

Special Meeting Agenda
PUD Board of Commissioners
Thursday, May 19, 2022 9:00 AM
310 Four Corners Rd.
Port Townsend, WA 98368



To join online go to: <https://zoom.us/my/jeffcopud>. Follow the instructions to login. Meetings will open 5 minutes before they begin. TOLL FREE CALL IN #: 833-548-0282, Meeting ID# 4359992575#. Use *6 to mute or unmute. *9 to raise a hand to request to begin speaking.

1. Call to Order

Per the Governor's Extended Proclamation 20-28 and in response to the COVID-19 Pandemic, Jefferson County PUD is no longer providing an in-person room for meetings of the BOC. All meetings will be held remotely via Zoom until otherwise informed by the Governor. Participant audio will be muted upon entry. Please unmute at the appropriate time to speak. If you are calling in, use **6 to mute and unmute and *9 to raise a hand to request to speak.*

2. Agenda Review

3. Presentation- JPUD Broadband Business Plan

2 - 30

[Broadband Projects Business Planning.pdf](#) 

4. Fiber Bid Review

31 - 33

[AGENDA REPORT_Fiber Bid Selection.docx](#) 

[Preliminary Bid Tabulation-Fiber Material 2022 004.pdf](#) 

5. Adjourn



Jefferson County
Public Utility District

Broadband Projects Business Planning

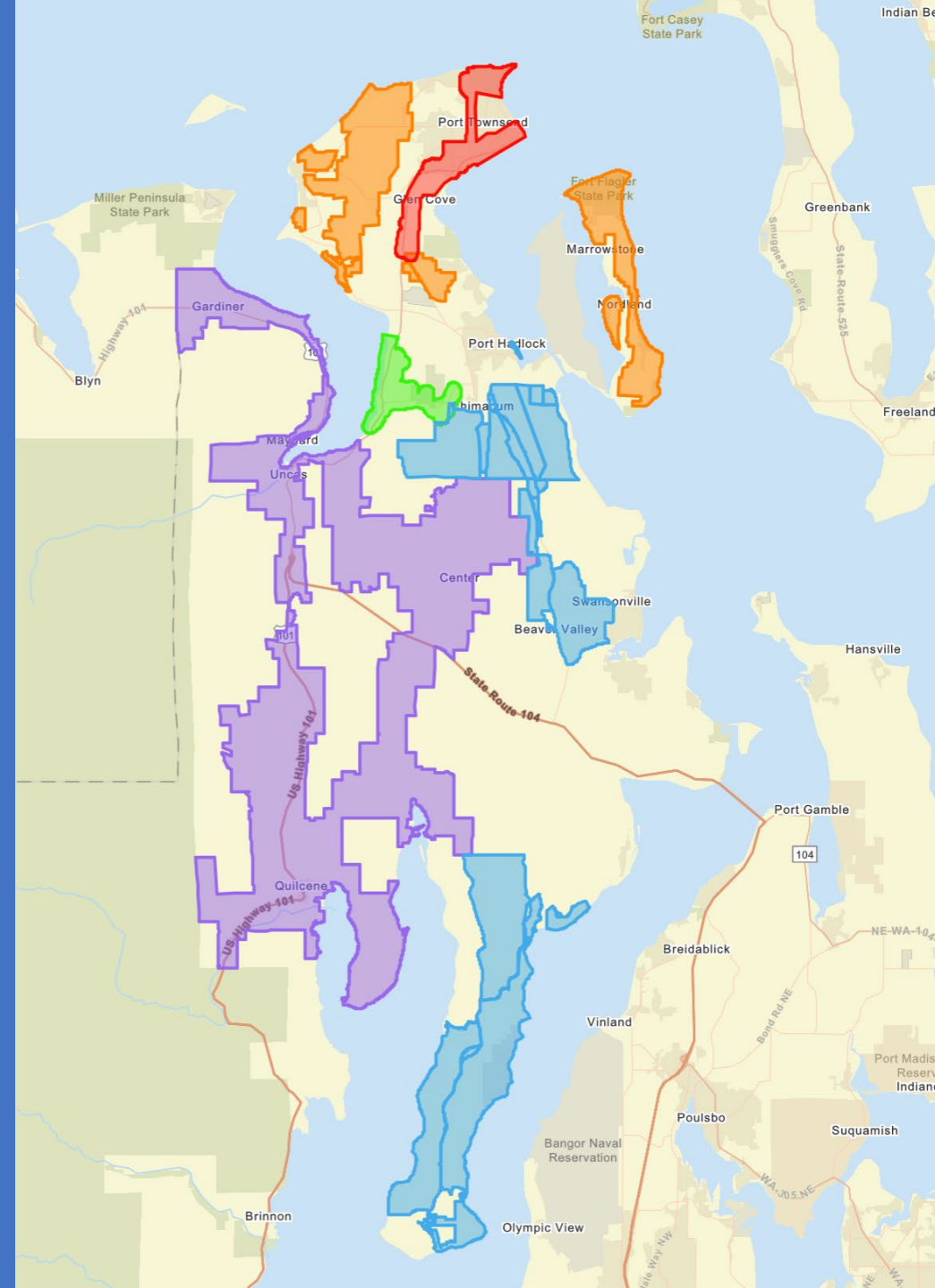
Will O'Donnell

Broadband and Communications Director

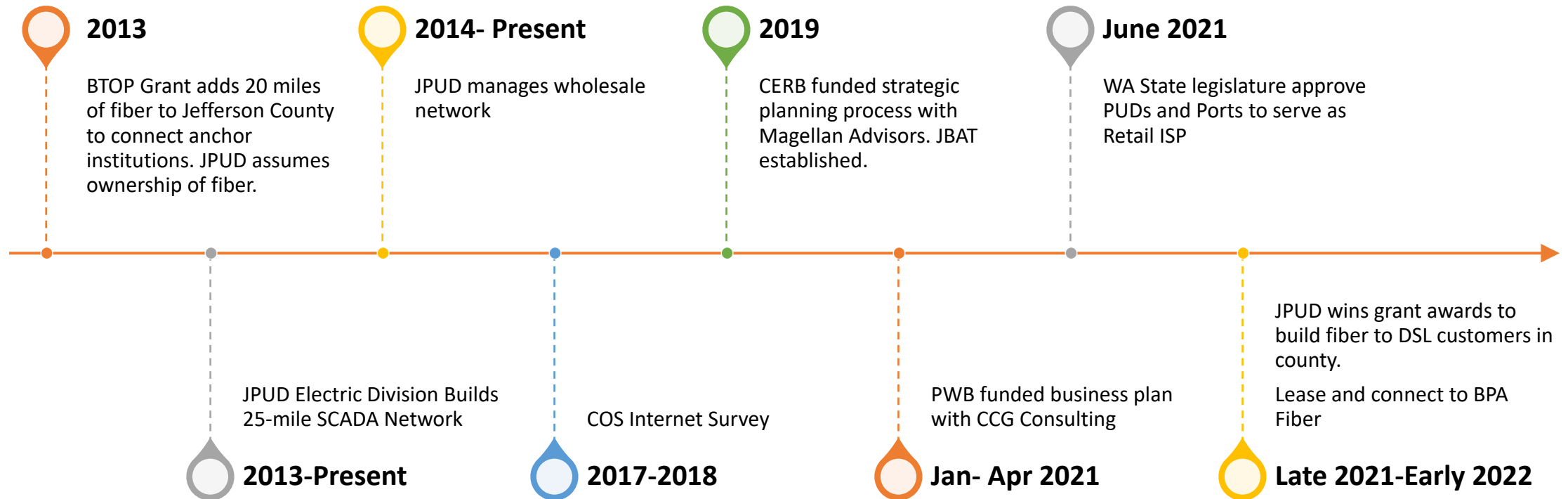
Doug Dawson

President, CCG Consulting

May 19, 2022



BROADBAND TIMELINE TO DATE



Current JPUD Broadband Team

- Network and Construction Oversight by GM Kevin Streett
- Grants/Project/Customer management by BB/Comms Director Will O'Donnell
- Fiber & equip work by SCADA Team: Colton Worley and David Elias
- Staking and quotes by SCADA Engineer Erik Pryor
- No full time Broadband Staff Members





Partners & Procurement



- **CCG Consulting:** Broadband Strategic Planning, Prelim Engineering, Project Design, Grant development
