



UNIVERSAL SERVICE MONITORING REPORT

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2018

(Data Received Through September 2018)

Prepared by Federal and State Staff for the
Federal-State Joint Board on Universal Service

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Universal Service Monitoring Report

2018

Introduction and Summary

This is the twenty-first report in a series prepared by federal and state staff members for the Federal-State Joint Board on Universal Service (Universal Service Joint Board).¹ Unless otherwise noted, this report is generally based on information available to us as of September 2018. This report is focused on monitoring the impact of various universal service support mechanisms and the method used to finance them. This report is part of a monitoring program created by the Federal Communications Commission in 1997.²

The *Monitoring Report* incorporates data from several sources, including the National Exchange Carrier Association (NECA) and the Universal Service Administrative Company (USAC). USAC collects information from both contributors to, and beneficiaries of, the Universal Service Fund, including incumbent local exchange carriers (ILECs), competitive eligible telecommunications carriers (CETCs), schools, libraries and health care providers. NECA, at the direction of the Commission, provides information to USAC used to administer certain aspects of the high-cost program.

Section 1 of the report provides an update on industry revenues, universal service program funding requirements, and contribution factors. Sections 2 through 5 provide the latest data on the low-income, high-cost, schools and libraries, and rural health care support mechanisms. Section 6 presents recent Census and Bureau of Labor Statistics data on voice telephony subscribership and expenses taken from the Current Population Survey, the American Community Survey and the Consumer Expenditure Survey as well as data on telephone subscribership by income by state. It also includes data on residential Internet subscribership and expenses. Section 7 includes updated Consumer Price Index data.

This entire report is available electronically in page image (.pdf) format through the FCC's Federal-State Joint Board Monitoring Reports website, located at <http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports>. The tables of the report are also available separately as spreadsheet files in a single compressed (.zip) format file at this site. The *Monitoring Report* is published once a year. Information received well in advance of the next *Monitoring Report* will be made available on an interim basis in separate staff reports or in raw data files (such as most NECA filings used in the *Monitoring Report*) on the Office of Economics and Analytics Statistical Reports Internet site.

Supplementary material is available in a single compressed (.zip) format file at <http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports>. The contents of this file are provided at the end of this introduction.

We continue to look for ways to present universal service data in a way that is useful for the public. We have broken out ACAM and legacy carriers 1) in Section 3 (Tables 3.1 and 3.2) to provide additional

¹ The last report was released in April 2018. *Universal Service Monitoring Report, 2017*, CC Docket No. 96-45 et al. (Data Received Through September 2017) available at <https://www.fcc.gov/general/federal-state-joint-board-monitoring-reports>.

² In 1997, the Commission adopted rules to implement section 254 largely based on the recommendations of the Universal Service Joint Board and delegated to the Common Carrier Bureau (the predecessor to the Wireline Competition Bureau), in consultation with the state staff, the creation of a new monitoring program to replace a similar program in CC Docket No. 87-339 that previously resulted in a series of nineteen *Monitoring Reports*. *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9218, para. 869 (1997) (*Universal Service First Report and Order*). See 47 C.F.R. § 54.702(i).

information on high-cost support fund history for Rate-of-Return carriers, and 2) in Section 6 (Table 6.13) to provide additional information on switched access lines and interconnected VoIP subscribers for Rate-of-Return carriers. Table 6.10 has been expanded to include five years of residential high-speed internet subscribership by State.

We invite questions or comments on this report via email at OEA-IADreports@fcc.gov with subject: December 2018 Monitoring Report.

2018 Monitoring Report Supplementary Material

This list shows the folders (underlined) and filenames contained in the 2018 Monitoring Report Supplementary Material zip file available at <http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports>.

<u>Revenues and Contributions</u>	S.1.1. Detailed Telecommunications Revenue - 2017 S.1.2. Estimating End-User Revenue by State - 2016 Technical Appendix S.1.3. Estimating End-User Revenue by State - 2016 Tables S.1.4. Contribution Base Revenues by Program
<u>Low Income</u>	S.2.1. LI Support - by State S.2.2. LI Support - by Study Area S.2.3. LI Subscribers and Beneficiaries - by State S.2.4. ETCs Receiving Lifeline Support 2017
<u>High Cost</u>	<u>Claims</u> S.3.1. HC Claims - by State S.3.2. HC Claims - by Study Area S.3.3. HC RoR Claims per Line - by Study Area S.3.4. HC Support Study Areas - 2017 S.3.5. 2018 Rate Floor Report S.3.6. Support Reduction Waiver Requests S.3.7. HC Rate Floor Reductions – by Study Area S.3.8. HC Reductions due to \$250 Cap - by Study Area <u>Disbursements</u> S.3.9. HC Disbursements - by State S.3.10. HC Disbursements - by Study Area S.3.11. HC RoR Disbursements per Line - by Study Area S.3.12. HC Penalties
<u>Schools and Libraries</u>	S.4.1. SL Funds - by Service Type, State, and Funding Year S.4.2. SL Cumulative Funds - by Service Type and State S.4.3. SL Disbursements - by Service Provider Type S.4.4. SL Funds per Student - by State S.4.5. SL Funds - by Applicant Type, State, and Funding Year
<u>Rural Health Care</u>	S.5.1. RHC Funds - by State, Program, and Year S.5.2. RHC Disbursements - by Speed, Year, and State S.5.3. RHC Disbursements - by Speed, Year, and HCP Type S.5.4. RHC Disbursements per Person - by State S.5.5. RHC Funds - by HCP Type, Program, and Year
<u>Subscribership and</u>	S.6.1. Broadband Subscribership by County, Congressional District, and State
<u>Minutes of Use</u>	S.6.2. ILEC Interstate Switched Access Minutes of Use - by Study Area S.6.3. ILEC Interstate Switched Access Minutes of Use - by Tier S.6.4. ILEC Interstate Switched Access Minutes of Use - by State S.6.5. NECA Pool Results

Section 1 - Revenues and Contributions

Overview – Revenues and Contributions

In response to the Telecommunications Act of 1996, the Commission established universal service mechanisms to help ensure that all Americans have access to affordable telecommunications service. Congress mandated that these programs be supported by contributions from every telecommunications carrier that provides interstate telecommunications, and other providers of telecommunications services if the Commission finds contributions from such providers to be in the public interest. The tables in this section provide an overview of the revenues of the U.S. telecommunications industry and the associated contributions to the universal service support mechanisms. The tables are based on information filed with the Commission in FCC Forms 499-A and 499-Q. To the extent that certain telecommunications industry revenues are not subject to contributions, such revenues may not be fully captured in these tables.

