



Council Business Meeting

January 16, 2024

Agenda Item	Approval of GPON vendor & Next Gen Fiber Pilot Project Update		
From	Chad Sobotka	AFN Operations Manager	
Contact	chad.sobotka@ashland.or.us 541-552-2402		
Item Type	Requested by Council <input type="checkbox"/> Update <input checked="" type="checkbox"/> Request for Approval <input checked="" type="checkbox"/> Presentation <input type="checkbox"/> Consent <input type="checkbox"/> Public Hearing <input type="checkbox"/> New Business <input type="checkbox"/> Old Business <input type="checkbox"/>		

SUMMARY

Approval is being requested to enter into a public contract to provide GPON and Residential Gateway services.

POLICIES, PLANS & GOALS SUPPORTED

This contract is essential for the success of our GPON Pilot Project. We will be purchasing OLTs, ONTs, residential gateways (wireless routers), and management services from the vendor.

BACKGROUND AND ADDITIONAL INFORMATION

We have selected Calix as our partner. Staff have been evaluating multiple vendors since our previous City Council presentation in the spring. Calix will bring tremendous value and features to our customers.

This partnership will benefit not just new GPON customers but our existing customers as well. We will provide managed residential gateway services. Staff will have the ability to troubleshoot internet connection issues and assist with tasks such as forgotten wireless passwords without having to schedule a truck roll.

Calix also provides many value-add services including router-based security (anti-virus, anti-ransomware, & malicious website protection), parental controls, device prioritization, mobile app blocking, and more.

Business customers will also benefit from additional business services such as multiple wireless networks for device segregation security, wireless fail-over services, and guest captive portal with social media integration.

Residential and business services will be provided for a small monthly fee.

FISCAL IMPACTS

We will enter into a 3-year contract with Calix. The contract is valued at approximately \$600,000 for the first two years. The third year will be determined by the success of the pilot project. The third year estimate ranges from \$75,000 to \$350,000. The funds for the first two years of the contract have already been allocated. Please see the table below for the fee breakdown:

	Year 1	Year 2	Year 3
OLT Hardware	\$85,800	\$56,100	TBD
OLT Warranty	\$4,400	\$4,400	TBD
Customer Hardware	\$178,200	\$110,000	TBD
Customer Warranty	\$23,100	\$12,100	TBD
Customer Services	\$39,600	\$50,600	\$70,400
Setup Fees	\$25,300	\$2,750	\$2,750
	\$356,400	\$235,950	\$73,150





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DISCUSSION QUESTIONS

SUGGESTED NEXT STEPS

Staff recommends approval of this contract.

REFERENCES & ATTACHMENTS

PowerPoint presentation

Form #6 – Sole Source

Calix sole source letter

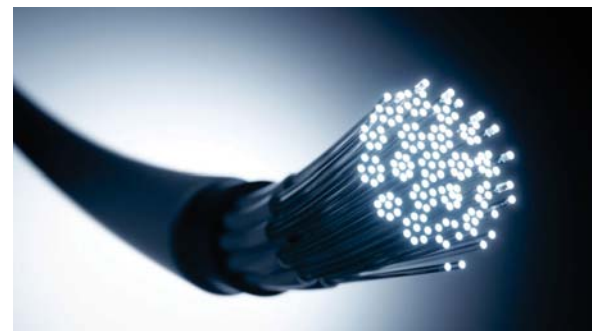


Ashland Fiber Network – Next Gen Fiber Pilot Project Update

January 16, 2024

AFN's Goals

- Bring value to the community
- Provide internet service that is:
 - ✓ High quality
 - ✓ Reliable
 - ✓ Future proof
- Offer competitive pricing and speed
- Increase digital equity and inclusion
- Implement “green” technologies to reduce carbon footprint
- Deploy fiber to every home and business in Ashland
 - 10 Gigabit Passive Optical Network (XGS-PON)



