

January 24, 2024

Via Email:
psc@utah.gov

Gary Widerburg
Commission Administrator
Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84111

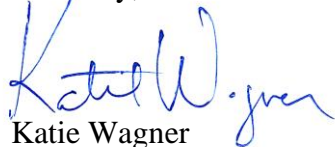
**RE: Docket No. 23-049-01
Qwest Corporation dba CenturyLink PC Petition for
Statewide Exemption from Carrier of Last Resort Obligations
Sur-Rebuttal Testimony of Alan Lubeck**

Dear Mr. Widerburg:

Attached for filing please find the Sur-Rebuttal Testimony of Alan Lubeck in Support of CenturyLink's Petition for Exemption from the Carrier of Last Resort Obligation.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Katie Wagner
Senior Corporate Counsel

Attachments

cc: Service List

Certificate of Service

Docket No. 23-049-01

I hereby certify that a true and correct copy of the foregoing *Sur-Rebuttal Testimony of Alan Lubeck* was served by email this 24th day of January 2024 on the following:

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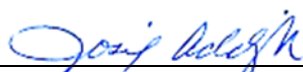
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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

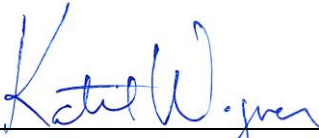
In the Matter of)
)
Qwest Corporation dba CenturyLink QC)
)
Petition for Statewide Exemption from Carrier)
of Last Resort Obligations)

SUR-REBUTTAL TESTIMONY OF ALAN LUBECK

Qwest Corporation dba CenturyLink QC hereby submits the Sur-Rebuttal Testimony of Alan Lubeck in this docket.

Dated this 24th day of January 2024.

CENTURYLINK,

By: 
Katie N. Wagner, OK Bar #33296
Senior Corporate Counsel
Katie.wagner@lumen.com
405-669-8712

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of)
)
Qwest Corporation DBA CenturyLink QC) Docket No. 23-049-01
)
Petition for Statewide Exemption from Carrier)
Of Last Resort Obligations)

**SUR-REBUTTAL TESTIMONY OF ALAN LUBECK
ON BEHALF OF
QWEST CORPORATION DBA CENTURYLINK QC**

January 24, 2024

1 **I. IDENTIFICATION OF WITNESS**

2 **Q. PLEASE STATE YOUR NAME AND CURRENT POSITION.**

3 A. My name is Alan Lubeck. I am employed by Qwest Corporation d/b/a CenturyLink QC
4 (CenturyLink) as a Director of Public Policy, and I am providing this rebuttal testimony on
5 behalf of CenturyLink.

6 **Q. ARE YOU THE SAME MR. LUBECK THAT FILED REBUTTAL TESTIMONY**
7 **ON NOVEMBER 16, 2023 IN THIS DOCKET?**

8 A. Yes.

9 **Q. WAS THIS SUR-REBUTTAL TESTIMONY PREPARED BY YOU OR UNDER**
10 **YOUR DIRECT SUPERVISION?**

11 A. Yes.

12 **Q. WHAT IS THE PURPOSE OF YOUR SUR-REBUTTAL TESTIMONY?**

13 A. The purpose of my testimony is to support the *Petition of Qwest Corporation d/b/a*
14 *CenturyLink QC for Statewide Exemption from Carrier of Last Resort Obligations*. The
15 objective of my testimony is to respond to certain issues raised in the rebuttal testimony of
16 the witness for the Utah Rural Telecom Association (“URTA”).

17 **II. RESPONSES TO URTA REBUTTAL TESTIMONY**

18
19 **Q. WHAT APPEARS TO BE THE OVER-ARCHING CONCERN OF URTA?**

20 A. From his testimony, it appears that the over-arching concern of Mr. Merideth and URTA
21 is that a COLR is the only way that consumers will receive voice service. While this
22 concern is already in Utah statute, this concern has already been accomplished in
23 CenturyLink areas, by CenturyLink and multiple competitive providers. Most locations
24 in CenturyLink service areas are covered by a combination of cable, fixed wireless and

1 mobile wireless. And satellite providers have reported to the Federal Communications
2 Commission (FCC) that they are able to serve 100 percent of households in Utah.

3 **Q. HOW DOES MR. MERIDETH DEFINE EFFECTIVE COMPETITION?**

4 A. While Section 58-8b-3(5) identifies six factors to be considered to determine effective
5 competition, including the market share of the telecommunications corporation for which
6 an exemption is proposed and allows for other relevant factors, Mr. Merideth argues that
7 the Commission should basically ignore CenturyLink's statewide market share and even
8 its wire center market share, drilling down to the household level. While this would be a
9 nearly impossible task due to the data available to CenturyLink and to the Commission, it
10 is neither necessary nor how effective competition is measured. Although the Utah
11 Legislature could have included that every household must have competitive alternatives
12 for the service area to be effectively competitive, it does not include that phrase.

13 **Q. WHAT IS STATE POLICY RELATED TO EFFECTIVE COMPETITION?**

14 A. The policies of the State in Section 54-8b-1-1 includes "(4) allow flexible and reduced
15 regulation for telecommunications corporations and public telecommunications services
16 as competition develops." This policy does not require that competition has to be
17 ubiquitous at the household level for the Commission to reduce regulation. Instead, it
18 states that regulations should be reduced "as competition develops." Currently, at least
19 73.4% of households use only mobile services in Utah, which is overwhelming proof by
20 itself that competition has developed. And that ignores cable, competitive local exchange
21 carriers, fixed wireless and satellite competitors that are marketing against CenturyLink
22 and each other for the remaining 26.6% of households.