Additional information about the revenues collected to support universal service can be found on the Commission's website at <http://www.fcc.gov/encyclopedia/contribution-methodology-administrative-filings> and on USAC's website at <http://www.usac.org/cont/default.aspx>. Please note that that the information provided in this report is based upon Commission rules in effect in 2017.

Table 1.1
Filer Revenues by Service Type: 2007 - 2017
(in Millions of Dollars)

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Local Service and Payphone Revenues	Local Exchange and Federal/State USF Support ¹	\$62,790	\$60,721	\$56,839	\$56,993	\$52,718	\$50,598	\$49,016	\$47,495	\$46,515	\$46,314	\$43,539
	Pay Telephone ²	470	379	268	197	136	362	359	327	286	271	269
	Local Private Line ³	24,307	26,314	27,098	26,809	28,243	29,101	29,632	31,194	32,191	30,472	30,272
	Other Local ⁴	3,227	3,321	3,531	3,032	3,145	2,408	1,746	1,456	1,493	1,510	1,749
	Subscriber Line Charges ⁵	10,141	9,283	8,363	7,481	6,703	6,195	5,968	5,507	5,175	4,787	4,431
	Access ⁶	10,543	9,776	8,778	8,336	7,368	6,759	6,384	5,016	4,836	3,809	3,312
	Total Local Service and Payphone Revenues	111,478	109,795	104,876	102,847	98,313	95,422	93,105	90,994	90,495	87,162	83,572
Mobile Revenues	Total Mobile Service Revenues⁷	117,939	120,934	114,625	111,643	107,393	105,183	98,160	86,998	75,263	65,636	56,952
Toll Service Revenues	Operator ⁸	5,874	5,444	4,340	3,585	3,162	3,092	3,064	2,785	2,351	1,876	1,844
	Non-Operator Switched Toll ⁹	42,518	39,329	34,943	27,132	27,557	25,340	23,345	22,518	21,499	18,297	15,609
	Long Distance Private Line ¹⁰	12,080	11,683	11,649	14,344	11,443	12,262	12,542	12,362	12,778	13,353	13,316
	Other Long Distance ¹¹	1,661	2,071	2,708	4,945	4,186	3,929	3,886	3,891	3,050	2,816	3,306
	Total Toll Service Revenues	62,133	58,527	53,640	50,006	46,347	44,624	42,837	41,555	39,678	36,342	34,075
Total Local, Mobile, and Toll Revenues		291,549	289,255	273,141	264,496	252,052	245,229	234,102	219,547	205,436	189,141	174,599
	Universal Service Surcharges ^{12,13}	7,902	8,110	7,911	8,662	8,986	10,012	8,986	9,084	9,041	9,135	8,319
Total Telecommunications Revenues¹⁴		299,451	297,365	281,052	273,158	261,038	255,242	243,088	228,631	214,477	198,276	182,918
	Total Non-Telecommunications Revenues ¹⁵	131,615	151,494	158,859	173,228	214,538	224,487	251,892	268,260	301,121	311,404	321,597
Total Reported Revenues		\$431,066	\$448,860	\$439,911	\$446,386	\$475,576	\$479,729	\$494,981	\$496,892	\$515,598	\$509,679	\$504,516

Footnotes to Table 1.1

¹ Dollar amounts are calculated using the sum of Lines 303a, 308a (Federal and State USF Support Revenues), and Line 404a from Form 499-A.

² Dollar amounts are calculated using the sum of Lines 306a and 407a from Form 499-A.

³ Dollar amounts are calculated using the sum of Lines 305a and 406a from Form 499-A.

⁴ Dollar amounts are calculated using the sum of Lines 307a and 408a from Form 499-A.

⁵ Dollar amounts are calculated using Line 405a from Form 499-A. As of 2012, includes Access Recovery Charge (ARC).

⁶ Dollar amounts are calculated using Line 304a from Form 499-A.

⁷ Dollar amounts are calculated using the sum of Lines 309a, 409a, and 410a from Form 499-A.

⁸ Dollar amounts are calculated using the sum of Lines 310a, 411a, 412a, and 413a from Form 499-A.

⁹ Dollar amounts are calculated using the sum of Lines 311a and 414a from Form 499-A.

¹⁰ Dollar amounts are calculated using the sum of Lines 312a and 415a from Form 499-A.

¹¹ Dollar amounts are calculated using the sum of Lines 313a, 314a, 416a, and 417a from Form 499-A.

¹² The surcharge figure indicates only surcharges that have been explicitly reported as such in Form 499-A and does not account for implicit surcharge revenues where carriers collect the surcharge through higher prices.

¹³ Dollar amounts are calculated using Line 403a from Form 499-A.

¹⁴ Subtotal includes surcharge.

¹⁵ Dollar amounts are calculated using Line 418a from Form 499-A.

Note : Detail may not add to totals due to rounding.

Source : FCC Form 499-A based on filings as of September 21, 2018.

Table 1.2
Filer Revenues,¹ Wholesale vs. Retail: 2007 - 2017
(in Millions of Dollars)