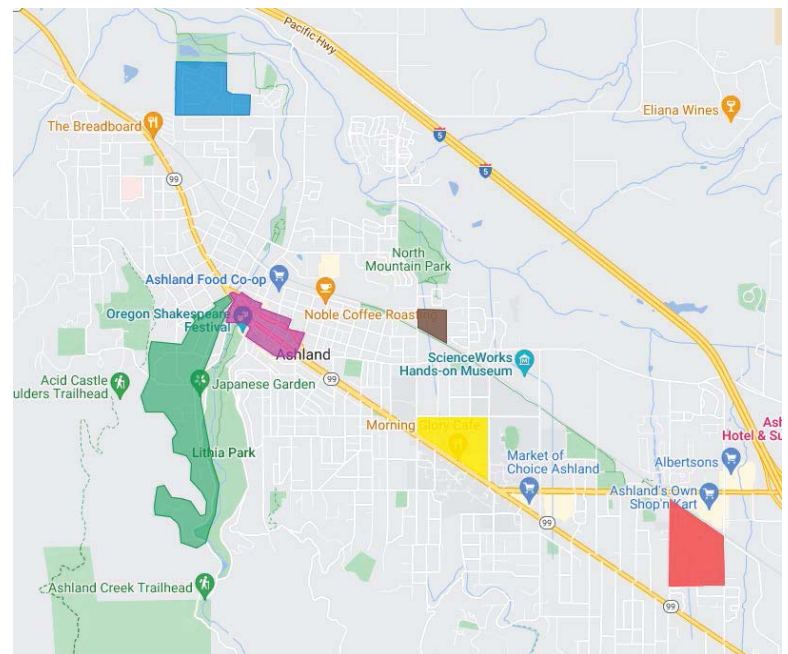
Project Status

- Hands-on training for field staff
- Designed network for first two neighborhoods
- Drafting RFQ for fiber buildout
- Procurement of equipment
(OTDR, additional fusion splicer, etc)
- Evaluating Outside Plant (OSP) materials
(Splice cases, drop fiber, etc)
- Vendor selection



Locations

- **Granite St** – Phase I
- **SOU** – Phase I
- **Quiet Village** – Phase II
- **Clay St** – Phase II
- **Downtown** – Ongoing (mix of fiber and G.hn)
- **Beach Creek** – New 100% fiber subdivision



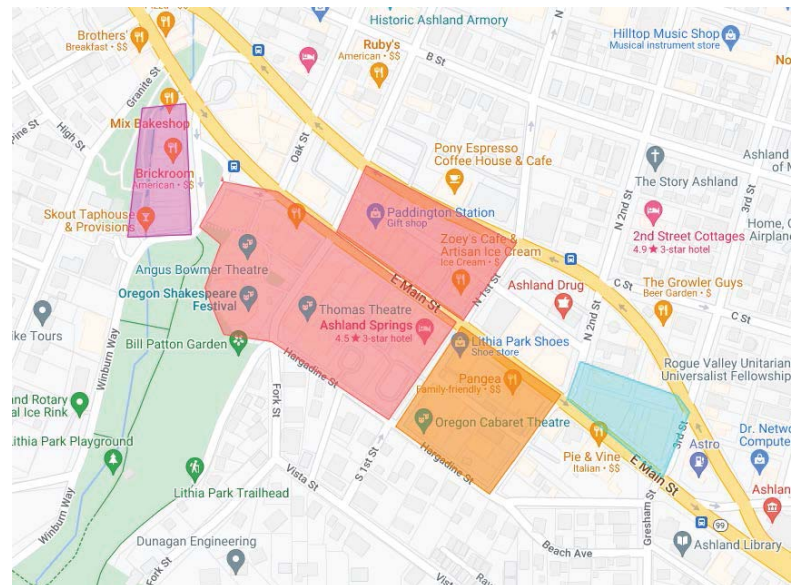
Downtown

- Running fiber to every block in downtown
- Will be offering low-cost symmetrical gigabit speed
- Expanding our free wireless network
- Calix outdoor wireless access points provide significant cost savings



Downtown Map

- Gigabit speeds available in the orange, blue & pink areas
- Have a fiber presence in the red areas



