:

Throughout the course of RISI's engagement with QLife, the following strategic goals were identified on multiple occasions. They have been included, along with relevant remarks below, as they should be front of mind when QLife determines if a new fiber deployment makes sense and will help achieve their primary goal of increased economic development:

1. **Bring last mile service where there is none or, existing last mile service has insufficient upload and download speeds**

Having reliable, high-speed, internet is a key marker in identifying rural communities poised for success in economic development efforts and overall increased quality of life. By providing access to unserved and underserved communities, QLife is helping provide access to increased business, career, educational, telehealth care, and recreational opportunities for Wasco County residents.

2. **Cover all costs associated with the project**
   It is imperative that QLife understand what combination of funding streams will cover the immediate and ongoing costs of the network. Ideally, revenues from the deployment cover the ongoing costs; however, there may be situations where Qlife can also arrange a structure where some ongoing costs are covered with deployments in other areas, trades for services, or cash reserves.

3. **Facilitate competition whenever possible**
   Competition between multiple FTTH providers in Wasco County's remote communities is unlikely in the near term due to the low density and small customer bases of those areas. However, ideally, Qlife can set up middle mile deployments and, in cases, last mile partnerships, that don't preclude future competitive entrants.

4. **Ensure lowest costs for final customers**
   Qlife's leverage is the greatest while it is planning or considering building middle mile to unserved areas. As Qlife negotiates with service providers during this phase, it can establish contractual boundaries to customer costs to ensure Qlife doesn't facilitate an exploitative monopoly.

5. **Enable continued expansion if needed**
   Qlife's deployments must account for potential future growth and expansion of service areas, customers both residential and enterprise, and the ever-increasing bandwidth needs of users.

6. **Insulate Qlife from risk**
   Qlife has identified a number of risk factors, ranging from fires in the more remote regions to middle mile fiber competition in their established markets like the city of The Dalles. Qlife should take into account this and other risks in planning for every new deployment; and insulate risk by careful planning, and executing long-term, predictable contracts.

7. **Understand and control long-term costs and administrative needs**
   Given technological advances, increasing frequency of climate-related disasters, changing demographics and population, the cost of providing broadband and transport services in Wasco county will constantly change. It is key for Qlife to understand potential areas where costs could increase, and minimize the likelihood. For example, it is likely going to be more

and more costly to maintain and replace above-ground fiber; underground fiber will be more resilient to climate change related disasters. And, given Qlife's limited staff capacity, partnerships and rate frameworks should be designed to be attentive to the administrative burden they may create, which means reducing the need for Qlife to be involved in ongoing maintenance, and establishing clear reporting mechanisms that allow for seamless oversight and monitoring of the partnership.

Strategic Recommendations for Network Expansion and Increased Viability

1. **Consider making Qlife's rate framework private**
   Having a publicly published rate framework in a competitive environment makes it too easy for competitors to undercut QLife. It also may dissuade potential customers from even reaching out to discuss a contract. Creating a new pricing and product strategy is a larger undertaking than can be addressed in this document; however, removing the published rate framework and beginning to create flexibility in pricing models should strongly be considered. In addition, Qlife should establish guidelines around the creation of custom quotes – and whether they are willing to provide volume discounts, discounts for reaching strategic markets, or even discounts for providers who commit to certain last-mile speed and quality thresholds.

2. **Consider mechanisms to encourage longer-term contracts to ensure stability and minimize risk**
   Given Qlife's stated risk around losing contracts or losing customers, Qlife should consider mechanisms to encourage longer term contracts. Planning in an environment where long-term revenues are unclear is very challenging. New deployments should have contracts that allow long-term predictability either via the length of the contract or automatic renewal mechanisms. When existing contracts in places like The Dalles are up for renewal, Qlife should also consider ways to encourage longer-term agreements.

3. **Approach outside-of-The-Dalles network expansions with a committed partner in place before construction begins**
   Qlife should establish partnerships before building; Qlife would lose negotiating leverage by building without a committed partnership in place first.

4. **Consider risk tolerance for a particular deployment when choosing the rates**
   For deployments Qlife considers riskier, it may be advantageous to pursue a framework based on a set, stable metric, like miles of fiber or passings. For deployments Qlife deems

are less risky, or Qlife wants more access to upside, a framework built around subscribed customers might be preferable.