1 **Q. ARE CENTURYLINK SERVICE AREAS EFFECTIVELY COMPETITIVE?**

2 A. Yes.

3 **Q. HOW WILL AN EXEMPTION FROM CARRIER OF LAST RESORT (COLR)**
4 **RULES IMPACT CUSTOMERS OF CENTURYLINK?**

5 A. It will not impact CenturyLink customers.

6 **Q. HOW HAS CENTURYLINK HANDLED NEW CUSTOMER REQUESTS IN**
7 **STATES WHERE THERE ARE NO COLR RULES?**

8 A. CenturyLink has been providing excellent service to customers without incident in
9 Wyoming, Colorado, Nevada and other states that have no COLR rules. None of these
10 Commissions have assigned new COLR providers because they understand that the FCC
11 ETC rules provide any protection needed by consumers. In reality, all consumers have
12 options because of the continuing service and geographic improvements by satellite
13 providers. In addition, CenturyLink is not leaving Utah and will continue to provide
14 service based on its Terms and Conditions (CenturyLink local services are not tariffed in
15 Utah), just as it does in its other states where there are no COLR requirements.

16 **Q. MR. MEREDITH DISCUSSES WHO WILL BE THE PROVIDER FOR NEW**
17 **CUSTOMERS IN ESTABLISHED CENTURYLINK TERRITORY. HOW DOES**
18 **THIS RELATE TO LINE EXTENSION POLICY?**

19 A. The line extension provision is another example of how existing or potential customers in
20 CenturyLink territory will not be adversely affected if CenturyLink is granted COLR
21 relief. Because this provision will still exist, even without a COLR regulatory obligation
22 to provide service to every individual, line extension remains to provide service to those
23 customers who are willing to pay for costs associated with extending the carrier's line to
24 provide that service.

1 **Q. HOW DO YOU RESPOND TO MR. MEREDITH’S STATEMENT THAT**
2 **SERVICE QUALITY SHOULD BE A RELEVANT FACTOR IN DETERMINING**
3 **COLR RELIEF?**

4 A, The Utah legislature has declared it is the explicit policy of the State to “allow flexible
5 and reduced regulation for telecommunications corporations and public
6 telecommunications services as competition develops.” Utah Code § 54-8b-1.1(4). To
7 date, no party has submitted demonstrable evidence that service quality is an existing or
8 ongoing issue related directly to COLR relief. I believe raising the issue serves as a red
9 herring to distract the Commission from the purpose of this proceeding – determining if
10 effective competition exists.

11 **Q. HOW DO YOU RESPOND TO MR. MEREDITH’S COMMENTS REGARDING**
12 **THE NEED FOR ADDITIONAL EVIDENCE TO DETERMINE WITH**
13 **SPECEFICITY THE EXTENT TO WHICH COMPETING**
14 **TELECOMMUNICATION SERVICES ARE AVAILABLE FROM**
15 **ALTERNATIVE PROVIDERS?**

16 A. CenturyLink has supplemented its data responses to address this concern. See Exhibit 1
17 to this testimony, CTL-0388-0397. This is the latest FCC broadband data collection for
18 Utah, updated as of June 30, 2023. The FCC data collection is derived from a hexagon
19 spatial indexing technology as a means of indexing precise locations. As utilized by the
20 FCC in broadband data collection, each hexagon represents a specific area for assessing
21 broadband coverage, allowing for more accurate and comprehensive mapping of telecom
22 availability. Fixed telecom coverage is shown at an index 8 of spatial granularity, while
23 mobile coverage is shown at an index 9 spatial granularity. This means that the FCC can
24 now show telecom connections at a much more detailed level. Each index 8 hexagon
25 depicts data within an area that is 0.73 square kilometers (0.28 square miles), and for
26 mobile connections, each index 9 hexagon depicts data within an area that is 0.1 square

1 kilometers (0.03 square miles). This data includes fiber, cable, fixed wireless, satellite,
2 and mobile providers as well as a column for all fixed providers excluding satellite.

3
4 Comparing the total number of locations that exist in a wire center (884,186 “Total
5 Locations” column) against the number of locations actually served by competitors
6 (881,498 “Total Served” column) in that wire center, any variation between the two
7 represents the number of locations that CenturyLink exclusively serves – 2,688 exclusive
8 locations. Adding satellite service to the data set the FCC’s data shows that competition
9 exists at every location in Utah. Alternatively, if satellite is excluded from the analysis,
10 the FCC’s data shows that across the entire state there are only 2,688 locations of the total
11 884,186 CenturyLink locations in Utah that would not have an alternative voice provider.
12 The other parties deem these locations “captive”. It should be noted that “captive
13 customers” is not a measurement of Effective Competition. Therefore, CenturyLink’s
14 market share of these “captive customers” accounts for only one third of a single percent
15 – 0.3% – of all existing locations if satellite technology is excluded, and not all these
16 locations are CenturyLink customers, meaning that even these supposedly captive
17 customers have found other alternatives. CenturyLink believes that this data is sufficiently
18 granular to show that effective competition exists, and specifically that 100% of Utah
19 citizens have competitive choices including satellite or alternatively, 99.7% of Utah
20 citizens have competitive choices excluding satellite.

1 **Q. HOW WILL THE UTAH DIGITAL CONNECTIVITY PLAN AND BROADBAND**
2 **EQUITY, ACCESS, AND DEPLOYMENT (“BEAD”) FUNDING IMPACT THIS**
3 **NEW DATA?**

4
5 **A.** For context, the Utah Digital Connectivity Plan has identified 69,649 locations eligible
6 for Broadband Equity, Access, and Deployment (“BEAD”) funding – 41,541 unserved
7 broadband serviceable locations (BSLs) and 28,108 underserved BSLs. Since all or nearly
8 all of these identified 2,688 customer locations are currently served copper technology
9 and 25Mbps/3Mbps broadband or less, and that all of these locations will be eligible for
10 BEAD funding, at least some portion of those 2,688 locations will be overbuilt by
11 CenturyLink itself or its competitors through the BEAD program.