- **FINLEY:** Design Engineering and Project Management
- **CALIX:** Network Equipment Vendor
- **GENUINE CABLE:** Aerial and Buried Fiber Vendor



Broadband Department Goal

**FACILITATE ACCESS TO
BROADBAND FOR ALL JEFFERSON
COUNTY RESIDENTS**

Broadband Department Objectives

*Unserved currently defined as 25/3
over wireline

Extend Fiber Network to all unserved customers in electric service territory

Partner to assist with connections outside of electric service territory

Fund Construction with State and Federal Grants & Loans

Extend Existing Network where financially viable

Build future-proof, reliable, affordable network to improve quality of life

Broadband is a Department of the
Electric Division

Historically wholesale, SCADA
focused

Retail and Wholesale ISP going
forward

Open Access Fiber to the Premise
Network

NoaNet current Network Operator,
transition to JPUD

Broadband Department Setup

Current Retail Rates

Residential Speeds	Monthly rates
100/100 Mbps	\$65/mo
250/250 Mbps	\$75/mo
1 Gbps/1 Gbps	\$90/mo
Premium Service	\$20/mo
Low-income Discount	\$20/mo.
Wifi Modem Rental	\$10
VOIP Service	\$20/mo.

Business Speeds	Monthly rates
100/100 Mbps	\$75/mo
250/250 Mbps	\$85/mo
1 Gbps/1 Gbps	\$100/mo
Premium Service	\$25/mo
Low-income Discount	n/a
Wifi Modem Rental	\$10
VOIP Service	\$30/mo

Current Wholesale Rates

Residential Speeds	Monthly rates
100/100 Mbps	\$35/mo
250/250 Mbps	\$40/mo
1 Gbps/1 Gbps	\$45/mo
Premium Service	\$10/mo
Low-income Discount	\$10/mo
Wifi Modem Rental	n/a
VOIP Service	n/a

Business Speeds	Monthly rates
100/100 Mbps	\$40/mo
250/250 Mbps	\$45/mo
1 Gbps/1 Gbps	\$50/mo
Premium Service	\$15/mo
Low-income Discount	n/a
Wifi Modem Rental	n/a
VOIP Service	n/a



Fiber Construction Projects

Current Projects

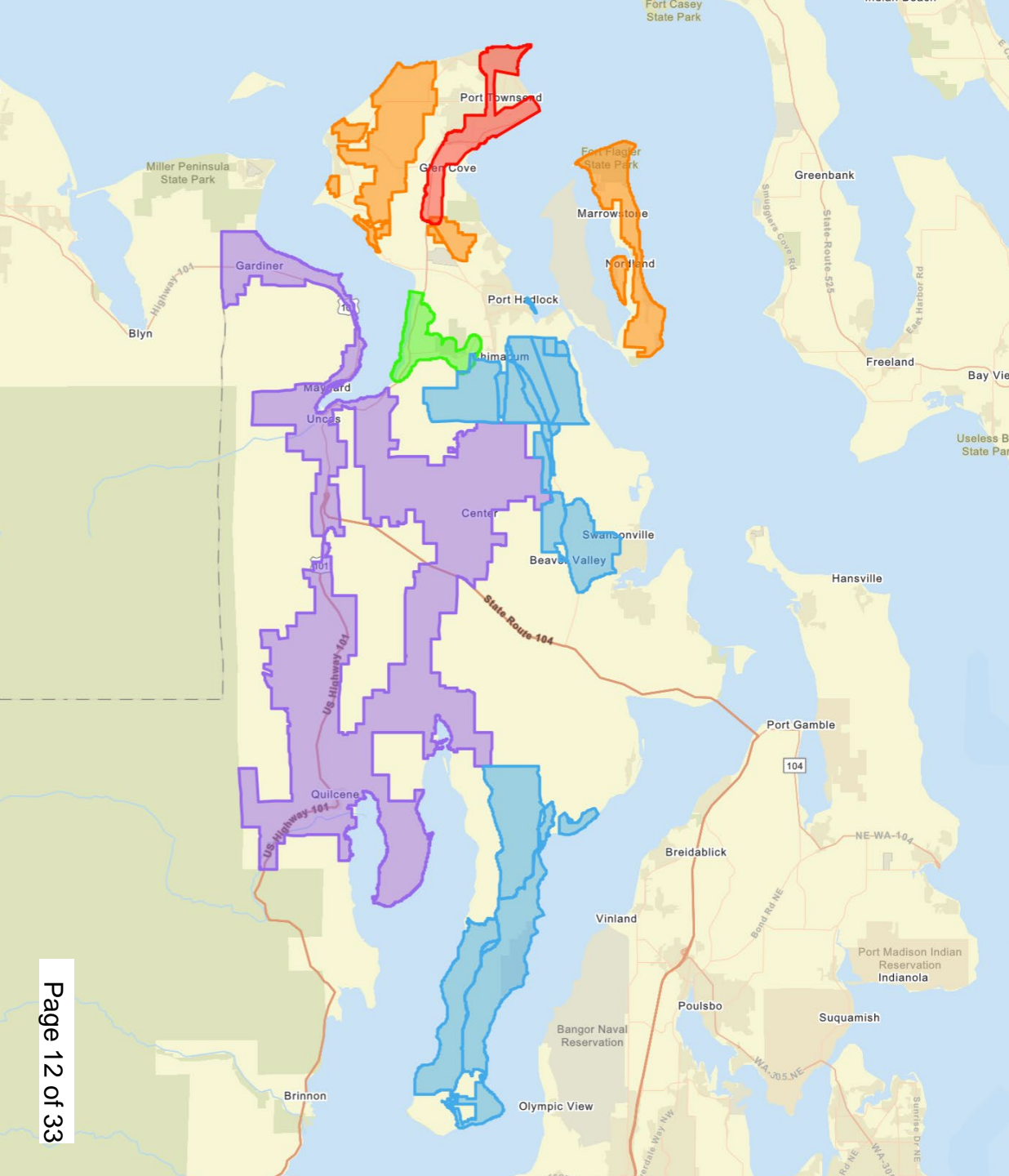
**Olympic Fiber
Corridor**
Quilcene to Gardiner