Thank you

Thank you for the opportunity to work with Qlife on a rate framework tool for new deployments. Please direct questions about this document to Alex Kelley at alex.kelley@ruralinnovation.us. Rural Innovation Strategies, Inc, and CTC Energy and Technology look forward to staying in touch; please let us know if there are any ways we can support Qlife's work and mission in the future.

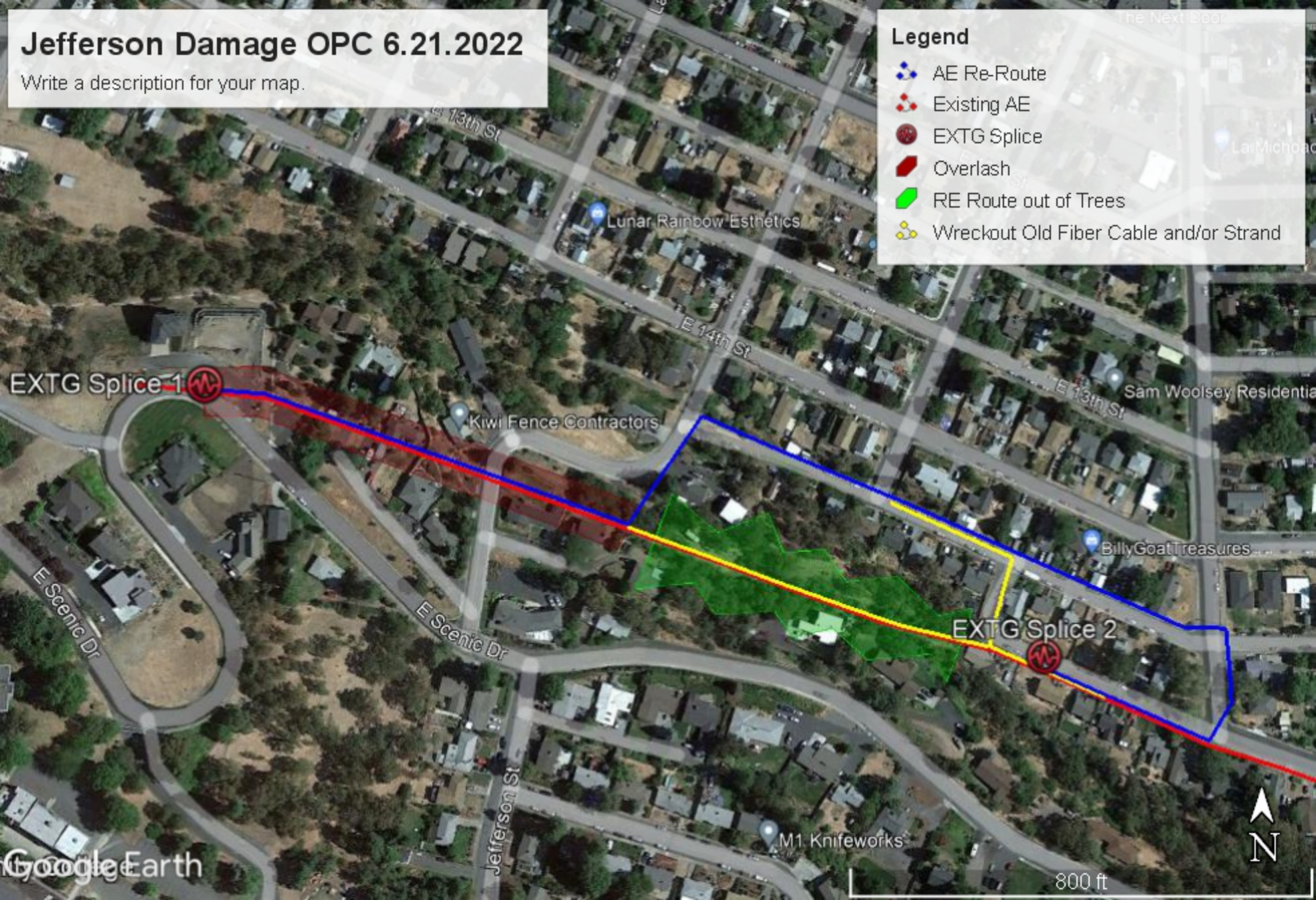
Actions Items

- Jefferson Damage OPC

Date: 6/21/2022
Client: Q-Life
Project: Jefferson Damamge - The Dalles, OR

Description	Type	Unit	Labor	Materials	Total Unit	Aerial Re-Route Qty.	Total Cost
Aerial:							
Aerial - New Construction	New Construction	LIN FT	$ 7.00	$ 1.75	$ 8.75	1,750	$ 15,312.50
Aerial - Overlash - De/Re	Overlash - De/Re	LIN FT	$ 6.00	$ 1.50	$ 7.50	750	$ 5,625.00
Aerial - Wreckout	Wreckout	LIN FT	$ 4.50	$ 0.60	$ 5.10	1,325	$ 6,757.50
Pole Load Analysis	PLA	EACH	$ 100.00		$ 100.00	18	$ 1,800.00
Make Ready	Raise-Move-Lower	EACH	$ 350.00	$ 85.00	$ 435.00	2	$ 870.00
					Aerial Sub-Total:		**$ 30,365.00**
Cable, Splicing and Termination:							
Splicing	Splice Case	EACH	$ 330.00	$ 350.00	$ 680.00	2	$ 1,360.00
Splicing	Bucket Truck Adder	T&M	$ 27.50		$ 27.50	27	$ 742.50
Splicing Technician	$ 100 + $ 50 Truck	T&M	$ 165.00		$ 165.00	48	$ 7,920.00
Splicing Technician OT	$ 125 + $ 50 Truck	T&M	$ 195.00		$ 195.00	6	$ 1,170.00
Fiber Cable	288F	LIN FT		$ 2.00	$ 2.00	2,550	$ 5,100.00
					Cable, Splicing and Termination Sub-Total:		**$ 16,292.50**
Project Totals by Segment:							
Notes:					**Aerial Section:**		**$ 30,365.00**
					Cable, Splicing and Termination Section:		**$ 16,292.50**
					All Sections Combined Construction Totals:		**$ 46,657.50**
					Technical Management: **Est.**		$ 6,000.00
					Engineering Cost: **18%**		$ 8,398.35
					Contingency: **10%**		$ 4,665.75
					Prevailing Wage Premium: **0%**		$ -