12 **Q. HOW DOES CENTURYLINK’S SERVICE COMPARE TO COMPETITORS IN**
13 **TERMS OF PRICING, TERMS, QUALITY, AND CONDITIONS?**

14 **A.** Many functionally equivalent services are available at comparable prices to CenturyLink
15 services. Depending on what service the customer is seeking, at times competitors can
16 offer faster services at lower prices. For instance, if you select a random sample location,
17 in this case 111 S 100 E, Lehi, Utah, Cox Communication via Xfinity Internet offers
18 unlimited data with WiFi equipment included at 400 Mbps for \$50.00 per month. The
19 comparable CenturyLink product available at that address is only 15Mbps for \$55.00 per
20 month. Choosing a different sample location, 658 S 600 E, Salt Lake City, Utah, it is clear
21 that in terms of product quality available, Google Fiber offers 5000 Mbps while
22 CenturyLink’s fiber product only offers 940 Mbps. See Exhibit 2, CTL 0521 - 0523. In
23 short, because there are so many competitive options, pricing, terms, quality, and
24 conditions vary but are nonetheless competitive. This is further demonstrated by earlier

1 exhibits depicting CenturyLink's loss of overall market share as customers move away
2 from standalone voice products.

3

4

5

EXHIBIT 1

Utah Telecommunication Open Infrastructure Agency	Verizon	Viasat	Wasatch Broadband	Western NM Telephone	WI Fiber Inc	WiFi Pros	WiFiCOW	Xfinity	Zayo
	75	97							
519	6,730	21,447	365	164				20,500	2
	335	2,275							
7,663	1,248	9,777						8,810	
	36	687							
4,741	12,429	29,235				621		28,715	5
1	2,798	17,469							
21,234	15,063	43,146						42,241	1
	159	767						310	
124	7,363	17,319						16,772	2
177	17,803	30,374						29,903	21
137	5,645	8,159						7,835	
	1,202	4,390						3,562	
28	1,171	11,363						8,190	
1,382	9,957	17,491						17,113	1
	1,570	4,070						1	
	1,098	10,960							
	504	5,813			3,881			4,675	
22,725	21,310	50,843						50,544	
15,597	13,931	26,892						26,311	3
	46	757							
198	14,068	35,966	34,338	277				31,935	10
141	2,203	23,605			18,449			22,028	
3,098	2,361	3,197						3,083	
4,164	4,779	14,594						13,642	
7,584	14,536	29,957						29,500	14
	352	2,385		2,274					
1,376	425	2,456					7		
12,059	14,135	24,390						24,046	
	501	1,786							
	532	3,836		3,831					
106	11,055	26,700						26,154	20
34	5,147	16,002						15,353	
18	3,266	10,984						10,716	
90	3,188	18,071						15,446	1
21,925	10,511	29,103	5,624					26,241	20
10,761	1,901	13,000	1,732					12,572	3
20	1,919	15,769						12,428	1
312	13,927	21,300	7					20,767	4
	244	2,120							
5,982	4,749	7,346		2,903				6,499	1
	722	4,647		4,584					
	356	2,323			2,022			1,592	
281	26,342	49,832	2					48,239	2
454	1,216	4,896		2,739				4,077	
	335	2,195		1,859					
46	4,449	7,372						6,665	
760	13,882	24,434						23,933	2
701	16,659	28,845						28,609	
4,684	6,374	10,679						10,362	
	690	7,091			6,191			6,134	
	2,873	5,294		5,192					
	145	735							
10	5,246	14,167		1,356				11,911	2
2	5,905	14,059	2	364				13,336	1
1,727	3,965	40,224						1	2
	4,706	17,704						15,368	
	232	2,158							
	1,611	16,784							3
106	6,551	14,849						14,546	5

EXHIBIT 1

Wire Center	Total Locations	Total Served	9Stone	All West	Avative Internet Avative Fiber Avative 5G	Beehive Broadband	Blue Spring Broadband	Cogent Communication	Direct Communications Cedar Valley	Echo Broadband	FIF St George LLC	Fusion	Fusion Networks	Google Fiber	HICountryNet	Intellipop	Kayenta Technologies	Liberty Broadband	LightBurst Broadband	Manti Telephone Company	NetFortris	Optic Loop	Rise Broadband	SFCN	Silicon Slopes Broadband LLC	South Central Communications	STRATA Networks	Syringa	T-Mobile	TDS Telecom	Terabit Networks	TPx Communications	Utah Broadband	Utah Telecommunication Open Infrastructure Agency	Verizon		
Alta/Snowbird	97	88																										26	27				9		75		
American Fork	21,447	21,445				340							11								6,863		20,913					19	18,375				519	6,730			
Beaver	2,275	2,088									2,059																1,494		1,043					335			
Brigham City	9,777	9,744				6,298																	8,536						4,960				7,663	1,248			
Brianhead	687	397																											236					36			
Bountiful	29,235	29,228				4,287				922				7,336									25,240					7	27,242			11,731	4,741	12,429			
Cedar City	17,469	17,293									13,575																14,614	7	7,681	10,867			1	2,798			
Clearfield	43,146	43,145				18,455																	3,903	39,616				1	36,778			857	21,234	15,063			
Corinne	767	744																											211					159			
Cottonwood	17,319	17,280				71								3,214														5	14,347			1	3,466	124	7,363		
Draper	30,374	30,371				46		2				1		16,158												2,759		8	25,256			2	7,567	177	17,803		
Farmington	8,159	8,156								330																											
Grantsville	4,390	4,384	2,642			3,246																						6	7,588				2	137	5,645		
Heber City	11,363	11,259		984																													85		1,202		
Holladay	17,491	17,481				1,254								11,570								1											7,083	28	1,171		
Huntsville	4,070	3,788																3,677										24	14,877				7,312	1,382	9,957		
Hurricane	10,960	10,908									10,846																							2,825		1,570	
Hyrum	5,813	5,754					1,660																					4								1,098	
Kearns	50,843	50,834				21,815								15,390																					504		
Kaysville	26,892	26,889				14,698				3																											
Leeds	757	749									521																										
Lehi	35,966	35,965			5,441	4			1,125				10																								
Logan	23,605	23,513				1,415	2,236																														
Layton East	3,197	3,195				2,786																															
Magna	14,594	14,551	1			4,823						1																									
Midvale	29,957	29,929				6,083		1						8,055																							
Monroe	2,385	2,373									2,254																		16	27,224							
Morgan	2,456	2,402		31		1,438												2,303																			
Murray	24,390	24,390				10,282		1				1		6,133																							
Mountain Green	1,786	1,780				803												1,504																			
Nephi	3,836	3,832																																			
Ogden Main	26,700	26,692																																			
Ogden North	16,002	15,989																																			
Ogden South	10,984	10,983				6																															
Ogden West	18,071	18,067																																			
Orem	29,103	28,969				17,721							13	1,945																							
Pleasant Grove	13,000	12,999				9,524							5		10,349	6,146																					
Park City	15,769	15,554		1,336		10																															
Provo	21,300	21,290				194								19,242		3,118																					
Parowan	2,120	2,111									2,078																										
Payson	7,346	7,337				5,572							2																								
Richfield	4,647	4,647									4,592																										
Richmond	2,323	2,311				1,134																															
Riverton	49,832	49,827				149						1		10,349	6,146																						
Salem	4,896	4,889				423							577																								
Salina	2,195	2,189									2,155																										
Silk East	7,372	7,348																																			
Silk Main	24,434	24,411				441		3		6		1		6,185																							
Silk South	28,845	28,785				34						1		24,197																							
Silk West	10,679	10,670				2,475		1				3		2,733																							
Smithfield	7,091	7,079					304																														
Santaquin	5,294	5,294																																			
Springdale	735	653									609																										
Spanish Fork	14,167	14,156												25																							
Springville	14,059	13,828											25	4,229		6,421																					
St. George	40,224	40,223				1,245					38,405							26,868																			
Tooele	17,704	17,647	335			17,207																															
Veyo	2,158	2,062									1,987																										
Washington	16,784	16,772									16,715																										
West Jordan	14,849	14,849						1				2		1,356																							