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Wholesale (Carrier's Carrier) Telecommunications Revenues²	Local Service ^{3,4}	\$38,383	\$39,200	\$38,285	\$37,955	\$39,807	\$39,783	\$39,101	\$37,974	\$38,976	\$36,180	\$35,501
	Mobile Service ⁵	5,360	5,630	4,284	5,006	5,512	5,587	5,384	5,334	5,025	4,601	3,463
	Toll Service ⁶	16,093	13,843	13,003	15,549	11,921	11,425	10,911	10,472	9,955	9,714	8,519
	Total Wholesale Revenues	59,836	58,672	55,571	58,510	57,240	56,796	55,396	53,780	53,955	50,496	47,484
	Intrastate ⁷	22,566	21,836	20,173	22,484	20,379	18,860	17,236	16,182	15,775	13,749	13,095
	Interstate and International ^{8,9}	37,270	36,837	35,399	36,026	36,861	37,936	38,160	37,598	38,180	36,747	34,389
Percentage Interstate/International	62%	63%	64%	62%	64%	67%	69%	70%	71%	73%	72%	
Retail (End User) Telecommunications Revenues	Local Service ^{3,10}	\$73,095	\$70,598	\$66,591	\$64,892	\$58,506	\$55,639	\$54,004	\$53,020	\$51,519	\$50,982	\$48,071
	Mobile Service ¹¹	112,579	115,304	110,341	106,637	101,881	99,596	92,776	81,664	70,238	61,035	53,489
	Toll Service ¹²	46,040	44,681	40,637	34,457	34,426	33,198	31,927	31,083	29,724	26,628	25,556
	Universal Service Surcharges ¹³	7,902	8,110	7,911	8,662	8,986	10,012	8,986	9,084	9,041	9,135	8,319
	Total Retail Revenues	\$239,615	\$238,693	\$225,481	\$214,648	\$203,798	\$198,446	\$187,693	\$174,851	\$160,522	\$147,780	\$135,435
	Intrastate ¹⁴	158,380	157,737	149,493	142,356	133,475	128,409	119,294	107,909	96,592	87,598	79,702
Interstate and International ^{1,8,15}	81,235	80,956	75,988	72,292	70,323	70,037	68,399	66,942	63,930	60,181	55,733	
Percentage Interstate/International	34%	34%	34%	34%	35%	35%	36%	38%	40%	41%	41%	
Total Telecommunications Revenues (Wholesale + Retail)	Local Service ³	\$111,478	\$109,798	\$104,876	\$102,847	\$98,313	\$95,422	\$93,105	\$90,994	\$90,495	\$87,162	\$83,572
	Mobile Service	117,939	120,934	114,625	111,643	107,393	105,183	98,160	86,998	75,263	65,636	56,952
	Toll Service	62,133	58,523	53,640	50,006	46,347	44,624	42,837	41,555	39,678	36,342	34,075
	Universal Service Surcharges ¹³	7,902	8,110	7,911	8,662	8,986	10,012	8,986	9,084	9,041	9,135	8,319
	Total Telecommunications Revenues	\$299,451	\$297,365	\$281,052	\$273,158	\$261,038	\$255,242	\$243,088	\$228,631	\$214,477	\$198,276	\$182,918
	Intrastate	180,946	179,573	169,666	164,840	153,854	147,269	136,530	124,091	112,367	101,347	92,797
Interstate and International ⁸	118,505	117,793	111,387	108,318	107,184	107,972	106,559	104,540	102,110	96,929	90,121	
Percentage Interstate/International	40%	40%	40%	40%	41%	42%	44%	46%	48%	49%	49%	
Total Non-Telecommunications Revenues	\$131,615	\$151,494	\$158,859	\$173,228	\$214,538	\$224,487	\$251,892	\$268,260	\$301,121	\$311,404	\$321,597	
Total Reported Revenues	\$431,066	\$448,859	\$439,911	\$446,386	\$475,576	\$479,729	\$494,981	\$496,892	\$515,598	\$509,679	\$504,516	

Footnotes to Table 1.2

- ¹ Data include revenues for *de minimis* filers, as well as for other carriers that are exempt from universal service contribution requirements.
- ² Wholesale revenues are reported on the FCC Form 499-A as sales to other universal service contributors for resale. This includes, for example, access services that local exchange carriers provide to toll carriers. Sales to *de minimis* resellers, end-user customers, government-only providers, international-only providers, and any other non-contributors are treated as end-user revenues. Filers contribute to the universal service funding mechanisms based on their end-user interstate and international revenues. *See* Table 1.5 for further details on the USF contribution base.
- ³ Payphone revenues and interconnected Voice over Internet Protocol (VoIP) revenues are included with local service revenues in this table.
- ⁴ Dollar amounts are calculated using the sum of Lines 303a to 308a from Form 499-A.
- ⁵ Dollar amounts are calculated using Line 309a from Form 499-A.
- ⁶ Dollar amounts are calculated using the sum of Lines 310a to 314a from Form 499-A.
- ⁷ Dollar amounts are calculated using the sum of Lines 303a to 314a, minus the sum of Lines 303d to 314d, minus the sum of Lines 303e to 314e from Form 499-A.
- ⁸ Revenues from calls that both originate and terminate in foreign points are reported as end-user revenues and are included in this table, but are not included in the universal service contribution base. This line best represents the USF contribution base, which is further described in Table 1.5.
- ⁹ Dollar amounts are calculated using the sum of Lines 303d to 314d, plus the sum of Lines 303e to 314e from Form 499-A.
- ¹⁰ Dollar amounts are calculated using the sum of Lines 404a to 408a from Form 499-A.
- ¹¹ Dollar amounts are calculated using the sum of Lines 409a and 410a from Form 499-A.
- ¹² Dollar amounts are calculated using the sum of Lines 411a to 417a from Form 499-A.
- ¹³ Dollar amounts are calculated using Line 403a from Form 499-A. Surcharges are contribution amounts passed through to end users.
- ¹⁴ Dollar amounts are calculated using the sum of Lines 403a to 417a, minus the sum of Lines 403d to 417d, minus the sum of Lines 403e to 417e from Form 499-A.
- ¹⁵ This line best represents the USF contribution base, which is further described in Table 1.5. Dollar amounts are calculated using the sum of Lines 403d to 417d, plus the sum of Lines 403e to 417e from Form 499-A. This is different from billed interstate and international end user revenue, which does not include international-to-international revenues and uncollected revenues.

Note : Detail may not add to totals due to rounding.

Source : FCC Form 499-A based on filings as of September 21, 2018.

Table 1.3
2017 Filer Revenues by Service Type: Top 5 Affiliated Entities vs. Other Companies
(in Millions of Dollars)

		Top 5 Affiliated Entities¹	Other Companies	Total
Local Service and Payphone Revenues	Local Exchange ²	\$ 18,322	\$ 19,313	\$ 37,636
	Pay Telephone ³	3	266	269
	Local Private Line ⁴	21,146	9,126	30,272
	Other Local ⁵	885	864	1,749
	Federal and State USF Support ⁶	1,361	4,542	5,904
	Subscriber Line Charges ⁷	2,234	2,197	4,431
	Access ⁸	1,717	1,595	3,312
	Total Local Service and Payphone Revenues	45,669	37,904	83,572
Mobile Revenues	Total Mobile Service Revenues⁹	50,292	6,660	56,952
Toll Service Revenues	Operator ¹⁰	108	1,736	1,844
	Non-Operator Switched Toll ¹¹	7,125	8,484	15,609
	Long Distance Private Line ¹²	9,639	3,677	13,316
	Other Long Distance ¹³	458	2,849	3,306
	Total Toll Service Revenues	17,330	16,745	34,075
Total Local, Mobile, and Toll Revenues		113,290	61,309	174,599
	Universal Service Surcharges ¹⁴	6,085	2,234	8,319
Total Telecommunications Revenues		119,375	63,543	182,918
	Total Non-Telecommunications Revenues ¹⁵	219,011	102,587	321,597
Total Reported Revenues		\$ 338,386	\$ 166,130	\$ 504,516

¹ The "Top 5 Affiliated Entities" are those with the greatest revenues as defined by Line 419a, which includes Lines 303a to 314a and Lines 403a to 418a on Form 499-A. These companies are (in alphabetical order): AT&T Inc., CenturyLink, Deutsche Telekom AG, SoftBank Corporation, and Verizon Communications. The affiliated entity structure is current as of year-end 2017.