Pricing Updated:	January 1, 2022				**Total w/ Engineering & Contingency:**		**$ 65,721.60**

The Construction Cost Estimate is an opinion of probable construction costs that may be provided as part of a project. In providing opinions of probable construction cost, it is recognized that neither the Owner nor Commstructure has control over the cost of labor, equipment or materials, or over the Contractor's methods of determining prices or bidding. The opinion of probable construction cost is based on Commstructure's professional judgment and experience and does not constitute a warranty, express or implied, that the Contractor's bids or the negotiated price of the Work described in the Study will not vary from the Owner's budget or from any opinion of probable cost prepared by Commstructure.


Jefferson Damage OPC 6.21.2022
Write a description for your map.
Legend
AE Re-Route
Existing AE
EXTG Splice
Overlash
RE Route out of Trees
Wreckout Old Fiber Cable and/or Strand
EXTG Splice 1
EXTG Splice 2
E 13th St
E 14th St
Lunar Rainbow Esthetics
Kiwi Fence Contractors
Sam Woolsey Residentia
BillyGoatTreasures
E Scenic Dr
Jefferson St
M1 Knifeworks
N
800 ft
Google Earth

Consent Agenda

- May 26, 2022 Minutes

MINUTES
QLife Regular Board Meeting
Thursday, May 26, 2022
Via Google Hangouts

Call to Order President Weinstein calls the meeting to order at 12:00 PM.

Roll Call Lee Weinstein, Scott Hege, Scott Randall, Dale Lepper, John Amery, Joseph Franell, Joshua Pool, Kristen Campbell, Justin Brock, Tom McGowan, Tyler Stone, Stephanie Krell, and Mike Middleton.

Changes to the Agenda
There are no changes to the agenda.

[[Mr. Lepper moves to approve the agenda. Mr. Hege seconds the motion, which passes unanimously.]]

Approval of the Consent Agenda

[[Mr. Lepper moves to approve the consent agenda. Mr. Hege seconds the motion, which passes unanimously.]]

Budget Hearing

President Weinstein opens the budget hearing at 12:02 PM.