Wasatch Broadband	Western NM Telephone	WI Fiber Inc	WIFI Pros	WIFCOW	Xfinity	Zayo
365	164				20,500	2
					8,810	
			621		28,715	5
					42,241	1
					310	
					16,772	2
					29,903	21
					7,835	
					3,562	
					8,190	
					17,113	1
					1	
		3,881			4,675	
					50,544	
					26,311	3
34,338	277	18,449			31,935	10
					22,028	
					3,083	
					13,642	
					29,500	14
	2,274					
				7		
					24,046	
		3,831				
					26,154	20
					15,353	
					10,716	
					15,446	1
5,624					26,241	20
1,732					12,572	3
					12,428	1
					20,767	4
	2,903				6,499	1
	4,584					
		2,022			1,592	
	2				48,239	2
	2,739				4,077	
	1,859					
					6,665	
					23,933	2
					28,609	
					10,362	
		6,191			6,134	
	5,192					
	1,356				11,911	2
2	364				13,336	1
					1	2
					15,368	
						3
					14,546	5

Wire Center	Total Locations	Copper Served	Fusion	Mantl Telephone Company	TPK Communications	Western NM Telephone	Zayo
Alta/Snowbird	97						
American Fork	21,447	5,315		5,314	1		
Beaver	2,275						
Brigham City	9,777						
Brianhead	687						
Bountiful	29,235						
Cedar City	17,469						
Clearfield	43,146						
Corinne	767						
Cottonwood	17,319	1			1		
Draper	30,374	3	1		2		
Farmington	8,159						
Grantsville	4,390						
Heber City	11,363						
Holladay	17,491						
Huntsville	4,070						
Hurricane	10,960						
Hyrum	5,813						
Kearns	50,843						
Kaysville	26,892						
Leeds	757						
Lehi	35,966						
Logan	23,605						
Layton East	3,197						
Magna	14,594						
Midvale	29,957						
Monroe	2,385						
Morgan	2,456						
Murray	24,390	2	1		1		
Mountain Green	1,786						
Nephi	3,836	2				2	
Ogden Main	26,700	1			1		
Ogden North	16,002						
Ogden South	10,984						
Ogden West	18,071						
Orem	29,103						
Pleasant Grove	13,000	2		1	1		
Park City	15,769						
Provo	21,300	1			1		
Parowan	2,120						
Payson	7,346						
Richfield	4,647						
Richmond	2,323						
Riverton	49,832	1	1				
Salem	4,896						
Salina	2,195						
Silkc East	7,372						
Silkc Main	24,434						
Silkc South	28,845	1	1				
Silkc West	10,679	5	2		3		
Smithfield	7,091						
Santaquin	5,294						
Springdale	735						
Spanish Fork	14,167						
Springville	14,059						
St. George	40,224	1					1
Tooele	17,704						
Veyo	2,158						
Washington	16,794						
West Jordan	14,849						