² Dollar amounts are calculated using the sum of Lines 303a and 404a from Form 499-A.

³ Dollar amounts are calculated using the sum of Lines 306a and 407a from Form 499-A.

⁴ Dollar amounts are calculated using the sum of Lines 305a and 406a from Form 499-A.

⁵ Dollar amounts are calculated using the sum of Lines 307a and 408a from Form 499-A.

⁶ Dollar amounts are calculated using Line 308a from Form 499-A.

⁷ Dollar amounts are calculated using Line 405a from Form 499-A. As of 2012, this amount also includes the Access Recovery Charge.

⁸ Dollar amounts are calculated using Line 304a from Form 499-A.

⁹ Dollar amounts are calculated using the sum of Lines 309a, 409a, and 410a from Form 499-A.

¹⁰ Dollar amounts are calculated using the sum of Lines 310a, 411a, 412a, and 413a from Form 499-A.

¹¹ Dollar amounts are calculated using the sum of Lines 311a and 414a from Form 499-A.

¹² Dollar amounts are calculated using the sum of Lines 312a and 415a from Form 499-A.

¹³ Dollar amounts are calculated using the sum of Lines 313a, 314a, 416a, and 417a from Form 499-A.

¹⁴ Dollar amounts are calculated using Line 403a from Form 499-A.

¹⁵ Dollar amounts are calculated using Line 418a from Form 499-A.

Note : Detail may not add to totals due to rounding.

Source : FCC Form 499-A, based on filings as of September 21, 2018.

Table 1.4
Telecommunications Revenue Reported on FCC Form 499-Q: 2016 - 2018
(in Millions of Dollars)

Data from FCC Form 499-Q			All Filers	LIRE Exemption ¹	Total Less LIRE
Projected Revenues for 2016	Interstate and International ²	Retail (End User) Billed ³	61,506		
		Retail Net of Uncollectibles ⁴	60,955	(2,446)	58,509
		Implied Uncollectible Rate	0.9%		
Historical Revenues Reported for 2016	Intrastate, Interstate, and International	Wholesale (Carrier's Carrier) Billed ⁵	50,246		
		Retail (End User) Billed	148,259		
		Total Revenue	198,505		
	Interstate and International	Retail (End User) Billed	60,071		
Projected Revenues for 2017	Interstate and International	Retail (End User) Billed	56,366		
		Retail Net of Uncollectibles	55,800	(2,152)	53,649
		Implied Uncollectible Rate	1.0%		
Historical Revenues Reported for 2017	Intrastate, Interstate, and International	Wholesale (Carrier's Carrier) Billed	45,059		
		Retail (End User) Billed	136,393		
		Total Revenue	181,452		
	Interstate and International	Retail (End User) Billed	55,716		
Projected Revenues for 2018	Interstate and International	Retail (End User) Billed ⁶	53,217		
		Retail Net of Uncollectibles ^{7,8}	52,855	(1,861)	50,994
		Implied Uncollectible Rate	0.7%		
Historical Revenues Reported for First Half of 2018	Intrastate, Interstate, and International	Wholesale (Carrier's Carrier) Billed ⁹	22,617		
		Retail (End User) Billed ¹⁰	64,855		
		Total Revenue	87,473		
	Interstate and International	Retail (End User) Billed ¹¹	26,896		

¹ A provider receives the Limited International Revenue Exemption (LIRE) and its international revenues are excluded from the contribution base if the total amount of interstate end-user revenues for the filing entity, consolidated with all affiliates, is less than 12% of the total of interstate and international end-user revenues for the filing entity consolidated with all affiliates. Affiliated filer entities who do not pass the 12% rule, but whose USF obligation exceeds its interstate revenue, may be considered for the LIRE exemption on a case by case basis. See 47 C.F.R. § 54.706(c). In addition, filers that provide only international services are exempt regardless of services offered by affiliates.

² Projected intrastate revenues are not reported on FCC Form 499-Q.

³ Prior to 2014, this line was referred to as "Billed to End Users."

⁴ Prior to 2014, this line was referred to as "Collected from End Users."

⁵ Prior to 2014, this line was referred to as "Billed to Resellers."

⁶ Dollar amounts for projected revenues billed to end users are calculated using the sum of Lines 119b and 119c from Form 499-Q.

⁷ Dollar amounts for projected revenues collected from end users are calculated using the sum of Lines 120b and 120c from Form 499-Q.

⁸ Dollar amounts for projected LIRE exempt revenues are calculated using the sum of Lines 120b and 120c in the Form 499Q filings from those filers who are LIRE-exempt.

⁹ Dollar amounts for historical revenues billed to wholesaler is calculated using Line 115a from Form 499-Q.

¹⁰ Dollar amounts for historical revenues billed to retail is calculated using Line 116a from Form 499-Q.

¹¹ Dollar amounts for interstate and international historical revenues billed to end users is calculated using the sum of Lines 116b and 116c from Form 499-Q.

Note: Detail may not add to totals due to rounding.

Source: FCC Form 499-Q as of September 21, 2018.

Table 1.5
USF Contribution Base by Year¹: 2007 - 2017
(in Millions of Dollars)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenues Subject to USF Contribution											
Billed interstate and international retail (end-user) revenues (includes Universal Service Surcharge) [Line 403 to Line 417, parts (d) and (e)]	\$81,235	\$80,956	\$75,988	\$72,292	\$70,323	\$70,037	\$68,399	\$66,942	\$63,930	\$60,181	\$55,733
less revenues for international-to-international services [Line 412(e)]	886	862	576	469	452	444	589	673	362	174	150
less international revenues of international-only filers and international revenues that were excluded because of the LIRE Exemption ²	3,978	4,148	3,393	3,326	3,079	2,653	3,086	2,827	2,616	1,960	2,026
less interstate and other international revenues for filers who are de minimis or otherwise exempt from universal service support requirements	50	51	49	34	31	28	31	31	31	31	38
less uncollectible contribution base revenues [Line 422(d) + Line 422(e)] ³	1,301	1,131	1,075	960	787	709	610	527	470	427	356
equals	\$75,020	\$74,764	\$70,895	\$67,503	\$65,971	\$66,203	\$64,083	\$62,884	\$60,451	\$57,590	\$53,163

¹ This table shows the contribution base for the Universal Service Fund (USF), but the actual amounts used for determining contributions may differ due to the following factors: (1) Adjustments are made by the Administrator to account for additional and corrected filings received; (2) Exempt amounts were based on revenues and the filer type (i.e., principal business activity) information contained in the FCC Form 499-A filings; (3) The Administrator may use carrier type, revenue type, Line 603 exemption certifications, and additional information requested from filers to determine which filers are required to contribute; (4) The Administrator bills delinquent filers based on estimated revenues and may, in some instances, include estimated revenue amounts in contribution base amounts; (5) The universal service contribution factors are set quarterly based on FCC Form 499-Q filings; and (6) FCC Form 499-A data are used for true-up and auditing purposes. As a result of these factors, actual contribution bases have been based on different amounts than those shown.