**East
Discovery Bay**
Anderson Lake Rd and
Hwy 20

**Jefferson
North**
Cape George, Woodland
Hills, Marrowstone

**SE Jefferson
County**
Chimacum to Ludlow to
Coyle

PT Business Fiber
Fort Worden to Hwy 20/19 Intersection



Project Areas	E DISCO BAY	Olympic Fiber Corridor	Jefferson North	PT Business Fiber (Loan	SE Jefferson County	Total
FUNDER	PWB	NTIA/WSBO	WSBO	PWB	USDA RUS	
Residential Passings	74	1646	1071	0	1034	3825
Business Passings	0	37	6	375	0	413
Take Rate	70%	60%	60%	60%	70%	
Customers	52	1010	646	225	724	2675
Miles of Fiber	8.3	136	100	47	114	405.3
State or Federal Funding	\$1,096,046	\$10,406,153	\$9,718,934	\$1,839,295	\$9,927,431	\$31,148,564
State or Local Match	0	\$1,156,239	\$750,000	0	\$3,309,144	\$5,215,383
JPUD Cash	0	\$147,840	\$965,106	\$204,366	0	\$1,317,312
Total Funding	\$1,096,046	\$11,710,232	\$10,468,934	\$2,043,661	\$13,236,575	\$39,520,554