All Fixed Provider Competitors

Wire Center	Total Locations	Cable Served	Beehive Broadband	SFCN	South Central Communications	TDS Telecom	Western NM Telephone	Xfinity
Alta/Snowbird	97							
American Fork	21,447	20,497						20,497
Beaver	2,275	1,222			1,222			
Brigham City	9,777	8,810						8,810
Brianhead	687	240			240			
Bountiful	29,235	28,714						28,714
Cedar City	17,469	11,885			2,088	9,837		
Clearfield	43,146	42,238						42,238
Corinne	767	310						310
Cottonwood	17,319	16,772						16,772
Draper	30,374	29,901						29,901
Farmington	8,159	7,835						7,835
Grantsville	4,390	3,561						3,561
Heber City	11,363	8,190						8,190
Holladay	17,491	17,112						17,112
Huntsville	4,070							
Hurricane	10,960	8,307				8,307		
Hyrum	5,813	4,675						4,675
Kearns	50,843	50,543						50,543
Kaysville	26,892	26,311						26,311
Leeds	757	469				469		
Lehi	35,966	31,933						31,933
Logan	23,605	22,026						22,026
Layton East	3,197	3,083						3,083
Magna	14,594	13,641						13,641
Midvale	29,957	29,499						29,499
Monroe	2,385	1,637					1,637	
Morgan	2,456							
Murray	24,390	24,045						24,045
Mountain Green	1,786	13	13					
Nephi	3,836	2,443					2,443	
Ogden Main	26,700	26,153						26,153
Ogden North	16,002	15,353						15,353
Ogden South	10,984	10,716						10,716
Ogden West	18,071	15,436						15,436
Orem	29,103	26,241						26,241
Pleasant Grove	13,000	12,572						12,572
Park City	15,769	12,427						12,427
Provo	21,300	20,767						20,767
Parowan	2,120	1,679			1,679	94		
Payson	7,346	6,499						6,499
Richfield	4,647	3,983					3,983	
Richmond	2,323	1,592						1,592
Riverton	49,832	48,237						48,237
Salem	4,896	4,077						4,077
Salina	2,195	1,845					1,845	
Slkc East	7,372	6,665						6,665
Slkc Main	24,434	23,932						23,932
Slkc South	28,845	28,609						28,609
Slkc West	10,679	10,361						10,361
Smithfield	7,091	6,134						6,134
Santaquin	5,294	3,679					3,679	
Springdale	735							
Spanish Fork	14,167	12,698		12,270				11,911
Springville	14,059	13,341		363				13,336
St. George	40,224	31,261				31,261		
Tooele	17,704	15,367						15,367
Veyo	2,158	652				652		
Washington	16,784	12,867				12,867		
West Jordan	44,000	41,000						14,546

All Fixed Provider Competitors

Wire Center	Total Locations	Fiber Served	All West	Avative Internet Avative Fiber Avative 5G	Beehive Broadband	Cogent Communication	Direct Communications Cedar Valley	FIF St. George LLC	Fusion	Fusion Networks	Google Fiber	HICountry/Net	Manti Telephone Company	NetFortris	Optic Loop	Rise Broadband	SFCN	South Central Communications	STRATA Networks	Syringa	TDS Telecom	Terabit Networks	Utah Broadband	Utah Telecommunication Open Infrastructure Agency	Wasatch Broadband	Western NM Telephone	WI Fiber Inc	Xfinity	Zayo	
Alta/Snowbird	97	26																		26										
American Fork	21,447	2,384			340					3			1,599			4				19			24	519	74	164		4	2	
Beaver	2,275	274																274												
Brigham City	9,777	7,673			6,298																				7,663					
Brianhead	687	123																												
Bountiful	29,235	12,085			4,287						7,336					5					7			4,741				2	5	
Cedar City	17,469	12,458					637											12,433			1,033			1						
Clearfield	43,146	22,554			18,455										1,310	67					1		26	21,234			3	1		
Corinne	767																													
Cottonwood	17,319	3,345			71						3,214										5			124					2	
Draper	30,374	16,385			46	2					16,158										8			177			4	21		
Farmington	8,159	143																			6		2	137						
Grantsville	4,390	246			245																							1		
Heber City	11,363	2,692	984											1									1,822	28						
Holladay	17,491	13,014			1,254						11,570										24			1,382			1	1		
Huntsville	4,070	568																		1			566				1			
Hurricane	10,960	2,005						1											4		2,000									
Hyrum	5,813	1																			1									
Kearns	50,843	38,124			21,815						15,390					7					10				22,725			1		
Kaysville	26,892	15,608			14,698											37									15,597				3	
Leeds	757	53																				53								
Lehi	35,966	6,108		3,091	4		1,125														1		440	198	988	277	2	10		
Logan	23,605	2,054			1,415														1,777		101			141		88	4			
Layton East	3,197	3,098			2,786											8								3,098						
Magna	14,594	4,814			4,702											3							36	4,164				1		
Midvale	29,957	15,710			6,083	1					8,055					3					16			7,584				2	14	
Monroe	2,385	901						849																		789				
Morgan	2,456	1,687	31		1,438											15								1,376						
Murray	24,390	18,142			10,282	1					6,133					5					4			12,059				3		
Mountain Green	1,786	791			791																									
Nephi	3,836	2,018																								2,018				
Ogden Main	26,700	3,320																			100			106				2	20	
Ogden North	16,002	6,071														3,092					4		25	34				1		
Ogden South	10,984	405			6											6,010												1		
Ogden West	18,071	6,030														382								18				1		
Orem	29,103	23,853			17,721					13	1,945					5,931					1			90				10	1	
Pleasant Grove	13,000	11,004			9,524								1			51								21,925			1	20		
Park City	15,769	3,544	1,336		10											11					1		47	10,761			1	3		
Provo	21,300	19,539			194						19,242												140	312			2	1		
Parowan	2,120	1,429																1,429									3	4		
Payson	7,346	6,002			5,572																				5,982				1	
Richfield	4,647	1,800														23									235					
Richmond	2,323	1																							1,800					
Riverton	49,832	10,933			149						10,349	148									8			281			1			
Salem	4,896	693			423					1						1								454		261	2	2		
Salina	2,195	340																							340					
Slkc East	7,372	6,231									6,185													46						
Slkc Main	24,434	19,403			441	3					18,842												41	760			2	2		
Slkc South	28,845	24,803			34						24,196												27	701			3			
Slkc West	10,679	7,426			2,475	1			1		2,733			1								8	4,684				2			
Smithfield	7,091	11																				10								
Santaquin	5,294	2,243																									1			
Springdale	735	361																								2,243				
Spanish Fork	14,167	12,395																12,270							10		122		2	
Springville	14,059	4,961									4,229							363							2		364	2	1	
St. George	40,224	13,390			1,245			5,484															8,301	1,727				1	1	
Tooele	17,704	2,706			2,610																		123					1		
Veyo	2,158	13							8																					
Washington	16,784	3,829						506															5							
West Jordan	14,849	1,474				1					1,356												6		106			1	5	