² A provider receives the Limited International Revenue Exemption (LIRE) and its international revenues are excluded from the contribution base if the total amount of interstate end-user revenues for the filing entity consolidated with all affiliates is less than 12% of the total of interstate and international end-user revenues for the filing entity consolidated with all affiliates. Affiliated filer entities who do not pass the 12% rule, but whose USF obligation exceeds its interstate revenue may request to be considered for the LIRE exemption on a case by case basis. See 47 C.F.R. § 54.706(c). In addition, filers that provide only international services are exempt regardless of services offered by affiliates.

³ Does not include uncollectible amounts associated with filers who are de minimis or LIRE exempt.

Note : Detail may not add to totals due to rounding. Revisions have been made for 2007.

Source : FCC Form 499-A based on filings as of September 21, 2018.

Table 1.6
Universal Service Fund Contribution Factor¹

Year	Quarter	Factor
2007	First Quarter	9.7
	Second Quarter	11.7
	Third Quarter	11.3
	Fourth Quarter	11.0
2008	First Quarter	10.2
	Second Quarter	11.3
	Third Quarter	11.4
	Fourth Quarter	11.4
2009	First Quarter	9.5
	Second Quarter	11.3
	Third Quarter	12.9
	Fourth Quarter	12.3
2010	First Quarter	14.1
	Second Quarter	15.3
	Third Quarter	13.6
	Fourth Quarter	12.9
2011	First Quarter	15.5
	Second Quarter	14.9
	Third Quarter	14.4
	Fourth Quarter	15.3
2012	First Quarter	17.9
	Second Quarter	17.4
	Third Quarter	15.7
	Fourth Quarter	17.4
2013	First Quarter	16.1
	Second Quarter	15.5
	Third Quarter	15.1
	Fourth Quarter	15.6
2014	First Quarter	16.4
	Second Quarter	16.6
	Third Quarter	15.7
	Fourth Quarter	16.1
2015	First Quarter	16.8
	Second Quarter	17.4
	Third Quarter	17.1
	Fourth Quarter	16.7
2016	First Quarter	18.2
	Second Quarter	17.9
	Third Quarter	17.9
	Fourth Quarter	17.4
2017	First Quarter	16.7
	Second Quarter	17.4
	Third Quarter	17.1
	Fourth Quarter	18.8
2018	First Quarter	19.5
	Second Quarter	18.4
	Third Quarter	17.9
	Fourth Quarter	20.1

¹ Carriers contribute based on projected, collected, end-user interstate and international telecommunications revenues.

Source : Quarterly Public Notices on universal service contribution factors are in CC Docket 96-45. See <http://www.fcc.gov/encyclopedia/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support>.

Table 1.7

**Billed Interstate and International Retail Telecommunications Revenues¹ by
Top 5 Affiliated Entities vs. Other Companies: 2009 - First Half 2018
(in Millions of Dollars)**

	Top 5 Affiliated Entities²	Other Companies	Total	Top 5 Share
2009	\$54,503	\$21,485	\$75,988	72 %
2010	51,655	20,637	72,292	71
2011	50,412	19,911	70,323	72
2012	49,795	20,242	70,037	71
2013	48,530	19,870	68,399	71
2014	46,870	20,072	66,942	70
2015	43,682	20,247	63,930	68
2016	40,013	20,169	60,182	66
2017	38,888	16,844	55,733	69
First Half 2018 ³	18,511	8,385	26,896	69

¹ Revenues for 2011 - 2018 are calculated as the sum of Lines 403d to 417d (interstate end user revenue) and 403e to 417e (international end user revenue) from Form 499-A. Previous years were calculated as the sum of Lines 403d to 417d (interstate end user revenue) and 403e to 417e (international end user revenue), minus Lines 412e, 422d, and 422e.

² The "Top 5 Affiliated Entities" are the five affiliated entities with the greatest revenues as defined by Line 419a, which is the sum of Lines 303a to 314a and Lines 403a to 418a, and is determined as of each year-end affiliate structure. These companies for 2009 and 2010 are (in alphabetical order): AT&T Inc., Deutsche Telekom AG, Qwest Services Corp., Sprint Nextel Corporation, and Verizon Communications. These companies for 2011 to 2012 are (in alphabetical order): AT&T Inc., CenturyLink, Deutsche Telekom AG, Sprint Nextel Corporation, and Verizon Communications. These companies for 2013 - 2018 are (in alphabetical order): AT&T Inc., CenturyLink, Deutsche Telekom AG, SoftBank Corporation (which acquired Sprint Nextel Corporation in June 2013), and Verizon Communications.

³ Preliminary revenues are calculated using Line 116b plus Line 116c for each quarter in FCC Form 499-Q.

Note : Detail may not add to totals due to rounding.

Source : Data for 2009 through 2017 are based on Form 499-A filings as of September 21, 2018. Data for 2018 are based on FCC Form 499-Q filings as of September 21, 2018.

Table 1.8
End User Telecommunications Revenue by State: 2016
(in Millions of Dollars)