Selection Criteria

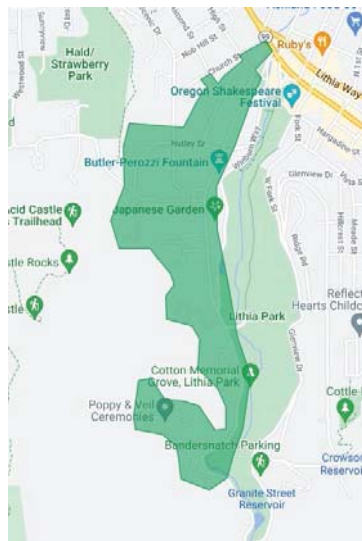
- Proximity to fiber splice cases
- Near other fiber projects
 - 20% of fiber ran around Granite St through other City projects
 - Billed other departments \$8,500
- Diverse census data:

Neighborhood	Median Age	Avg Household Income	Median Home Value	Avg Household Size	Bachelor's Degree
SOU	25.4	\$51,568	\$415,200	1.9	51%
Granite St	60.5	\$103,771	\$570,300	1.98	71%
Quiet Village	53.4	\$94,006	\$412,300	2.18	56%
Clay St	43.4	\$79,289	\$471,200	2.07	55%
Ashland Average	48	\$93,288	\$476,500	2.05	63%

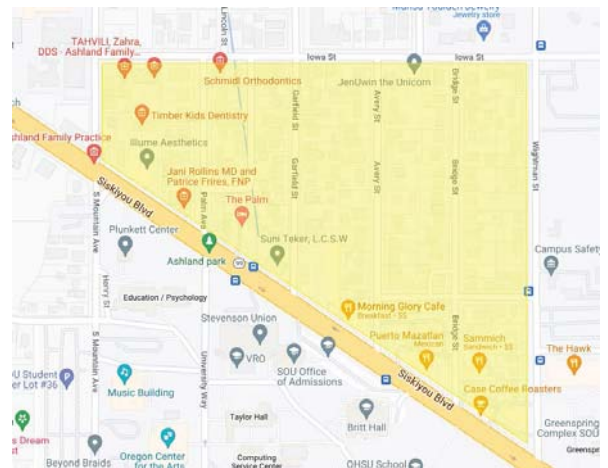


First Two Neighborhoods

Granite



SOU



Vendor Selection

- Adtran vs. Calix
- Final decision came down to what is best for our customers
- Calix offers more features:
 - **AFN branded** mobile application
 - **Security software** on residential gateway
 - Anti-virus, anti-ransomware, malicious website protection, intrusion prevention detection, etc.
 - **Parental controls**
 - Ability to block access to 15 predefined categories
 - **Group and prioritize devices**
 - **Block individual mobile apps**
 - **Additional Managed services**
 - Anti bullying (Bark), and video security (Arlo Cameras)
 - **Advertising campaigns**



Who is Calix?

- Founded in 1999
- Headquarters in San Jose
- 1,400+ employees
- 1,800+ customers worldwide
- 53 service providers in WA and OR use Calix, 33 in Oregon
- North America's leader in Fiber To The Premises (FTTP) solutions
- Privacy minded – *we own our customer data, not Calix*



Benefits to Residential Customers

- Open to everyone in Ashland – existing AFN customers and Spectrum & Century Link customers
- One-time setup fee
- Monthly recurring fee
- Remotely troubleshoot connection issues
 - Will reduce truck rolls
 - Increase customer satisfaction
- Routers easily mesh to cover any type of dwelling
- Manage home network and services through AFN branded app
- White glove setup
- Includes whole home network security and parental controls