Wire Center	Total Locations	Satellite Served	HughesNet	Starlink	Viasat
Alta/Snowbird	97	97	97	97	97
American Fork	21,447	21,447	21,447	21,447	21,447
Beaver	2,275	2,275	2,275	2,275	2,275
Brigham City	9,777	9,777	9,777	9,777	9,777
Brianhead	687	687	687	687	687
Bountiful	29,235	29,235	29,235	29,235	29,235
Cedar City	17,469	17,469	17,469	17,469	17,469
Clearfield	43,146	43,146	43,146	43,146	43,146
Corinne	767	767	767	767	767
Cottonwood	17,319	17,319	17,319	17,319	17,319
Draper	30,374	30,374	30,374	30,374	30,374
Farmington	8,159	8,159	8,159	8,159	8,159
Grantsville	4,390	4,390	4,390	4,390	4,390
Heber City	11,363	11,363	11,363	11,363	11,363
Holladay	17,491	17,491	17,491	17,491	17,491
Huntsville	4,070	4,070	4,070	4,070	4,070
Hurricane	10,960	10,960	10,960	10,960	10,960
Hyrum	5,813	5,813	5,813	5,813	5,813
Kearns	50,843	50,843	50,843	50,843	50,843
Kaysville	26,892	26,892	26,892	26,892	26,892
Leeds	757	757	757	757	757
Lehi	35,966	35,966	35,966	35,966	35,966
Logan	23,605	23,605	23,605	23,605	23,605
Layton East	3,197	3,197	3,197	3,197	3,197
Magna	14,594	14,594	14,594	14,594	14,594
Midvale	29,957	29,957	29,957	29,957	29,957
Monroe	2,385	2,385	2,385	2,385	2,385
Morgan	2,456	2,456	2,456	2,456	2,456
Murray	24,390	24,390	24,390	24,390	24,390
Mountain Green	1,786	1,786	1,786	1,786	1,786
Nephi	3,836	3,836	3,836	3,836	3,836
Ogden Main	26,700	26,700	26,700	26,700	26,700
Ogden North	16,002	16,002	16,002	16,002	16,002
Ogden South	10,984	10,984	10,984	10,984	10,984
Ogden West	18,071	18,071	18,071	18,071	18,071
Orem	29,103	29,103	29,103	29,103	29,103
Pleasant Grove	13,000	13,000	13,000	13,000	13,000
Park City	15,769	15,769	15,769	15,769	15,769
Provo	21,300	21,300	21,300	21,300	21,300
Parowan	2,120	2,120	2,120	2,120	2,120
Payson	7,346	7,346	7,346	7,346	7,346
Richfield	4,647	4,647	4,647	4,647	4,647
Richmond	2,323	2,323	2,323	2,323	2,323
Riverton	49,832	49,832	49,832	49,832	49,832
Salem	4,896	4,896	4,896	4,896	4,896
Salina	2,195	2,195	2,195	2,195	2,195
Slkc East	7,372	7,372	7,372	7,372	7,372
Slkc Main	24,434	24,434	24,434	24,434	24,434
Slkc South	28,845	28,845	28,845	28,845	28,845
Slkc West	10,679	10,679	10,679	10,679	10,679
Smithfield	7,091	7,091	7,091	7,091	7,091
Santaquin	5,294	5,294	5,294	5,294	5,294
Springdale	735	735	735	735	735
Spanish Fork	14,167	14,167	14,167	14,167	14,167
Springville	14,059	14,059	14,059	14,059	14,059
St. George	40,224	40,224	40,224	40,224	40,224
Tooele	17,704	17,704	17,704	17,704	17,704
Veyo	2,158	2,158	2,158	2,158	2,158
Washington	16,784	16,784	16,784	16,784	16,784
West Jordan	14,849	14,849	14,849	14,849	14,849