Mr. Middleton reminds the board that we participated in a budget committee meeting last month and there were no changes from the committee. In the packet is a resolution to adopt the FY 2023 budget for a total appropriation of $3,544,146 and $774,129 unappropriated to be set aside. There are no plans to spend the unappropriated funds, but it helps to build capacity. If and when the board makes a decision to move forward with certain projects, it will allow for flexibility in the budget.

[[Mr. Hege moves to adopt the budget for Fiscal Year 2022-2023, with an appropriated amount of $2,770,017; the total amount reserved for future expenditure of $774,129 for a total budget of $3,544,146. Mr. Lepper seconds the motion, which passes unanimously.]]

Finance Report

Financial Report, Analysis and Reconciliation
Mr. Middleton presents the April finance report to the board included in the packet and remarks that we are well within the budget range. We are keeping an eye on the legal services account line because it is still increasing, which was expected. There are still some outstanding payments from customers but staff have worked to bring it down to just three outstanding customers.

The Capital fund is doing well and we have not spent much from it. The Maupin fund balance is still decreasing a bit.

Strategic Plan

President Weinstein refers to the strategic plan and states that he and Matthew Klebes visited with Justin Brock and Roger Kline at the PUD. The meeting was positive and the PUD was receptive to being a part of the BAT. We vowed to keep the conversation going and look for ways to partner in the future. Mr. Klebes will continue meeting with them in his new role.

Discussion Items

Aristo Technical Management Report

Mr. Amery presents his technical report to the board and states that we discovered an issue with one customer. Testing was performed and it was determined to be an issue related to a problem we discovered in 2018. A splicer made an error and the solution in 2018 was to trim the trees. It appeared to fix the problem but it now seems to be a squirrel problem. Mr. Amery is working on a solution and will keep the board informed of any progress.

North Sky is closing out splicing on all current projects but it may not be complete before the end of the fiscal year. Mr. Hege asks if we are considering a different approach to splicing and Mr. Amery responds that it depends on our vision of where we think future growth will be. We can splice in that direction.

Mr. Hege asks how things are progressing with the Liberty Street project and Mr. Franell notes that it was completed but does not have a date for deployment. Resources have been sent elsewhere so he will keep the board updated. Mr. Amery adds that he is unsure where the project audit stands.

The meeting is adjourned at 12:19 PM

The next regularly scheduled board meeting is set for June 23, 2022.

These minutes were approved by the QLife Board on _____.

_____

Rod Runyon, Secretary

Financial Reports

- May 2021 Financial Statement
- May 2022 Financial Statement
- May Financial Analysis

Wasco County, OR

YEAR-TO-DATE BUDGET REPORT

FOR 2021 11

ACCOUNTS FOR: 6000 Qlife Operations	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-191,714	-191,714	-232,286.00	.00	.00	40,572.00	121.2%
414 CHARGES FOR SERVICE	-668,200	-668,200	-843,249.22	36,395.00	.00	175,049.22	126.2%
417 INVESTMENT EARNINGS	-1,200	-1,200	-1,591.19	-179.36	.00	391.19	132.6%
421 MISCELLANEOUS	-200	-200	-1,200.00	.00	.00	1,000.00	600.0%
520 MATERIALS & SERVICES	158,708	158,708	274,499.76	15,737.26	.00	-115,791.76	173.0%
550 TRANSFERS OUT	376,220	376,220	344,868.37	.00	.00	31,351.63	91.7%
590 UNAPPROPRIATED	54,350	54,350	.00	.00	.00	54,350.00	.0%
TOTAL Qlife Operations	-272,036	-272,036	-458,958.28	51,952.90	.00	186,922.28	168.7%
TOTAL REVENUES	-861,314	-861,314	-1,078,326.41	36,215.64	.00	217,012.41	
TOTAL EXPENSES	589,278	589,278	619,368.13	15,737.26	.00	-30,090.13	