Broadband Project Business Models

**MODEL 1: STATE AND
FEDERAL FUNDED,
UNSERVED AREAS**

**MODEL 2: FUNDED,
UNSERVED AREAS +
ADJACENT AREAS**



Revenue & Expense Assumptions

Model 1: Funded, Unserved Areas

2,573 Retail Customers

335 Open Access

\$36M in Grant Funding

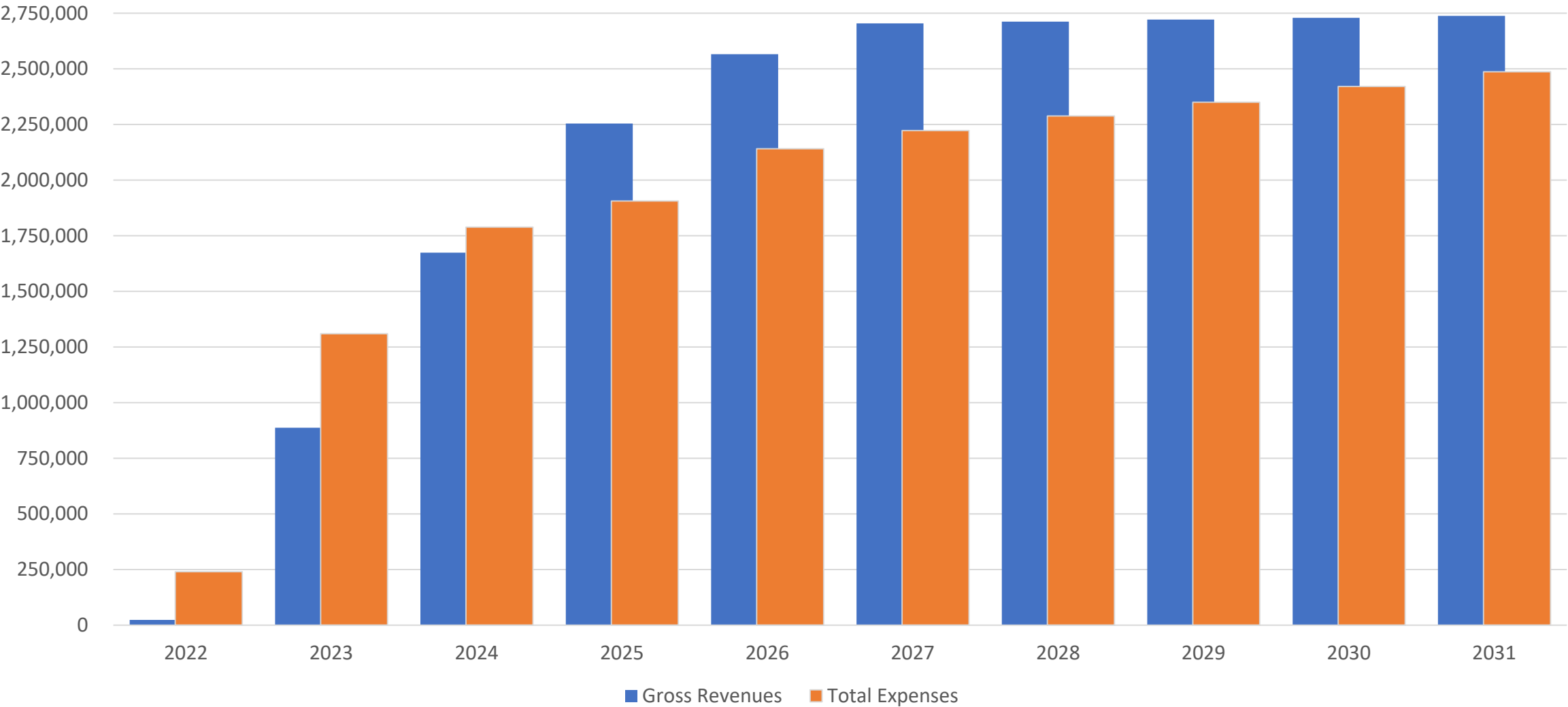
\$1.8M Low interest loan

\$1.3 Matching funds

Inclusion of Annual Property Tax Revenue

Assumes \$750 connection fee per non
grant eligible customer

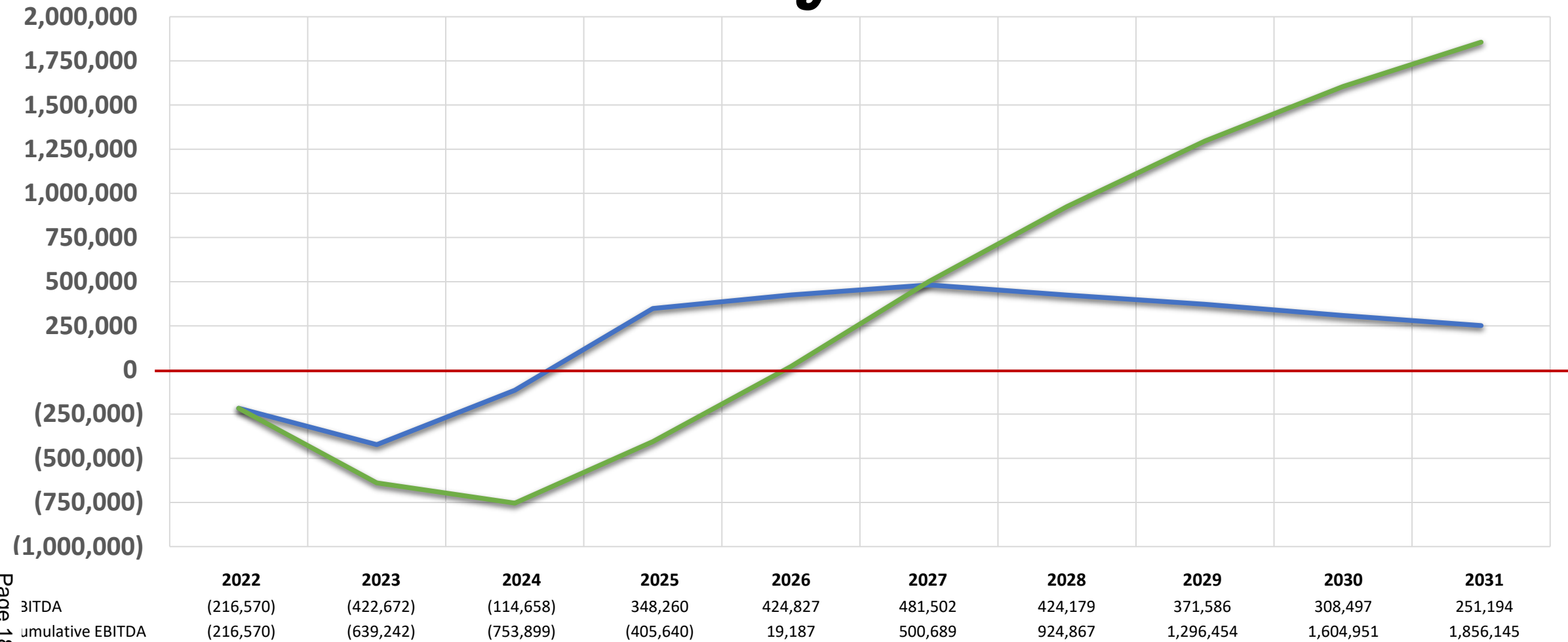
Broadband Revenues vs Expenses 2022- 2031



Operating Revenue		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Telephone Revenue		540	35,380	85,620	109,860	119,760	123,420	123,060	123,120	123,180	123,540
Broadband Revenue		2,716	690,320	1,343,352	1,894,380	2,191,728	2,331,996	2,339,892	2,347,512	2,355,708	2,363,952
Open Access Revenue		7,675	179,525	296,830	324,500	338,360	337,440	337,690	337,690	337,690	337,690
Miscellaneous Revenue		23	3,804	12,933	18,324	21,249	22,644	22,707	22,779	22,869	22,950
Existing Revenue		13,056	13,056	13,056	13,056	13,056	13,056	13,056	13,056	13,056	13,056
Total Revenues		24,010	922,085	1,751,791	2,360,120	2,684,153	2,828,556	2,836,405	2,844,157	2,852,503	2,861,188
Less Bad Debt:		(98)	(21,885)	(43,257)	(60,677)	(69,982)	(74,342)	(74,570)	(74,802)	(75,053)	(75,313)
Interest Income		0	0	0	0	0	0	0	0	0	0
Net Revenues		23,912	900,200	1,708,534	2,299,443	2,614,171	2,754,214	2,761,835	2,769,355	2,777,450	2,785,875
Interest on Working Cash		3,373	1,489	(664)	4,720	13,566	22,446	29,536	36,364	44,200	51,538
Cost of Goods Sold											
Less COGs		171	12,987	34,257	45,087	48,213	49,816	49,485	47,946	47,893	47,893
Gross Margin		23,741	887,213	1,674,277	2,254,356	2,565,958	2,704,398	2,712,351	2,721,408	2,729,558	2,737,982
Operating Expenses											
Vehicle Expense		2,167	13,325	13,658	14,000	14,350	14,708	15,076	15,453	15,839	16,235
Tools & Equipment		668	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780
Building Maintenance		400	1,000	1,500	1,750	2,000	2,250	2,500	2,750	2,819	2,889
Computer		938	4,488	4,623	4,738	5,740	5,883	6,030	6,181	6,336	6,494
Network Maintenance		106,044	447,127	555,525	612,698	666,778	710,177	753,876	797,881	842,200	886,841
Maintenance Contracts		19	2,682	8,878	12,490	15,156	16,125	16,165	16,211	17,081	17,134
Interconnection Expense		180	2,100	1,446	578	518	88	88	94	88	88
Internet Backbone		375	12,250	10,638	4,700	4,225	72,613	84,600	91,825	103,225	113,485
Help Desk Expense		124	20,288	68,976	97,728	116,728	124,391	124,737	125,133	129,396	129,854
Advertising		12,000	392,000	340,400	150,400	135,200	34,900	35,550	36,519	37,307	38,114
Sales and Marketing Expense		0	0	0	0	0	0	0	0	0	0
Customer Service		0	49,956	52,481	53,793	110,275	113,032	115,858	118,754	121,723	124,766
Billing		53	11,050	25,303	35,890	41,803	44,822	45,333	45,864	46,427	47,001
Software Maintenance		2,220	4,561	4,675	4,792	4,912	5,035	5,161	5,290	5,422	5,557
Management		23,418	48,000	49,201	50,431	51,692	52,984	54,308	55,666	57,058	58,484
General Accounting		0	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002
Legal Expense		0	0	0	0	0	0	0	0	0	0
Consultants		90,000	90,000	40,000	30,000	25,000	25,750	26,523	27,318	28,138	28,982
Allocated PUD Overheads		1,273	175,381	560,722	769,703	877,955	928,160	929,653	931,419	933,758	935,814
State B&O Tax		432	16,598	31,297	42,247	48,080	50,679	50,820	50,960	51,110	51,266
Property Tax		0	0	0	0	0	0	0	0	0	0
Total Operating Expenses		240,311	1,309,885	1,788,934	1,906,097	2,141,131	2,222,896	2,288,172	2,349,822	2,421,060	2,486,788

Earnings Before Interest, Taxes, Depreciation

Yearly vs Cumulative EBITA



Revenue & Expense Assumptions

Model 2: Funded, Unserved Areas + Adjacent Areas

Direct revenues cover addition of 1850 customers in adjacent areas to grant projects