EXHIBIT 1

Wire Center	Total Locations	Fixed Wireless Served	9Stone	Avative Internet Avative Fiber Avative 5G	Beehive Broadband	Blue Spring Broadband	Echo Broadband	FIF St George LLC	Fusion	Fusion Networks	Google Fiber	HiCountryNet	Intellipop	Kayenta Technologies	Liberty Broadband	LightBurst Broadband	Optic Loop	Rise Broadband	Silicon Slopes Broadband LLC	South Central Communications	T-Mobile	Utah Broadband	Verizon	Wasatch Broadband	Western NM Telephone	Wi Fiber Inc	WiFi Pros	WiFiCOW
Alta/Snowbird	97	86																				27	9	75				
American Fork	21,447	21,396								9								20,913				18,375	5,212	6,730	291			
Beaver	2,275	2,082						2,059														1,043		335				
Brigham City	9,777	9,406																8,535				4,960		1,248				
Brianhead	687	261																				236		36				
Bountiful	29,235	29,114					922											25,240				27,242	11,731	12,429				621
Cedar City	17,469	15,926						13,569														7,681		2,798				
Clearfield	43,146	42,850															3,903	39,610			2,190	36,778	831	15,063				
Corinne	767	655																569				211		159				
Cottonwood	17,319	15,700																5,812				14,347	3,466	7,363				
Draper	30,374	29,583																24,996	2,759			25,256	7,567	17,803				
Farmington	8,159	8,152					330											7,811				7,588		5,645				
Grantsville	4,390	4,356	2,642		3,193													4,062				160	85	1,202				
Heber City	11,363	11,151																9,623				6,219	6,092	1,171				
Holladay	17,491	17,399																14,896				14,877	7,312	9,957				
Huntsville	4,070	3,788													3,677			3,576				3,213	2,789	1,570				
Hurricane	10,960	10,899						10,846														387		1,098				
Hyrum	5,813	5,717				1,660												5,316				2,267		504			3,881	
Kearns	50,843	49,067																34,647				39,571	21,392	21,310				
Kaysville	26,892	26,829					3											24,169				24,924	1,977	13,931				
Leeds	757	579						521														335		46				
Lehi	35,966	35,962		2,520						10								35,041				24,295	8,936	14,068	33,350			
Logan	23,605	23,402				2,236												21,740				15,789		2,203			18,424	
Layton East	3,197	3,187																2,888				213		2,361				
Magna	14,594	11,941	1		741					1								7,903				7,087	3,408	4,779				
Midvale	29,957	29,718																22,877				27,224	9,912	14,536				
Monroe	2,385	2,373						2,254														1,623		352		2,226		
Morgan	2,456	2,400													2,303			1,893				1,932		425				7
Murray	24,390	24,087																15,989				20,170	12,345	14,135				
Mountain Green	1,786	1,754													1,504			1,445				1,618		501				
Nephi	3,836	3,830											121					28				3,036		532		3,829		
Ogden Main	26,700	26,667																22,465	24,796			24,092	5,412	11,055				
Ogden North	16,002	15,949																15,425	15,894			13,529	2,441	5,147				
Ogden South	10,984	10,967																7,402	9,736			10,144	967	3,266				
Ogden West	18,071	18,023																14,271	16,930			14,968	816	3,188				
Orem	29,103	28,900											11,063					27,355				24,908	5,355	10,511	5,624			
Pleasant Grove	13,000	12,995								5								12,773				11,791	4,896	1,901	1,732			
Park City	15,769	14,169																				11,858	8,741	1,919				
Provo	21,300	21,149											3,118					15,784				18,077	5,643	13,927	7			
Parowan	2,120	2,100						2,078													18	1,189		244				
Payson	7,346	7,331								2			3,223					7,288				4,258	5,760	4,749	2,668			
Richfield	4,647	4,645						4,592														3,888		722	2,430			
Richmond	2,323	2,294				1,134																38		356		2,022		
Riverton	49,832	49,593										6,146						43,639	2,915			37,740	16,374	26,342	2			
Salem	4,896	4,859								576								4,784				2,168	3,216	1,216	2,628			
Salina	2,195	2,186						2,155														1,737		335				
Silkc East	7,372	7,225																3,605				6,506	3,371	4,449				
Silkc Main	24,434	23,662					6			1		2						12,356				18,921	15,119	13,882				
Silkc South	28,845	28,345										2						19,938				21,305	11,607	16,659				
Silkc West	10,679	10,297										2						6,721				7,071	4,289	6,374				
Smithfield	7,091	7,059				304												6,906				1,591		690		6,191		
Santaquin	5,294	5,294											5,003					4,892				1,356	1,794	2,873	692			
Springdale	735	643																				423		145				
Spanish Fork	14,167	14,110						609					1,416					11,565				11,711	7,740	5,246	1,234			
Springville	14,059	13,803											6,421					13,588				11,766	2,871	5,905	2			
St. George	40,224	40,130						38,363						26,868								19,651		3,965				
Tooele	17,704	17,645	335		17,139													17,191				6,759	8,893	4,706				
Veyo	2,158	2,061							1,986													874		232				
Washington	16,784	16,730						16,701						8,723								7,245		1,611				
West Jordan	14,849	14,839																14,398				14,128	6,193	6,551				

Wire Center	Wire Center Pop	Wire Center HH	Mobile HH	AT&T	Choice Wireless	Dish Network Corporation	T-Mobile	Union Telephone Company	Verizon
Alta/Snowbird	248	179	179	179		-	179		179
American Fork	73,660	21,178	21,178	21,178		21,178	21,178		21,178
Beaver	4,387	1,439	1,439	1,437	305		1,416		1,427
Brigham City	30,521	10,335	10,335	10,335		10,105	10,335	-	10,335
Brianhead	172	164	163	163	-		161		162
Bountiful	102,117	35,254	35,254	35,254		35,245	35,254		35,254
Cedar City	55,794	18,337	18,337	18,337			18,333		18,337
Clearfield	156,320	50,105	50,105	50,105		50,105	50,105		50,082
Corinne	1,792	589	589	589		589	589		589
Cottonwood	54,779	19,227	19,227	19,227		19,227	19,227		19,227
Draper	116,881	36,843	36,843	36,843		36,843	36,843		36,843
Farmington	31,189	9,082	9,082	9,082		9,082	9,082		9,076
Grantsville	13,156	4,185	4,185	4,185			4,185		4,185
Heber City	33,048	10,277	10,277	10,277		-	10,254		10,277
Holladay	57,504	22,477	22,477	22,477		22,477	22,477		22,477
Huntsville	6,752	2,252	2,248	2,237		-	2,170		2,236
Hurricane	27,333	9,832	9,832	9,832			9,831		9,831
Hyrum	18,174	5,288	5,288	5,288		5,213	5,286	3,808	5,287
Kearns	192,332	57,518	57,518	57,518		57,518	57,518		57,518
Kaysville	95,099	28,670	28,670	28,670		28,670	28,670		28,670
Leeds	1,539	648	648	648			648		648
Lehi	131,508	34,783	34,783	34,783		34,736	34,783		34,783
Logan	93,917	30,391	30,391	30,391		30,386	30,386	30,386	30,391
Layton East	10,964	3,448	3,448	3,448		3,303	3,448		3,448
Magna	49,095	14,885	14,885	14,885		14,200	14,885		14,885
Midvale	119,946	45,183	45,183	45,183		45,183	45,183		45,183
Monroe	4,915	1,720	1,720	1,720			1,720		1,720
Morgan	6,351	1,992	1,992	1,992			1,992		1,992
Murray	101,145	41,627	41,627	41,627		41,627	41,627		41,627
Mountain Green	5,252	1,564	1,564	1,564		-	1,564		1,564
Nephi	10,938	3,348	3,348	3,348		61	3,345		3,345
Ogden Main	92,230	34,447	34,447	34,381		34,268	34,447		34,447
Ogden North	52,687	17,279	17,279	17,279		17,279	17,279		17,279
Ogden South	38,205	13,647	13,647	13,647		13,143	13,647		13,647
Ogden West	52,546	17,065	17,065	17,065		17,065	17,065		17,042
Orem	124,813	38,986	38,986	38,986		38,903	38,986		38,986
Pleasant Grove	52,239	15,058	15,058	15,058		15,058	15,058		15,058
Park City	31,704	11,859	11,859	11,859			11,859		11,859
Provo	116,761	33,924	33,924	33,924		33,924	33,924		33,924
Parowan	3,840	1,483	1,483	1,483			1,483		1,483
Payson	25,373	7,263	7,263	7,263		7,254	7,263		7,263
Richfield	11,871	3,954	3,954	3,954			3,954		3,954
Richmond	5,945	1,892	1,892	1,892		1,371	1,892	1,864	1,892
Riverton	193,939	55,330	55,330	55,330		55,330	55,330		55,330
Salem	15,882	4,434	4,434	4,434		4,434	4,434		4,434
Salina	4,705	1,609	1,609	1,609			1,609		1,609
Slkc East	27,202	10,125	10,125	10,125		9,768	10,125		10,125
Slkc Main	110,370	49,500	49,500	49,500		49,500	49,500		49,500
Slkc South	95,872	41,184	41,184	41,184		41,105	41,105		41,184
Slkc West	41,300	13,867	13,867	13,867		13,867	13,867		13,867
Smithfield	22,713	6,843	6,843	6,843		6,634	6,843	6,826	6,843
Santaquin	16,266	4,430	4,430	4,430		4,415	4,430		4,430
Springdale	979	374	374	374			374		374
Spanish Fork	48,273	13,685	13,685	13,685		13,682	13,685		13,685
Springville	49,521	14,571	14,571	14,571		14,526	14,532		14,543
St. George	108,836	38,729	38,729	38,729			38,729		38,729
Tooele	58,014	18,053	18,053	18,053		-	18,021		18,022
Veyo	4,374	1,486	1,486	1,486			1,469		1,486
Washington	44,967	15,476	15,476	15,476			15,476		15,476
West Jordan	64,540	18,474	18,474	18,474		18,474	18,474		18,474