YEAR-TO-DATE BUDGET REPORT

FOR 2021 11

ACCOUNTS FOR: 6010 Qlife Capital	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-1,853,727	-1,853,727	-1,692,712.14	.00	.00	-161,014.86	91.3%
414 CHARGES FOR SERVICE	-19,000	-19,000	-123,727.50	-49,140.00	.00	104,727.50	651.2%
417 INVESTMENT EARNINGS	-25,200	-25,200	-8,768.73	-560.52	.00	-16,431.27	34.8%
450 TRANSFERS IN	-426,220	-426,220	-394,868.37	-50,000.00	.00	-31,351.63	92.6%
520 MATERIALS & SERVICES	0	0	31,775.64	.00	.00	-31,775.64	100.0%
530 CAPITAL OUTLAY	80,000	80,000	367,667.01	6,797.46	.00	-287,667.01	459.6%
570 CONTINGENCY	-43,253	-43,253	.00	.00	.00	-43,253.00	.0%
580 RESERVED	675,125	675,125	.00	.00	.00	675,125.00	.0%
TOTAL Qlife Capital	-1,612,275	-1,612,275	-1,820,634.09	-92,903.06	.00	208,359.09	112.9%
TOTAL REVENUES	-2,324,147	-2,324,147	-2,220,076.74	-99,700.52	.00	-104,070.26	
TOTAL EXPENSES	711,872	711,872	399,442.65	6,797.46	.00	312,429.35	

YEAR-TO-DATE BUDGET REPORT

FOR 2021 11

ACCOUNTS FOR: 6020 Qlife - Maupin	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-169,456	-169,456	-168,945.31	.00	.00	-510.69	99.7%
414 CHARGES FOR SERVICE	-7,360	-7,360	-17,514.73	-17,514.73	.00	10,154.73	238.0%
417 INVESTMENT EARNINGS	-700	-700	-863.17	-50.18	.00	163.17	123.3%
520 MATERIALS & SERVICES	17,710	17,710	13,734.88	55.00	.00	3,975.12	77.6%
530 CAPITAL OUTLAY	51,000	51,000	.00	.00	.00	51,000.00	.0%
550 TRANSFERS OUT	50,000	50,000	50,000.00	50,000.00	.00	.00	100.0%
570 CONTINGENCY	45,006	45,006	.00	.00	.00	45,006.00	.0%
580 RESERVED	13,800	13,800	.00	.00	.00	13,800.00	.0%
TOTAL Qlife - Maupin	0	0	-123,588.33	32,490.09	.00	123,588.33	100.0%
TOTAL REVENUES	-177,516	-177,516	-187,323.21	-17,564.91	.00	9,807.21	
TOTAL EXPENSES	177,516	177,516	63,734.88	50,055.00	.00	113,781.12	

YEAR-TO-DATE BUDGET REPORT

FOR 2021 11

	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
GRAND TOTAL	-1,884,311	-1,884,311	-2,403,180.70	-8,460.07	.00	518,869.70	127.5%

** END OF REPORT - Generated by Mike Middleton **

Wasco County, OR

YEAR-TO-DATE BUDGET REPORT

FOR 2022 11

ACCOUNTS FOR: 6000 Qlife Operations	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-659,977	-659,977	-476,580.17	.00	.00	-183,396.83	72.2%
414 CHARGES FOR SERVICE	-741,420	-741,420	-646,180.00	-61,400.00	.00	-95,240.00	87.2%
417 INVESTMENT EARNINGS	-1,200	-1,200	-539.08	.00	.00	-660.92	44.9%
421 MISCELLANEOUS	-200	-200	.00	.00	.00	-200.00	.0%
520 MATERIALS & SERVICES	341,206	341,206	285,749.25	18,597.86	.00	55,456.75	83.7%
530 CAPITAL OUTLAY	20,000	20,000	.00	.00	.00	20,000.00	.0%
550 TRANSFERS OUT	595,020	595,020	545,435.00	49,585.00	.00	49,585.00	91.7%
570 CONTINGENCY	162,935	162,935	.00	.00	.00	162,935.00	.0%
590 UNAPPROPRIATED	283,636	283,636	.00	.00	.00	283,636.00	.0%
TOTAL Qlife Operations	0	0	-292,115.00	6,782.86	.00	292,115.00	100.0%
TOTAL REVENUES	-1,402,797	-1,402,797	-1,123,299.25	-61,400.00	.00	-279,497.75	
TOTAL EXPENSES	1,402,797	1,402,797	831,184.25	68,182.86	.00	571,612.75	