	Intrastate	Interstate and International	Total	% Intrastate	% Interstate and International	% Total
Alabama	\$1,205	\$824	\$2,030	1.38 %	1.37 %	1.37 %
Alaska	203	155	357	0.23	0.26	0.24
American Samoa	8	5	13	0.01	0.01	0.01
Arizona	1,665	1,234	2,898	1.90	2.05	1.96
Arkansas	711	507	1,218	0.81	0.84	0.82
California	10,933	6,704	17,637	12.48	11.14	11.93
Colorado	1,464	1,138	2,602	1.67	1.89	1.76
Connecticut	1,078	798	1,876	1.23	1.33	1.27
Delaware	289	236	525	0.33	0.39	0.36
District of Columbia	446	351	798	0.51	0.58	0.54
Florida	5,361	3,641	9,002	6.12	6.05	6.09
Georgia	2,684	1,870	4,554	3.06	3.11	3.08
Guam	36	29	64	0.04	0.05	0.04
Hawaii	360	266	626	0.41	0.44	0.42
Idaho	376	287	663	0.43	0.48	0.45
Illinois	3,499	2,397	5,896	3.99	3.98	3.99
Indiana	1,610	1,122	2,732	1.84	1.86	1.85
Iowa	794	599	1,393	0.91	0.99	0.94
Kansas	748	508	1,256	0.85	0.84	0.85
Kentucky	1,113	810	1,923	1.27	1.35	1.30
Louisiana	1,222	776	1,998	1.40	1.29	1.35
Maine	362	268	629	0.41	0.44	0.43
Maryland	1,849	1,427	3,276	2.11	2.37	2.22
Massachusetts	2,118	1,386	3,505	2.42	2.30	2.37
Michigan	2,485	1,614	4,100	2.84	2.68	2.77
Minnesota	1,557	1,112	2,669	1.78	1.85	1.81
Mississippi	654	451	1,105	0.75	0.75	0.75
Missouri	1,543	1,124	2,668	1.76	1.87	1.81
Montana	268	214	482	0.31	0.36	0.33
Nebraska	516	404	920	0.59	0.67	0.62
Nevada	762	525	1,287	0.87	0.87	0.87
New Hampshire	380	294	673	0.43	0.49	0.46
New Jersey	2,877	2,088	4,966	3.28	3.47	3.36
New Mexico	494	385	879	0.56	0.64	0.59
New York	6,226	3,938	10,164	7.11	6.54	6.88
North Carolina	2,583	1,831	4,414	2.95	3.04	2.99
North Dakota	198	153	351	0.23	0.25	0.24
N. Mariana Islands	10	6	16	0.01	0.01	0.01
Ohio	3,111	2,067	5,178	3.55	3.44	3.50
Oklahoma	908	608	1,517	1.04	1.01	1.03
Oregon	1,003	720	1,723	1.15	1.20	1.17
Pennsylvania	3,746	2,637	6,382	4.28	4.38	4.32
Puerto Rico	724	619	1,342	0.83	1.03	0.91
Rhode Island	303	196	498	0.35	0.32	0.34
South Carolina	1,221	881	2,102	1.39	1.46	1.42
South Dakota	228	168	397	0.26	0.28	0.27
Tennessee	1,708	1,152	2,860	1.95	1.91	1.94
Texas	6,696	4,308	11,003	7.64	7.16	7.45
Utah	666	485	1,151	0.76	0.81	0.78
Vermont	193	157	350	0.22	0.26	0.24
Virgin Islands	36	46	82	0.04	0.08	0.06
Virginia	2,381	1,770	4,151	2.72	2.94	2.81
Washington	1,861	1,294	3,154	2.12	2.15	2.13
West Virginia	459	397	856	0.52	0.66	0.58
Wisconsin	1,512	1,079	2,591	1.73	1.79	1.75
Wyoming	153	120	273	0.17	0.20	0.18
Total	\$87,598	\$60,181	\$147,780	100.00 %	100.00 %	100.00 %

Note: Figures may not add to totals due to rounding.

Source: FCC/WCB staff estimates. For methodology end-user revenue per state, see the Technical Appendix at <http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports>.

Table 1.9
Universal Service Support Mechanisms by State: 2017
(Annual Payments and Contributions in Thousands of Dollars)

	Payments from USF to Providers					Estimated Contributions ³				Estimated Net Dollar Flow ⁴
	High-Cost Support ²	Low-Income Support	Schools & Libraries	Rural Health Care	Total		Amount	% of Total		
					Amount	% of Total				
Alabama	\$ 56,544	\$ 17,514	\$ 81,335	\$ 2,142	\$ 157,536	1.77 %	\$ 124,423	1.37 %	\$ 33,112	
Alaska	206,019	4,202	40,620	96,270	347,112	3.91	23,348	0.26	323,764	
American Samoa	3,264	108	26,535	0	29,908	0.34	775	0.01	29,133	
Arizona	74,246	39,946	1,199	3,956	119,347	1.34	186,198	2.05	-66,851	
Arkansas	113,396	9,492	61,596	5,445	189,929	2.14	76,573	0.84	113,356	
California	145,319	201,222	370,520	12,176	729,236	8.21	1,011,952	11.14	-282,716	
Colorado	65,135	8,505	27,279	8,455	109,375	1.23	171,802	1.89	-62,427	
Connecticut	447	11,818	21,783	265	34,313	0.39	120,434	1.33	-86,122	
Delaware	228	3,377	6,819	0	10,423	0.12	35,560	0.39	-25,137	
District of Columbia	0	3,922	6,854	0	10,776	0.12	53,031	0.58	-42,255	
Florida	57,775	78,777	132,689	3,633	272,874	3.07	549,555	6.05	-276,681	
Georgia	113,626	44,167	93,819	6,370	257,982	2.90	282,336	3.11	-24,354	
Guam	10,803	114	282	46	11,246	0.13	4,319	0.05	6,927	
Hawaii	4,424	1,904	8,896	39	15,263	0.17	40,116	0.44	-24,853	
Idaho	45,744	1,647	21,140	1,773	70,303	0.79	43,359	0.48	26,945	
Illinois	111,962	39,812	13,102	3,745	168,621	1.90	361,741	3.98	-193,120	
Indiana	115,542	20,134	120,868	9,906	266,450	3.00	169,364	1.86	97,087	
Iowa	190,193	7,172	64,581	3,351	265,296	2.99	90,359	0.99	174,937	
Kansas	166,969	6,307	22,210	3,791	199,276	2.24	76,681	0.84	122,595	
Kentucky	144,028	23,038	38,396	4,030	209,493	2.36	122,243	1.35	87,249	
Louisiana	87,875	25,072	56,305	2,388	171,640	1.93	117,100	1.29	54,541	
Maine	31,835	3,604	40,593	1,370	77,402	0.87	40,393	0.44	37,009	
Maryland	3,638	20,395	20,050	194	44,276	0.50	215,460	2.37	-171,184	
Massachusetts	2,350	20,746	9,956	488	33,541	0.38	209,226	2.30	-175,685	
Michigan	100,507	45,962	55,315	3,557	205,341	2.31	243,657	2.68	-38,316	
Minnesota	201,491	10,791	35,947	2,706	250,935	2.83	167,778	1.85	83,158	
Mississippi	178,851	13,466	41,901	6,591	240,810	2.71	68,061	0.75	172,749	
Missouri	172,859	14,416	1,052	5,139	193,466	2.18	169,727	1.87	23,739	
Montana	116,510	1,354	26,012	871	144,747	1.63	32,271	0.36	112,476	
Nebraska	109,622	802	6,942	4,279	121,645	1.37	60,971	0.67	60,675	
Nevada	17,447	10,486	97,910	453	126,296	1.42	79,260	0.87	47,036	
New Hampshire	13,133	1,622	4,741	732	20,228	0.23	44,328	0.49	-24,099	
New Jersey	1,011	24,792	11,044	0	36,846	0.41	315,212	3.47	-278,365	
New Mexico	78,006	20,278	3,454	3,121	104,860	1.18	58,159	0.64	46,700	
New York	54,857	87,266	67,785	4,433	214,341	2.41	594,382	6.54	-380,041	
North Carolina	67,853	31,360	33,157	5,817	138,187	1.56	276,409	3.04	-138,222	
North Dakota	124,517	1,651	9,886	1,220	137,275	1.55	23,104	0.25	114,171	
N. Mariana Islands	3,209	343	93,828	0	97,380	1.10	889	0.01	96,491	
Ohio	83,689	53,326	86,409	3,541	226,964	2.56	312,052	3.44	-85,088	
Oklahoma	144,712	64,870	51,789	6,802	268,173	3.02	91,799	1.01	176,374	
Oregon	81,516	5,391	27,919	3,435	118,261	1.33	108,633	1.20	9,628	
Pennsylvania	68,669	53,323	82,101	2,109	206,201	2.32	397,960	4.38	-191,759	
Puerto Rico	172,708	57,850	36,453	10	267,021	3.01	93,369	1.03	173,652	
Rhode Island	30	4,569	5,537	0	10,136	0.11	29,520	0.32	-19,384	
South Carolina	104,544	18,463	38,803	3,030	164,839	1.86	133,004	1.46	31,835	
South Dakota	98,331	1,891	5,469	722	106,412	1.20	25,399	0.28	81,013	
Tennessee	84,903	28,685	108,641	3,089	225,317	2.54	173,821	1.91	51,496	
Texas	279,287	72,255	243,586	10,263	605,391	6.82	650,235	7.16	-44,844	
Utah	36,518	3,732	21,046	1,011	62,307	0.70	73,154	0.81	-10,847	
Vermont	19,999	1,721	48,173	323	70,216	0.79	23,729	0.26	46,486	
Virgin Islands	24,827	258	3,089	0	28,174	0.32	7,002	0.08	21,172	
Virginia	87,356	16,760	4,534	4,901	113,551	1.28	267,098	2.94	-153,546	
Washington	80,435	17,276	40,458	1,346	139,515	1.57	195,265	2.15	-55,751	
West Virginia	57,337	9,308	45,349	1,639	113,634	1.28	59,910	0.66	53,724	
Wisconsin	215,304	18,754	19,165	10,284	263,507	2.97	162,892	1.79	100,614	
Wyoming	51,574	738	4,735	244	57,291	0.65	18,093	0.20	39,198	
Total	\$ 4,682,980	\$ 1,286,750	\$ 2,649,657	\$ 261,500	\$ 8,880,887	100.00 %	\$ 9,083,490	100.00 %	-\$ 202,603	