4214 Retail Customers

514 Open Access

\$36M in Grant Funding

\$1.8M Low interest loan

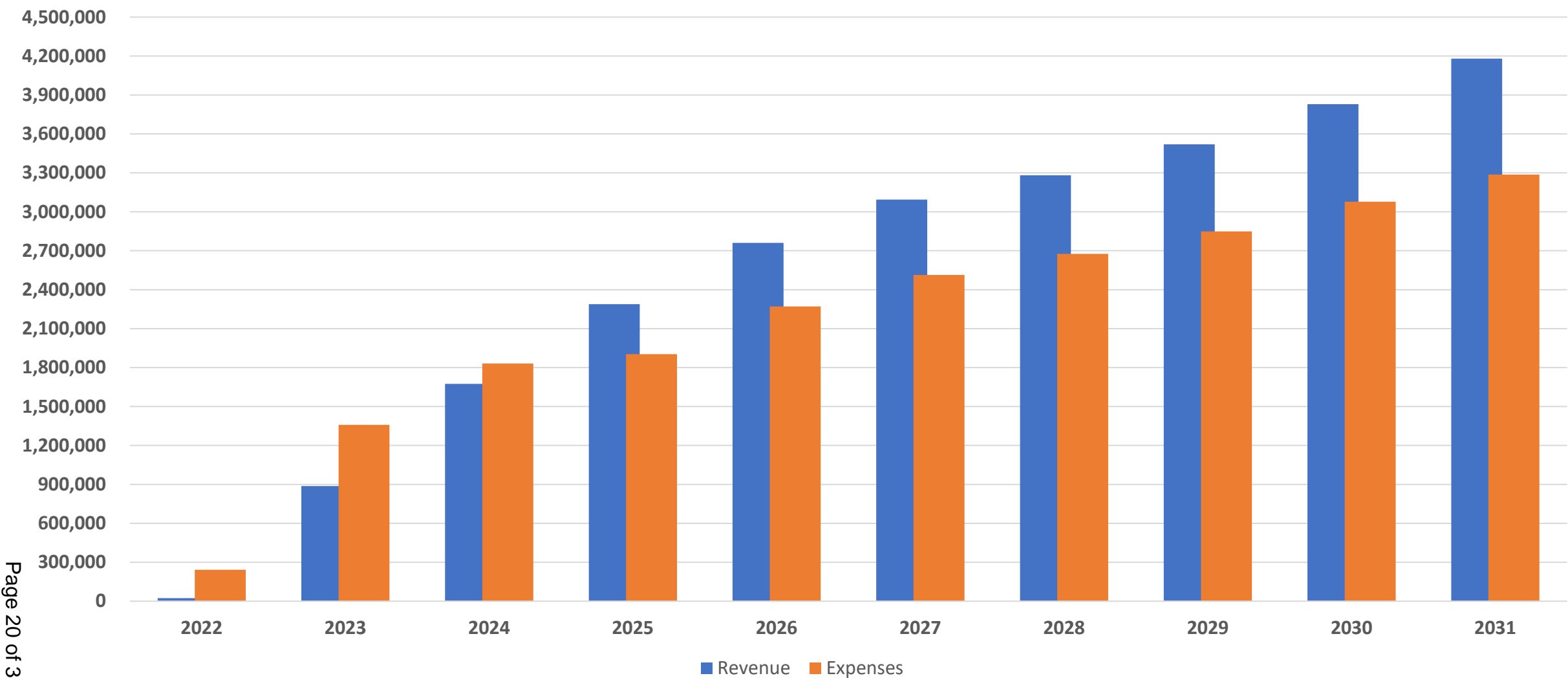
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Inclusion of Annual Property Tax Revenue

Assumes \$750 connection fee per non grant eligible customer

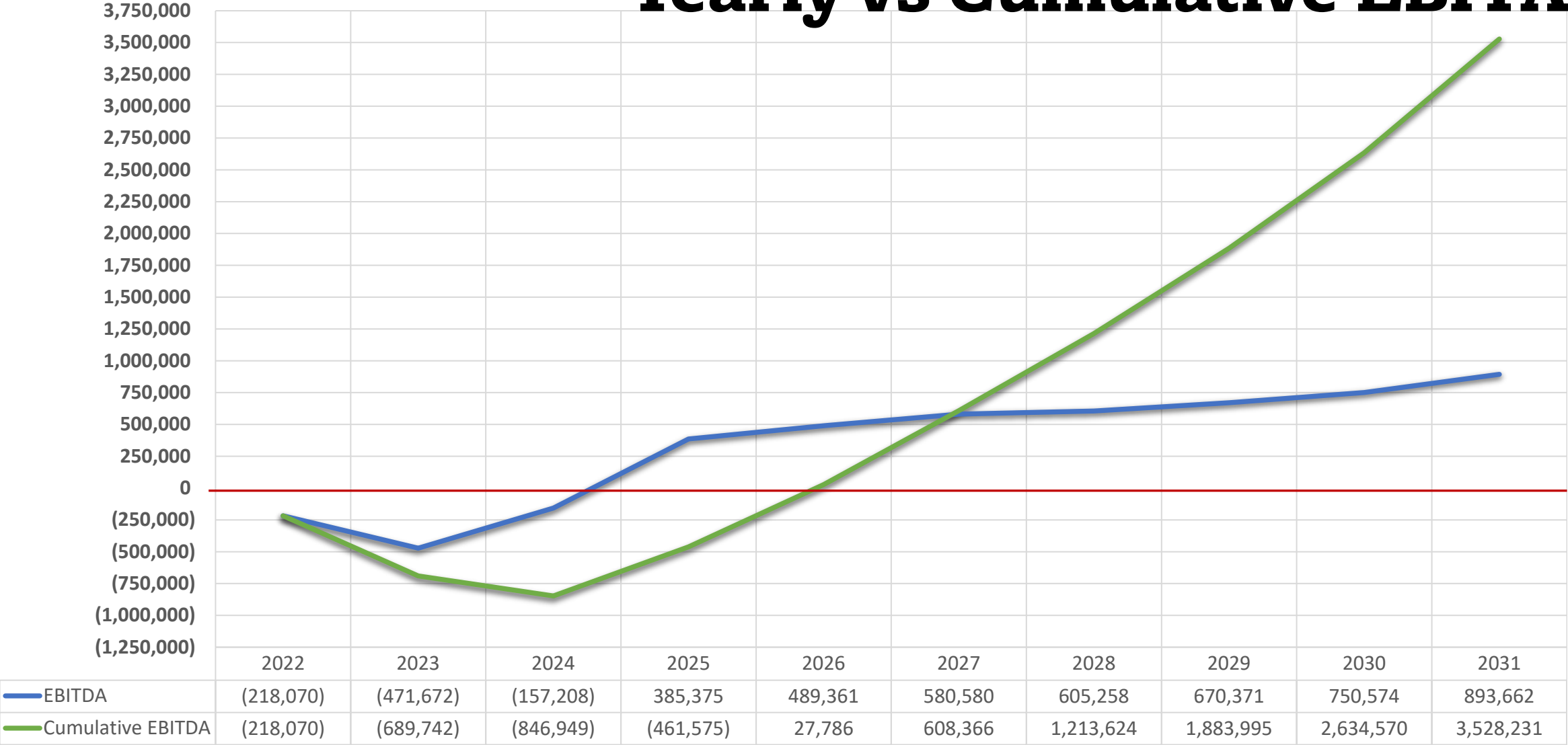
Broadband Revenues vs Expenses 2022- 2031