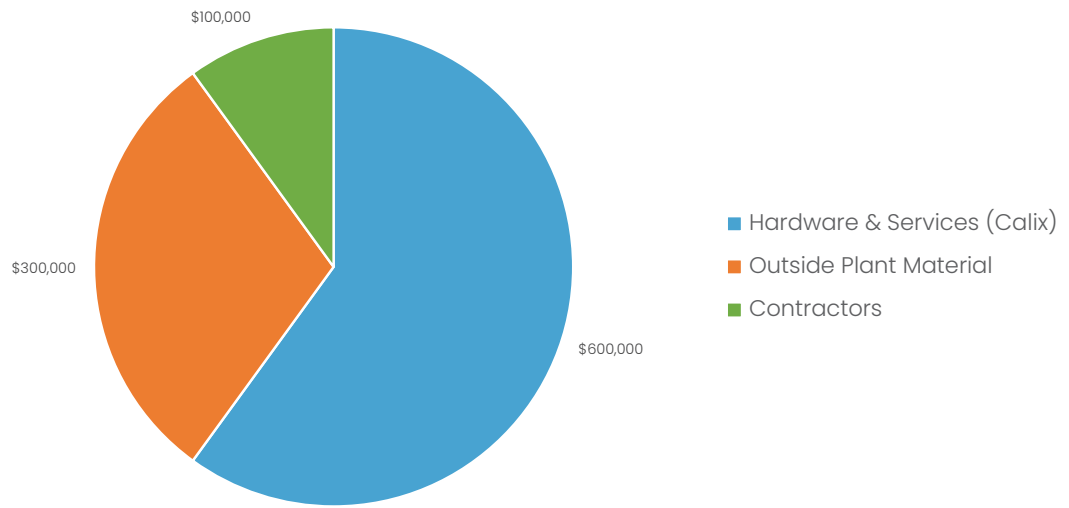


Benefits to Business Customers

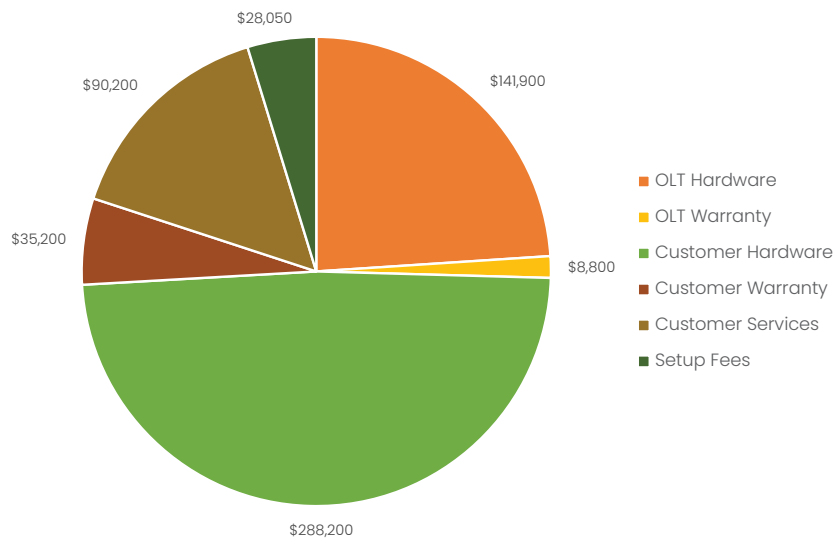
- Additional services for businesses:
 - **Multiple wireless networks**
Point of Sale, back office, employees, and guests
 - **Captive portal for guests**
Email address, Facebook integration, etc.
 - **Supports failover internet connection via wireless**
If the primary internet connection goes down, business can failover to a wireless hotspot or our municipal wireless network
 - **Schedule when guest network is available**
 - **Content filtering**



Pilot Project Budget



Hardware & Services Details (Calix)



Three Year Projection

	Year 1 FY 2024	Year 2 FY 2025	Year 1 + 2 Totals	Year 3 FY 2026	Totals
OLT Hardware	\$85,800	\$56,100	\$141,900	tbd	\$141,900
OLT Warranty	\$4,400	\$4,400	\$8,800	tbd	\$8,800
Customer Hardware	\$178,200	\$110,000	\$288,200	tbd	\$288,200
Customer Warranty	\$23,100	\$12,100	\$35,200	tbd	\$35,200
Customer Services	\$39,600	\$50,600	\$90,200	\$70,400	\$180,400
Setup Fees	\$25,300	\$2,750	\$28,050	\$2,750	\$56,100
	\$356,400	\$235,950	\$592,350	\$73,150	\$665,500

- Funds for years 1 & 2 (current fiscal biennium) are already allocated as part of the \$1 million Pilot Project
- The *tbd* values in year 3 depend upon the success of the Pilot Project
- The estimated expenses in year 3 will be reimbursed from customer fees for services rendered



Timeline

- Construction for Phase I completed late spring 2024
- Begin selling wireless routers 60 to 90 days after signing the Calix contract
- Goal of 500 wireless routers deployed in first year
- Phase I PON customers online early summer 2024



Questions?