YEAR-TO-DATE BUDGET REPORT

FOR 2022 11

ACCOUNTS FOR: 6010 Qlife Capital	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-1,784,664	-1,784,664	-1,846,578.43	.00	.00	61,914.43	103.5%
410 PROPERTY TAXES	-5,000,000	-5,000,000	.00	.00	.00	-5,000,000.00	.0%
414 CHARGES FOR SERVICE	-19,000	-19,000	-3,550.00	.00	.00	-15,450.00	18.7%
417 INVESTMENT EARNINGS	-9,000	-9,000	-5,639.19	.00	.00	-3,360.81	62.7%
421 MISCELLANEOUS	0	0	-132,145.99	.00	.00	132,145.99	100.0%
450 TRANSFERS IN	-645,020	-645,020	-595,435.00	-49,585.00	.00	-49,585.00	92.3%
530 CAPITAL OUTLAY	6,391,540	6,391,540	284,254.96	12,127.40	124,505.76	5,982,779.28	6.4%
570 CONTINGENCY	391,019	391,019	.00	.00	.00	391,019.00	.0%
580 RESERVED	675,125	675,125	.00	.00	.00	675,125.00	.0%
TOTAL Qlife Capital	0	0	-2,299,093.65	-37,457.60	124,505.76	2,174,587.89	100.0%
TOTAL REVENUES	-7,457,684	-7,457,684	-2,583,348.61	-49,585.00	.00	-4,874,335.39	
TOTAL EXPENSES	7,457,684	7,457,684	284,254.96	12,127.40	124,505.76	7,048,923.28	

YEAR-TO-DATE BUDGET REPORT

FOR 2022 11

ACCOUNTS FOR: 6020 Qlife - Maupin	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
400 BEGINNING FUND BALANCE	-118,610	-118,610	-127,560.10	.00	.00	8,950.10	107.5%
414 CHARGES FOR SERVICE	-7,360	-7,360	-8,932.77	-1,626.98	.00	1,572.77	121.4%
417 INVESTMENT EARNINGS	-700	-700	-299.47	.00	.00	-400.53	42.8%
520 MATERIALS & SERVICES	16,710	16,710	13,213.64	.00	.00	3,496.36	79.1%
530 CAPITAL OUTLAY	51,000	51,000	.00	.00	.00	51,000.00	.0%
550 TRANSFERS OUT	50,000	50,000	50,000.00	.00	.00	.00	100.0%
570 CONTINGENCY	8,960	8,960	.00	.00	.00	8,960.00	.0%
TOTAL Qlife - Maupin	0	0	-73,578.70	-1,626.98	.00	73,578.70	100.0%
TOTAL REVENUES	-126,670	-126,670	-136,792.34	-1,626.98	.00	10,122.34	
TOTAL EXPENSES	126,670	126,670	63,213.64	.00	.00	63,456.36	

YEAR-TO-DATE BUDGET REPORT

FOR 2022 11

	ORIGINAL APPROP	REVISED BUDGET	YTD ACTUAL	MTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
GRAND TOTAL	0	0	-2,664,787.35	-32,301.72	124,505.76	2,540,281.59	100.0%

** END OF REPORT - Generated by Mike Middleton **

Qlife – Financial Analysis May 2022 Financial Statements

The financial statements for through the 11th month of the 2022 fiscal year (FY22) are presented. The statements are intended for the use of management and are not audited. The expected straight-line assumption for accounts is 91.7% (11/12). This is typically a good starting point for analysis.

The reporting is becoming more familiar now, but will still undergo some changes as staff skill with the reporting tools increases. At this point, two reports are still used to compare the current fiscal year to the prior.

Operations Fund

Total revenues of the fund are $1,123,299 includes beginning fund balance of $476,580. Charges for Services are executing at 87.2% which is 4.5% under the straight-line assumption. The value is about $33K under the straight line assumption or about $3.0K per month. Compared to last year, the amount is off the mark due to FY21 having unplanned revenues recorded in this area.

The accounts receivable as of 5/31/2022 for current is $0 with $16,260 in 31 to 60 days, and $13,180 in over 120 days. The opverdue amounts are only due to 5 invoices. The amount has been pulled down but staff is still working with customers to collect aged bills.

Interest is down and only executing at 44.9%. This is due to LGIP only earning 0.45%. While the percentage looks large, the dollar value is not at this point as the total budgeted earning is $1,200.

Expenditures are in line with the budgeted expectations. Materials & Services are executing at 87.3%. This category has come into line after the spike of paying the administrative charges in full. The line items below are still being watched:

- Administrative Costs 100.0% - fully paid – this will not increase further for the fiscal year. $62,246 to Wasco County
- Contacted Services – Legal 231.4% - over the line item budget by $15,772
- Dues & Subscriptions 254.2% - over the line item budget by $3,084 – No change from February report
- Scholarship 100.0% - No change from August report

Finance has researched and will continue to review all transactions.