Additional customers

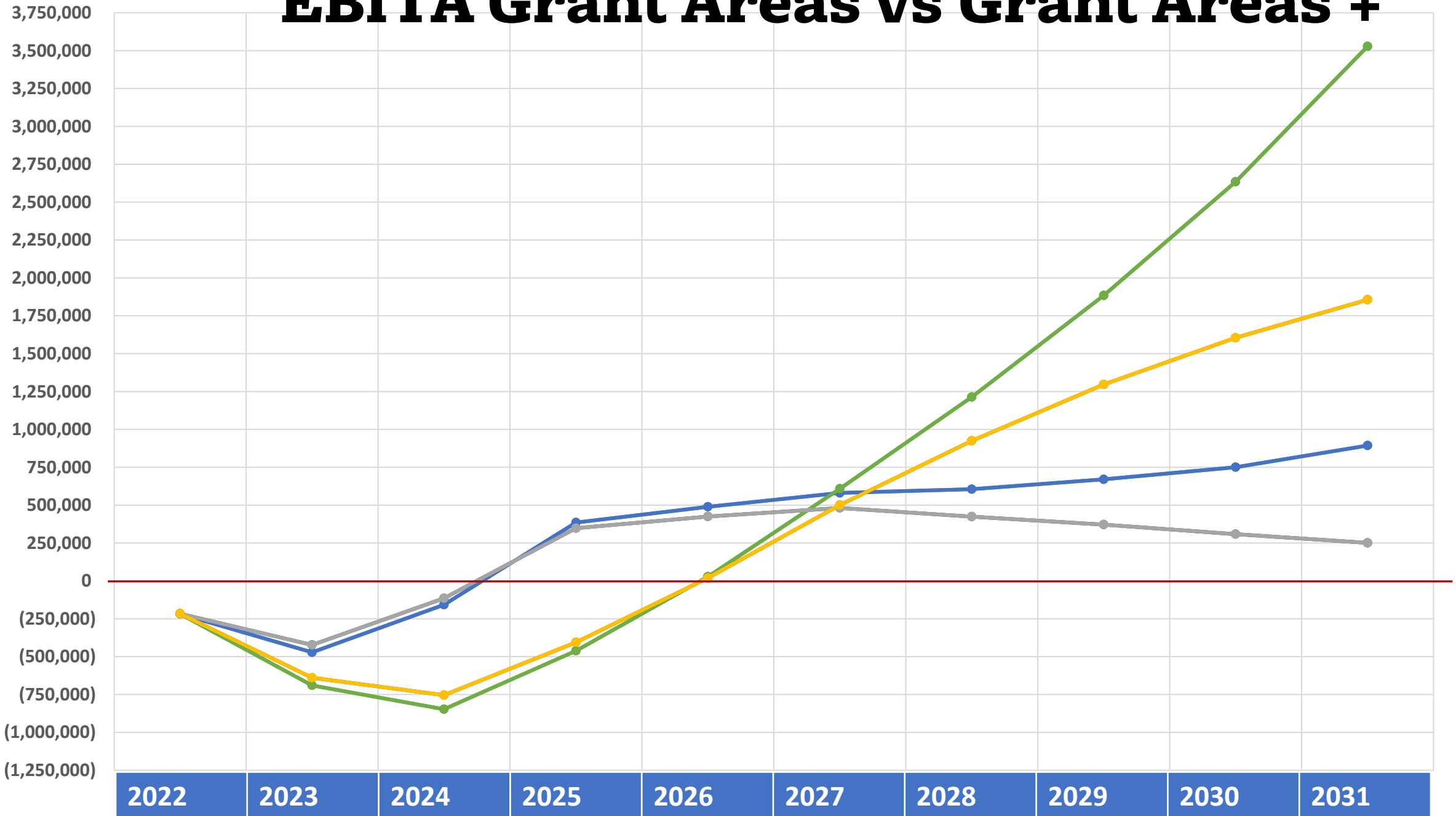


Earnings Before Interest, Taxes, Depreciation

Yearly vs Cumulative EBITA



EBITA Grant Areas vs Grant Areas +





Financial Conclusions

Cash flow positive after 3 years

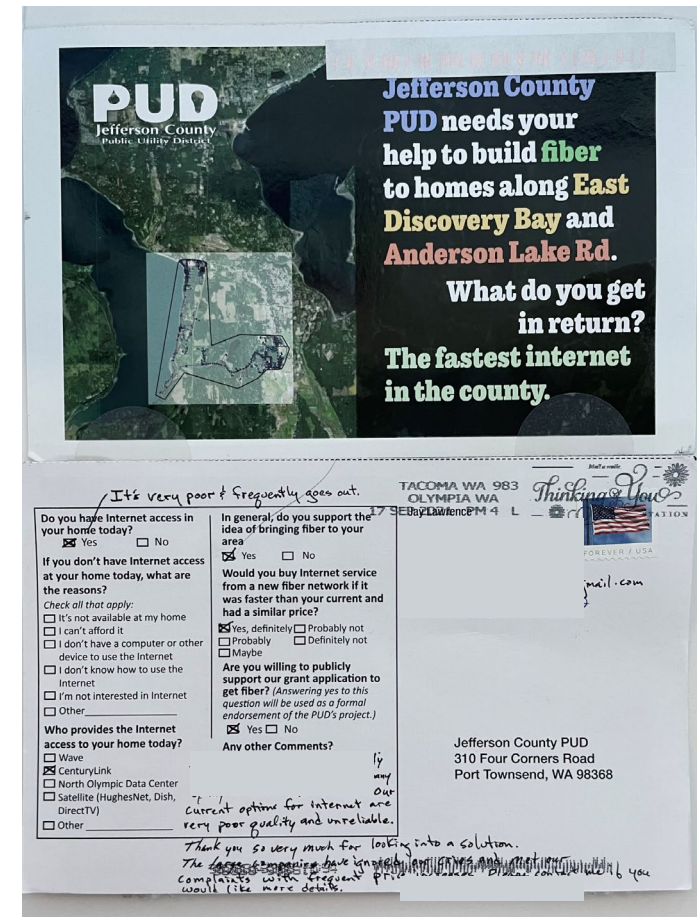
**\$4M+ annual revenue,
4000+ customers in 10 years**