Spectrum Advanced WiFi for \$5/month:

- Must be managed through the My Spectrum app
- Includes enhanced network security
- View who is connected to the router
- Group devices together
- Pause internet access for devices
- Set a schedule for devices

AFN WiFi for \$6.49/month:

- Managed through the mobile app or the web interface
- Includes anti-virus, anti-malware, intrusion detection, malicious web site protection, anti-ransomware packet inspection
- View who is connected to the router
- Group devices together
- Pause internet per device or group of devices
- Set schedules for internet access per device or group of devices
- Proactively monitors network traffic
- Security alerts through mobile app with details of the threat
- Per-user usage reports available for daily, weekly or monthly basis (eg, how many hours are your kids on TikTok this past week)
- Enforce safe search (Google, Bing, and YouTube)
- Block comments on YouTube
- Enforce content restrictions based on age or categories
- Block individual websites
- Block specific categories like gambling, illegal/criminal, internet portals, comics/animation, cloud storage, online games, online shopping, online video/audio, nudity, P2P file sharing, social networks, pornography, and more
- Prioritize specific device, group of devices, or application (like Zoom)
- Block specific mobile app
- WiFi 6e with mesh units (tri-band 6 Ghz)
- WiFi 6 with mesh units (tri-band 5 GHz)

SOLE-SOURCE DETERMINATION AND WRITTEN FINDINGS

GOODS AND SERVICES

Greater than \$100,000

To: Sabrina Cotta, Interim City Manager

From: Chad Sobotka, Ashland Fiber Network

Date: October 31, 2023

Re: Sole Source Determination and Written Findings for Goods and Services

In accordance with AMC 2.50.090(F), the Department Head shall determine in writing that there is only one provider of a product or service of the quality and type required available.

Estimated total value of contract: \$600,000

Project name: Passive Optical Network Pilot Project

Description of goods and services: Calix is a hardware manufacturer of equipment needed for optical networks. They manufacture remote Optical Line Terminators (OLTs), Optical Line Terminals (ONTs), and residential gateways (home wireless routers). They also provide services for deployment, configuration, and troubleshooting the hardware.

Background: City Staff have evaluated both Adtran and Calix for optical hardware, residential gateway hardware, and management services. We have determined that Calix offers the best value for our customers.

The value of the contract is estimated at \$600,000. The actual value will be determined by customer demand for the products. Please refer to the table below for details on what hardware and services will be purchased:

	Year 1	Year 2	Year 3
OLT Hardware	\$85,800	\$56,100	tbd
OLT Warranty	\$4,400	\$4,400	tbd
Customer Hardware	\$178,200	\$110,000	tbd
Customer Warranty	\$23,100	\$12,100	tbd
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Setup Fees	\$25,300	\$2,750	\$2,750
	\$356,400	\$235,950	\$73,150

OLT Hardware (Optical Line Termination) includes the remote OLTs that will be installed in the outside plant. This is the equipment that PON customers will connect to. This is equivalent to the cable modem node.

Customer Hardware includes residential gateways (wireless routers) that will be installed in the customer's home or business. Existing cable modem customers and Spectrum customers will be able to use the residential gateways. Customer Hardware also includes the ONTs (Optical Line Terminal) which will only be used by our PON customers. ONTs are the equivalent to the cable modem.

Customer Services are the fees we will charge our customers for managing the residential gateways. This also includes the fees for value-add services, such as parental control and security software.

Depending upon the success of the Pilot Project and our satisfaction with Calix, we may extend our contract after the initial 3-year term.