Notes : Figures may not add due to rounding.

¹ Data are from USAC.

² High-cost support excludes penalties from Mobility Fund and includes recovered forfeited funds for CAF-Phase I Support.

³ Contributions include administrative cost of approximately \$203 million, as shown in USAC's Annual Report. Allocation of contributions among states is an FCC staff estimate. See the Technical Appendix at <http://www.fcc.gov/encyclopedia/federal-state-joint-board-monitoring-reports>.

⁴ Net dollar flow is positive when payments from USF to carriers exceed contributions to USF. Total is negative because of administrative expenses.

Table 1.10
Universal Service Disbursements 2001-2017
(in Millions of Dollars)

Year	High-Cost Support	Low-Income Support	Rural Health Care	Schools and Libraries	Total
2001	\$2,602	\$584	\$8	\$1,464	\$4,659
2002	2,978	673	16	1,683	5,350
2003	3,273	713	3	1,644	5,633
2004	3,488	759	1	1,076	5,324
2005	3,824	809	26	1,862	6,520
2006	4,096	820	41	1,669	6,626
2007	4,287	823	37	1,808	6,955
2008	4,478	819	49	1,760	7,106
2009	4,292	1,025	72	1,878	7,268
2010	4,268	1,316	110	2,282	7,976
2011	4,031	1,751	141	2,233	8,156
2012	4,147	2,189	155	2,218	8,710
2013	4,165	1,798	159	2,204	8,326
2014	3,733	1,660	193	2,269	7,855
2015	4,499	1,514	279	2,080	8,372
2016	4,491	1,537	298	2,387	8,712
2017	4,683	1,287	262	2,650	8,882

Notes: Figures may not add due to rounding. The figures used in this table are for the calendar year and include disbursements that were committed over several years but paid out in the respective calendar year. In Sections 4 and 5, figures for the Schools and Libraries program and the Rural Health Care program are reported based on fiscal year rather than calendar year. High-cost support excludes penalties for Mobility Fund and includes recovered forfeited funds for CAF-Phase I Support.

Source: Universal Service Administration Company (USAC).