**\$30M in equity added to Electric
Department for \$1.3M cash outlay**

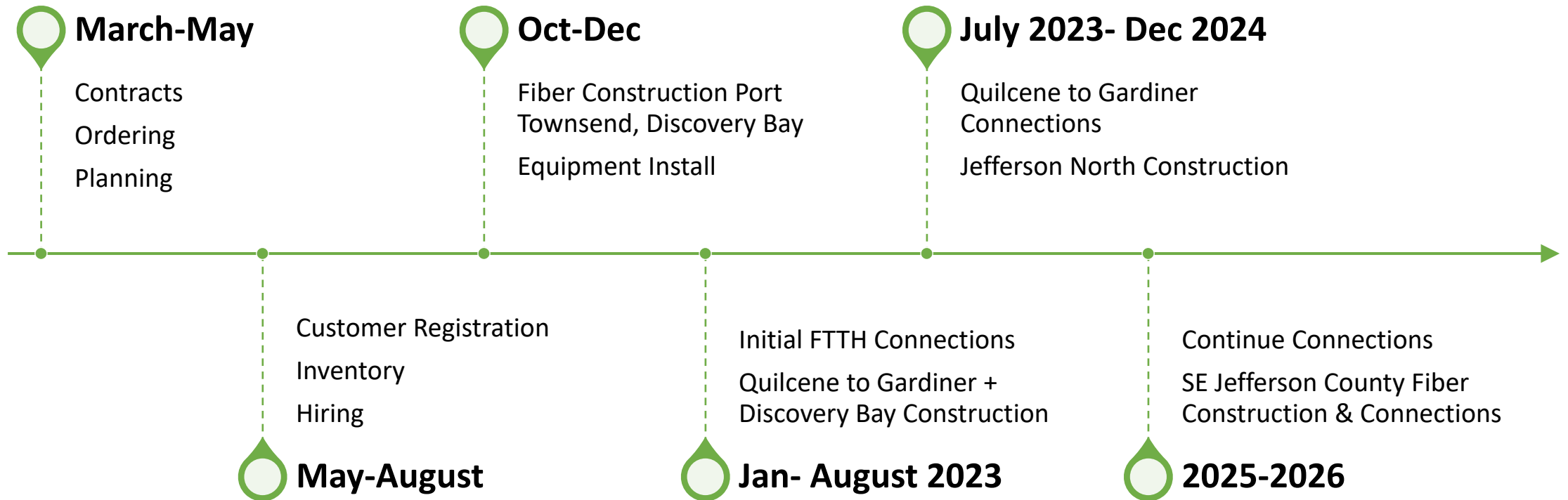
Balance Sheet		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Assets											
Operating Cash Fund		355,499	(198,704)	(24,444)	321,275	327,632	305,156	307,337	328,921	304,575	304,961
PWB Grant Capital Account		1,752,072	0								
Accounts Receivable		7,983	166,098	145,983	199,668	240,615	269,717	286,008	306,620	333,542	364,179
Land		0	0	0	0	0	0	0	0	0	0
Vehicles		170,000	344,250	344,250	344,250	344,250	558,929	581,827	581,827	581,827	581,827
Tools and Inventory		25,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Buildings		163,506	163,506	313,506	388,506	388,506	388,506	388,506	388,506	388,506	388,506
Furniture		3,500	8,000	8,000	8,000	8,750	9,500	9,500	9,500	9,500	9,575
Computers		7,500	15,225	15,225	15,225	18,039	22,132	23,362	23,362	23,362	23,810
Customer CPE		0	0	0	0	0	0	0	0	0	0
Core Fiber Electronics		540,968	751,102	751,102	751,102	751,102	751,102	751,102	751,102	498,941	498,941
ONTs		32,184	936,567	1,704,167	2,099,231	2,632,688	2,811,312	3,047,867	3,324,654	3,688,338	4,052,022
Fiber Drops		67,853	1,974,516	3,592,805	4,483,563	5,839,682	6,351,284	7,042,885	7,857,879	8,942,873	10,027,867
Fiber Network		3,672,618	15,964,027	25,117,492	29,253,383	31,447,564	31,447,564	31,447,564	31,447,564	31,447,564	31,447,564
Capitalized Software		76,500	76,500	76,500	76,500	76,500	76,500	76,500	76,500	76,500	76,500
Less Accumulated Amortization		0	(7,650)	(15,300)	(22,950)	(30,600)	(38,250)	(45,900)	(53,550)	(61,200)	(68,850)
Less Accumulated Depreciation		(66,849)	(714,209)	(2,254,138)	(4,045,541)	(6,043,647)	(7,950,017)	(9,900,288)	(11,977,654)	(14,010,392)	(16,268,517)
Total Assets		6,808,335	19,554,228	29,850,147	33,947,211	36,076,081	35,078,434	34,091,270	33,140,229	32,298,935	31,513,384
Liabilities											
Loan Liability		1,839,295	1,711,219	1,582,852	1,453,946	1,324,498	1,194,507	1,063,970	932,884	801,248	669,059
Accounts Payable		39,496	148,322	156,077	162,970	194,046	214,643	228,372	242,924	262,354	280,147
Total Liabilities		1,878,791	1,859,541	1,738,930	1,616,916	1,518,544	1,409,150	1,292,342	1,175,809	1,063,603	949,206
Owners' Equity											
Paid-in Capital		594,369	1,816,601	2,323,494	2,911,694	3,629,944	4,258,194	4,939,994	5,657,794	6,457,044	7,256,294
Grants		4,622,669	17,299,741	28,921,352	33,972,556	37,004,049	37,004,049	37,004,049	37,004,049	37,004,049	37,004,049
Retained Earnings		(287,494)	(1,421,655)	(3,133,628)	(4,553,955)	(6,076,456)	(7,592,959)	(9,145,114)	(10,697,422)	(12,225,759)	(13,696,164)
Total Owners' Equity		4,929,544	17,694,687	28,111,218	32,330,295	34,557,536	33,669,283	32,798,928	31,964,421	31,235,333	30,564,178

Marketing Plan

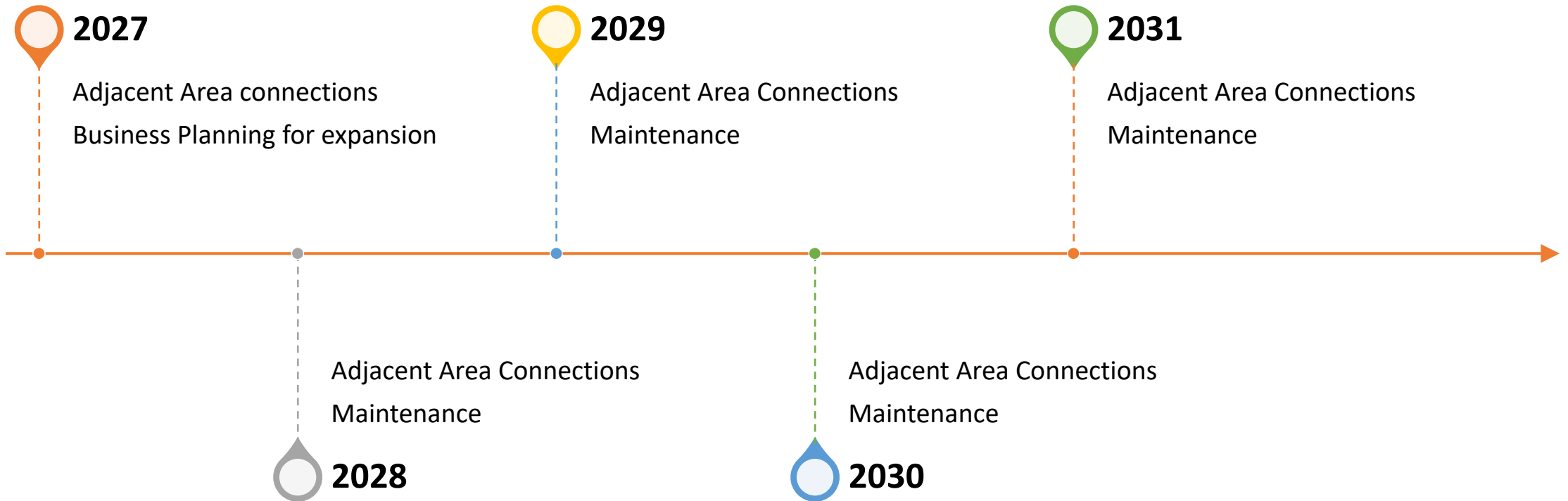
- Pre-app postcards to customers in grant areas
- Direct Email Campaign
- Social Media advertising
- JPUD Newsletter updates
- Press Releases
- Paid print ads
- Postcard updates
- Direct email updates
- Direct phone calls
- Updated Website Section
- Earned media
- Door hangers during construction
- In Person Events
 - Equipment Demo
 - Cord Cutting Education
 - Digital Literacy and Equity
- Business Plan includes substantial funding for marketing efforts