EXHIBIT 2

Internet Close X

Choose your speed



These offers include term contracts with additional savings

TERM CONTRACT

CONNECT

75 MBPS

\$19.99/mo

For 12 months, 1-year term contract. Taxes and equipment not included. Incl. up to \$10/mo. auto-pay & paperless bill discount.

WiFi equipment included

CONNECT MORE

200 MBPS

Save up to \$20/mo with Mobile

\$30/mo

For 24 month, no term contract. Taxes not included. Incl. up to \$10/mo. auto-pay & paperless bill discount.

Unlimited data with WiFi equipment included

FAST

400 MBPS

Save up to \$45/mo with Mobile

\$50/mo

For 24 month, no term contract. Taxes not included. Incl. up to \$10/mo. auto-pay & paperless bill discount.

Unlimited data with WiFi equipment included

SUPERFAST

800 MBPS

Save up to \$45/mo with Mobile

\$60/mo

For 24 month, no term contract. Taxes not included. Incl. up to \$10/mo. auto-pay & paperless bill discount.

EXHIBIT 2



Great! You qualify for up to 15 [Mbps](#) with unlimited data. This is the speed with the best offer at your address!

Premium Wireless Modem



The modem shown above may not be the same modem you receive.



Your Speed: ⓘ

Up to **15 Mbps** **\$55**/mo

- Unlimited data
- WiFi to connect your devices
- HD streaming on 1 device
- Online gaming, streaming music
- Work from home, attend class virtually
- Support for your [small business](#)

Paperless billing required. Taxes & Fees apply. [Offer Details](#)

Unlimited data on a 99.9% reliable* network. **No annual contract.**

*Based on network uptime or availability.

Up to **15 Mbps**

Modem and Installation:

- ✓ Premium Modem Lease \$15
- ✓ Secure WiFi Included
- ✓ Standard Install: 1/26/2024 \$15

[Make Changes](#)



One-time Charges:

Standard Install: \$15.00

One-Time Total: \$15.00

Monthly Charges:

Up to 15 Mbps: \$55.00

Premium Modem Lease: \$15.00

Secure WiFi: Included

Monthly Total: \$70.00

- ⓘ Leased equipment
- ⓘ Rate changes
- ⓘ Promotion or Discount
- ⓘ Add'l install charges
- ⓘ Construction charges
- ⓘ Affordable Connectivity Program (ACP) and Lifeline Program

To see Taxes & Fees, click Continue.

[Continue](#)

EXHIBIT 2

Federal Communications Commission
FCC National Broadband Map

Home | Location Summary | Provider Detail | Area Summary | Data Download | About | Broadband Funding Map

Service: Residential | Technology: Any Technology | Speed: ≥ 25/3

Address: 658 S 600 E SALT LAKE CTY, UT 84102

Data As Of: Jun 30, 2023 (latest) | (Last Updated: 1/9/24)

Fixed Broadband | Mobile Broadband

Selected Location: 658 S 600 E SALT LAKE CTY, UT 84102
Status: **Served** | Residential | Unit Count: 1

Broadband Availability

Provider	Technology	Down (Mbps)	Up (Mbps)	Chall.
Comcast Corporation	Cable	2000	200	
FIF Utah LLC	Unlicensed Fixed Wireless	50	10	
Google LLC	Fiber to the Premises	5000	5000	
Hughes Network Systems, LLC	GSO Satellite	25	3	
Lumen Technologies, Inc.	Fiber to the Premises	940	940	
Space Exploration Technologies Corp.	NGSO Satellite	220	25	
T-Mobile USA, Inc.	Licensed Fixed Wireless	0.2	0.2	
Verizon Communications Inc.	Licensed Fixed Wireless	300	20	