As it sits now, the fund balance is $292,115 when the beginning fund balance in included – when not considered the fund balance would decrease $184,465. The decrease of the fund balance is planned. Even with a declining fund balance, this includes transferring $545,435 to the Capital fund.

Capital Fund

Revenue has a large spike, this is due to a billing submitted for $152,851 that had not been considered in the budget. Other than that, there is nothing out of the ordinary in the revenue here.

The Beginning Fund Balance has been entered and is $1,846,578. The category labeled “Property Taxes” is actual the potential grant added into the budget created. This is a label mismatch in the new system and is being addressed by Finance – as identified in the September report.

Expenditures to date have been minimal.

The fund has an additional $5 million built into it in case any of the available grant funds can be claimed. That grant did not make it to funding so the $5M will not be spent.

Maupin Fund

The Gorge.Net receipts are in revenues the revenues. The total Charges for Services was budgeted at $7,360 – however, current receipts put the total at $8,933 which is 120.4% of the budget.

Expenditures have totaled $13,214 for the Maupin Wifi contract. The transfer to the Capital fund was executed as budgeted in January. This decreases the fund balance to $73,579

The fund is decreasing at this point.

Summary

The funds are in good positions. However, with the implementation of the new system, there are still learning curves to improve the layout of the reports. While the Operations fund is decreasing, this is due to the transfers out to the Capital fund. $545,435 is being transferred to Capital for the YTD while the Operations Fund decreases by $184,465.

Bank reconciliations have been completed through May.

Discussion Items

- MCEDD/BAT Broadband Survey
- Administration Updates
- Aristo Technical Management Report
- Oregon Telecomm Conference

Aristo Networks LLC
Technical Management Report
By
John Amery
6/21/2022

Items of Interest:

- QLIFE damages.
  - Commstructure has developed an OPC for the damage repair.
- QLIFE is bringing up Northsky to complete splicing for the following outstanding projects:
  - Dry Hollow Project
  - Downtown Overbuild Project
  - Liberty Street Project
  - City Hall High Density Frame Project

Stephanie Krell <stephaniek@co.wasco.or.us>

Update: Keynote Speakers>>> Oregon Connections Telecommunications Conference

1 message

BERRIAN Pam C <PBerrian@eugene-or.gov> Wed, May 25, 2022 at 12:52 PM
To: BERRIAN Pam C <PBerrian@eugene-or.gov>
Cc: "chris@oregonconnections.info" <chris@oregonconnections.info>

I assist the OC Conference Planning Committee with outreach. If you wish to be removed from this bcc list, just let me know. Thanks! -P

With the theme of *"Oregon Connections: Navigating the Funding Flood,"* the annual Oregon Connections Telecommunications Conference is scheduled for Thursday and Friday, October 6 and 7, 2022 at the Ashland Hills Hotel and Suites in Ashland https://ashlandhillshotel.com/. Special conference room rates are available now for reservations.

The Oregon Connections Telecommunications Conference draws attendees from all regions of the state to share ideas, experiences, and knowledge about broadband telecommunications. Hosted by Southern Oregon Regional Economic Development, Inc. (SOREDI), the conference will explore how Oregon can leverage the current historic and extraordinary funding programs available to meet the broadband needs of its local communities and to close the Digital Divide.

Our Keynote Speakers this year are Angela Siefer, the Executive Director of the National Digital Inclusion Alliance and Russ Elliott, the Chief Executive Officer of Siskiyou Telephone Company, an independent telecommunications company serving Western Siskiyou County California since 1896.

Program topics will include the array of available funding programs, state and local community engagement, broadband technologies, digital equity, digital inclusion, keys to success, managing expectations, and public sector, private sector, and public-private partnership solutions.

The Early Bird registration fee is just $80.

Find conference information, on-line registration, and updates at www.oregonconnections.info.

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Please join us this October 6 and 7, 2022 in Southern Oregon!

Thank you to our Sponsors: Astound Business Solutions, Hunter Communications, Genxsys Solutions, Walker & Associates / Comstar Supply, City of Eugene, Clearfield and Southern Oregon Regional Economic Development, Inc. (SOREDI)!

Chris Tamarin

Conference Planning Committee