Timeline Years 1-5



Timeline Years 5-10



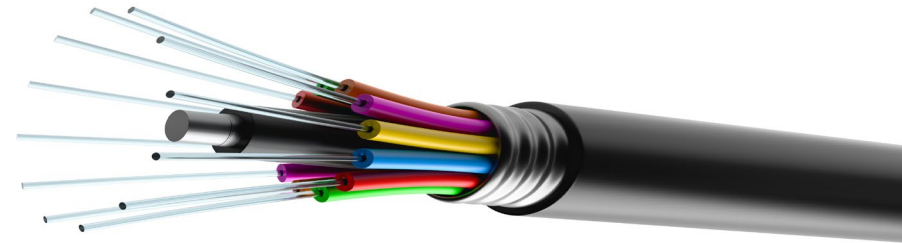
Upcoming Policy Updates

Coming to the June 7th Meeting

- Wholesale Broadband Agreement Revision
- Internet Services Agreement
- Acceptable Use Policy



Questions?





AGENDA REPORT

DATE: May 17, 2022
TO: Board of Commissioners
FROM: Kevin Streett, Will O'Donnell
RE: Fiber Bid Selection Approval

BACKGROUND: Jefferson County PUD is moving closer to building fiber broadband service to unserved portions of Jefferson County. To avoid supply chain shortages, impending price hikes, and to better prepare to meet timelines set by federal and state granting agencies, PUD staff have solicited bids to supply 36 reels of Buried and Aerial Fiber Optic Cable, 450 reels of Fiber Optic Drop Cable, and 164 Handholes.

ANALYSIS/FINDINGS: 6 bids were received from at the deadline. Staff reviewed the bids, and they were evaluated on price and delivery date as well as the following criteria:

- ☒ The Bidder's past performance(s) in providing substation equipment and meeting quoted deliveries
- ☒ The Bidder's past ability and willingness to solve problems that have arisen in a satisfactory and complete manner.
- ☒ The Bidder's deviations from the specifications.
- ☒ Warranties. (Standard and Extended)
- ☒ Manufacturer's cancellation policy.

SELECTION: Per the Bid Instructions each individual item is considered a separate quote. Different items may be awarded to different bidders based upon the lowest evaluated cost or other pre-established criteria. Based primarily on price and delivery date, JPUD staff recommend purchasing buried and aerial cable from Wesco Annixter's Bid #1 and drop fiber and hand holes from Graybar.

FISCAL IMPACT: Wesco/Annixter: \$878,306; Graybar: 371,008. TOTAL: \$1,249,314

RECOMMENDATION: Approve a motion to authorize staff to accept Fiber Optic Material Bid# 2022-004 proposals from Wesco/Anixter (for buried and aerial fiber) and Graybar (for drop fiber and hand holes).



Bid Tabulation-Preliminary Results Fiber Material Bid# 2022-004

April 20th 3:30pm Bid Opening

Jefferson County PUD- Four Corners Meeting Room

Opened By: Kevin Street

Recorded By: Alyson Dean

Company Name	Contact Name	Bid Submitted	Total Bid Amount	Lead Time	Bid Bond
Wesco/Anixter Bid# 1	Jed Doyle	Buried- \$229,320.60 Aerial- \$648,986.00 Drop- \$91,800.00 Hand Holes- \$286,836.00	\$1,256,942.60	Buried- Q4 2022 Aerial- 20 weeks Drop- 52 weeks Hand Holes- 40 weeks	Yes
Wesco/Anixter Bid# 2	Jed Doyle	Buried- <i>no quote</i> Aerial- \$687,916.00 Drop- <i>no quote</i> Hand Holes- <i>no quote</i>	\$687,916.00	Buried- Aerial- 28-30 weeks Drop- Hand Holes-	Yes
Genuine Cable	Mike Melnick	Buried- \$234,587.60 Aerial- \$696,068.40 Drop- \$135,900.00 Hand Holes- \$293,060.74	\$1,359,616.74	Buried- Q4 2022 Aerial- 10-14 weeks Drop- 16-17 weeks Hand Holes- 40 weeks	Yes
Graybar	Jennifer Walters	Buried- \$233,874.96 Aerial- \$654,790.70 Drop- \$93,870.00 Hand Holes- \$277,138.68	\$1,259,674.34	Buried- TBD 2023 Aerial- 10-14 weeks Drop- 17 weeks Hand Holes- 282 business days	Yes
General Pacific- Bid# 1	Shelby Hansen	Buried- <i>no quote</i> Aerial- \$639,322.20 Drop- <i>no quote</i> Hand Holes- <i>no quote</i>	\$638,322.20	Buried- Aerial- 16-22 weeks Drop- Hand Holes-	Yes
General Pacific- Bid# 2	Shelby Hansen	Buried- <i>no quote</i> Aerial- \$682,923.80 Drop- <i>no quote</i> Hand Holes- <i>no quote</i>	\$682,923.80	Buried- Aerial- 28-36 weeks Drop- Hand Holes-	Yes

General Pacific- Bid# 3	Shelby Hansen	Buried- \$329,027.20 Aerial- \$1,013,325.00 Drop- \$385,200.00 Hand Holes-	\$1,860,352.20 <i>(includes freight estimate)</i>	Buried- 20-28 weeks Aerial- 20-28 weeks Drop- 20-28 weeks Hand Holes-	Yes
Border States	Antonio Molina	Buried- \$226,828.00 Aerial- \$677,365.00 Drop- \$176,355.00 Hand Holes- \$335,888.40	\$1,416,436.40	Buried- 17-20 weeks Aerial- 28-30 weeks Drop- Aug 2023-Oct 2023 Hand Holes- 42-44 weeks	Yes
FIS	Adam Norsen	Buried- \$264,014.10 Aerial- \$882,657.60 Drop- \$116,100.00 Hand Holes- <i>no quote</i>	\$1,262,771.10	Buried- 17-20 weeks Aerial- 17-20 weeks Drop- 17-20 weeks Hand Holes-	No
FIS- Bid# 2 (South Korea)	Adam Norsen	Buried- \$191,673.00 Aerial- \$604,102.00 Drop- \$110,600.00 Hand Holes- <i>no quote</i>	\$906,375.00	Buried- 20-24 weeks Aerial- 20-24 weeks Drop- 20-24 weeks Hand Holes-	No