Findings: Calix does not have a typical value-added reseller (VAR) distribution network. Calix has many partners which add services that Calix does not provide, such as operations support system (OSS), business support system (BSS), and voice-over IP (VOIP). While Calix does have a few value-added resellers, they are used for other services such as engineering and feasibility studies as well as hardware procurement. Those are services that AFN does not require.

All services must be purchased directly from Calix.

[In accordance with ORS 279B.075, these are the examples of findings that should be addressed. Select at least one of the findings and prepare the determination as it specifically relates to the goods or services being procured. More than one finding can be addressed. The findings are as follows.]

Pursuant to ORS 279B.075 (2)(c): Provide findings supporting your determination that the goods or services are for use in a pilot or an experimental project. At the April 3, 2023 City Council study session, Council approved funds for a 2-year pilot project to deploy GPON. Calix will be used for this pilot project.

Pursuant to ORS 279B.075 (2)(d): Any other findings that support the conclusion that the goods or services are available from only one source. Please see the attached letter from Calix.

PUBLIC NOTICE:

Pursuant to OAR 137-047-0275 (2), a Contracting Agency shall give public notice of the Contract Review Authority’s determination that the Goods and Services or class of Goods and Services are available from only one source in a manner similar to the public notice of Competitive Sealed Bids under ORS 279B.055(4) and OAR 137-047-0300. The public notice shall describe the Goods or Services to be acquired by a Sole Source Procurement. The Contracting Agency shall give such public notice at least seven days before Award of the Contract.

After the Sole Source Procurement has been approved by the City Council, the following public notice will be posted on the City’s website to allow for the seven (7) day protest period.

Date Public Notice first appeared on www.ashland.or.us - *[Enter date]*

PUBLIC NOTICE
Approval of a Sole Source Procurement

First date of publication: *[Enter date]*

A request for approval of a Sole Source procurement was presented to and approved by the City Council, acting as the Local Contract Review Board, on *[Enter date]*.

It has been determined based on written findings that the following Goods and Services are available from only one source.

Optical network hardware, residential gateway services, and management services from Calix in the amount of \$600,000 over a 3-year term.

The contract terms, conditions and specifications may be reviewed upon request by contacting Chad Sobotka, Ashland Fiber Network, 541-552-2402

An affected person may protest the determination that the goods and services are available from only one source in accordance with OAR 137-047-0710. A written protest shall be delivered to the following address: City of Ashland, Ashland Fiber Network, Chad Sobotka, 90 N Mountain Ave, Ashland, OR 97520. The seven (7) day protest period will expire at 5:00pm on *[Enter date-seven calendar days from first date of publication]*

This public notice is being published on the City’s Internet World Wide Web site at least seven days prior to the award of a public contract resulting from this request for approval of a Sole Source procurement.



November 2, 2023

Ashland Fiber Network
90 N Mountain Ave
Ashland, OR 97520

Attention: Mr. Chad Sobotka, AFN Operations Manager
Email: chad@ashlandfiber.net
Subject: Sole Source Letter

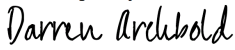
Dear Mr. Sobotka:

This letter confirms that Calix, Inc. ("Calix") is the sole provider of the Intelligent Access EDGE and Revenue EDGE solutions, which is comprised of the following hardware, software, and services components:

- Network Innovation Platform (AXOS)
- Experience Innovation Platform (EXOS) / Calix Cloud Foundation
- Calix Cloud Platform
- E-Series Systems and Line Cards
- GigaSpire BLAST Systems
- CommandIQ, ExperienceIQ and ProtectIQ
- SmartBiz Managed Service
- CommandIQ App Personalization Service

The above-mentioned solutions are to be deployed by Ashland Fiber Network to provide broadband services to their residential and commercial accounts. Calix develops, manufactures, markets, and sells these solutions, and no other vendor warrants these solutions.

Sincerely,

DocuSigned by:

B70F52052980401...

Darren Archbold
Vice President Western Region Sales
Darren.Archbold@calix.com

Cc: Colin Koehler, Calix

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