Table 1.11
Universal Service Program Requirements and Contribution Factors for 2018
(in Millions of Dollars)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
High Cost					
High Cost Loop Support	\$125.66	\$125.65	\$122.70	\$122.70	\$496.71
Broadband Loop Support	\$178.02	\$178.02	\$189.41	\$190.30	\$735.75
CAF - Phase I Frozen Support ¹	\$36.74	\$36.74	\$36.74	\$36.74	\$146.96
Frozen Competitive ETC Support ²	\$122.64	\$122.19	\$121.73	\$121.05	\$487.61
CAF - Inter-carrier Compensation Support	\$102.75	\$102.82	\$101.18	\$102.33	\$409.08
CAF - Phase II Cost Model	\$390.78	\$390.78	\$379.41	\$379.42	\$1,540.39
Rural Broadband Experiments	\$0.83	\$0.83	\$0.00	\$0.00	\$1.66
Alternative Connect America Cost Model	\$137.11	\$137.11	\$109.59	\$91.34	\$475.15
Alaska Plan Support	\$32.08	\$32.08	\$32.08	\$32.08	\$128.32
Uniendo a Puerto Rico Fund and Connect USVI Fund	\$0.00	\$0.00	\$0.00	\$64.20	\$64.20
Change to High-Cost Account ³	-\$67.09	-\$67.09	\$97.84	\$65.68	\$29.34
Prior Period Adjustment	\$50.07	-\$12.49	-\$32.51	-\$16.06	-\$10.99
USAC Administrative Costs	\$12.55	\$11.80	\$11.56	\$11.35	\$47.26
Interest Income ⁴	-\$4.48	-\$2.19	-\$0.19	-\$1.71	-\$8.57
Program Total	\$1,117.66	\$1,056.25	\$1,169.54	\$1,199.42	\$4,542.87
Low Income					
Lifeline Assistance	\$313.04	\$308.23	\$303.15	\$289.94	\$1,214.36
Link-Up	\$0.06	\$0.03	\$0.05	\$0.04	\$0.18
Prior Period Adjustment	-\$4.15	-\$13.38	-\$16.84	-\$22.95	-\$57.32
USAC Administrative Costs	\$14.92	\$12.00	\$11.25	\$12.31	\$50.48
Interest Income ⁴	-\$0.27	-\$0.10	-\$0.10	-\$0.09	-\$0.56
Program Total	\$323.60	\$306.78	\$297.51	\$279.25	\$1,207.14
Rural Health					
Rural Health Care Support	\$96.66	\$96.88	\$96.94	\$187.29	\$477.77
Prior Period Adjustment	-\$3.87	-\$0.61	-\$2.82	-\$1.50	-\$8.80
USAC Administrative Costs	\$3.34	\$3.12	\$3.06	\$2.90	\$12.42
Interest Income ⁴	-\$1.02	-\$0.53	-\$0.70	\$0.52	-\$1.73
Program Total	\$95.11	\$98.86	\$96.48	\$189.21	\$479.66
Schools & Libraries					
Schools and Libraries Support	\$486.57	\$486.57	\$378.85	\$378.85	\$1,730.84
Prior Period Adjustment	\$38.04	-\$3.85	-\$16.99	-\$9.28	\$7.92
Interest Income ⁴	\$30.06	\$28.29	\$26.52	\$26.21	\$111.08
USAC Administrative Costs	-\$9.56	-\$4.80	-\$5.36	-\$3.86	-\$23.58
Program Total	\$545.11	\$506.21	\$383.02	\$391.92	\$1,826.26
Grand Total	\$2,081.48	\$1,968.10	\$1,946.55	\$2,059.80	\$8,055.93
Applicable interstate and international end-user revenues					
Reported contribution base revenues	\$12,871.99	\$12,805.68	\$12,951.96	\$12,406.69	
Circulatory Adjustment					
Amount carriers will contribute to USF in this quarter	-\$2,081.48	-\$1,968.10	-\$1,946.55	-\$2,059.80	
Subtotal	\$10,790.51	\$10,837.58	\$11,005.41	\$10,346.89	
Adjustment factor for uncollectibles	1.0%	1.0%	1.0%	1.0%	
Contribution base at the time the factor was calculated	\$10,682.60	\$10,729.20	\$10,895.36	\$10,243.42	
Contribution factor	19.5%	18.4%	17.9%	20.1%	
Contribution factor times contribution base	\$2,083.11	\$1,974.17	\$1,950.27	\$2,058.93	

¹ In the *USF/ICC Transformation Order*, the Commission converted support received by price cap carriers and their rate-of-return affiliates, including: IAS, HCMS, ICLS, LSS, and HCLS, to CAF Phase I Frozen Support. *USF/ICC Transformation Order*, paras. 128-157.

² In the *USF/ICC Transformation Order*, the Commission froze support received by competitive ETCs, including IAS, HCMS, ICLS, LSS, and HCLS at 2011 levels, effective January 1, 2012, and began phasing the frozen support down effective July 1, 2012. *USF/ICC Transformation Order*, paras. 498-532.

³ In the *USF/ICC Transformation Order*, the Commission created the Connect America reserve to be used to manage fluctuations in high-cost demand. *USF/ICC Transformation Order*, paras. 547-556. Subsequently, in 2016, in the *Rate-of-Return Reform Order*, the Commission directed USAC to eliminate the CAF reserve and to combine those funds with the high-cost account. *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, Order and Order on Reconsideration and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087, 3111, paras. 17-79, n.130 (2016) (*Rate-of-Return Reform Order*).

⁴ Interest income is shown as negative because it is subtracted from expenses to yield the total.

Source : Support mechanism data are from USAC Appendix M02 from pertinent filings as shown at <http://www.usac.org/about/tools/fcc/filings/default.aspx>. Contribution factor information is available at <https://www.fcc.gov/encyclopedia/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support>.

Section 2 – Lifeline (Low Income)

Overview – Lifeline and Link Up Programs for Low-Income Consumers

Since 1985, the Universal Service Lifeline program has provided a discount on phone service for qualifying low-income consumers to ensure that all Americans have the opportunities and security that phone service brings, including being able to connect to jobs, family and emergency services. Recently, the Commission has made ensuring the availability of broadband service for low-income Americans a goal of the Lifeline program. In 2016, the Commission adopted an order to comprehensively reform the Lifeline program. Among other things, the Commission included broadband as a supported service in the Lifeline program, set out minimum service standards for Lifeline-supported services, and directed USAC to establish a National Eligibility Verifier to make independent subscriber eligibility determinations. As of May 2019, the National Verifier has launched in 27 states and territories, and USAC is planning additional launches in the remaining states and territories throughout 2019.

The Lifeline program is available to eligible low-income consumers in every state, territory, commonwealth, and on Tribal lands. The Link Up program offsets the cost of service activation to qualifying low-income households. Since 2013, Link Up has been available only on Tribal lands. Consumers with proper proof of eligibility may be qualified to enroll. To participate in the Lifeline or Link Up program, consumers must have an income that is at or below 135% of the Federal Poverty Guidelines or participate in a qualifying assistance program. The Lifeline and Link Up programs are administered by the Universal Service Administrative Company (USAC).

Additional information about the Lifeline program can be found on the Commission’s website at <http://www.fcc.gov/lifeline> and on USAC’s website at <http://www.usac.org/li/>. Please note that the information provided in this report is based upon the program rules through June 2018.

Table 2.1
Lifeline Subscribers and Link Up Beneficiaries
(in Thousands)

Year	Lifeline			Link Up		
	Non-Tribal	Tribal	Total	Non-Tribal	Tribal	Total
1987			1,063			8
1988			1,829			106
1989			2,115			207
1990			2,467			513
1991			2,984			640
1992			3,440			743
1993			3,972			737
1994			4,423			838
1995			4,914			824
1996			5,233			808
1997 ¹			5,111			
1998	5,376	0	5,376	2,195	0	2,195
1999	5,638	0	5,638	1,835	0	1,835
2000	5,856	4	5,861	1,690	2	1,692
2001	6,088	53	6,140	1,670	23	1,694
2002	6,393	111	6,504	1,657	30	1,687
2003	6,352	146	6,498	1,662	23	1,685
2004	6,612	176	6,788	1,670	42	1,712
2005	6,829	234	7,063	1,672	90	1,762
2006	6,634	287	6,921	1,553	101	1,654
2007	6,615	328	6,943	1,382	112	1,494
2008	6,382	350	6,732	1,510	118	1,627
2009	7,661	371	8,032	1,751	111	1,862
2010	9,883	382	10,265	2,509	126	2,635
2011	13,301	463	13,764	4,014	285	4,300
2012	16,405	761	17,166	1,228	180	1,408
2013	13,833	650	14,483	0	17	17
2014	12,943	502	13,445	0	29	29
2015	12,115	418	12,533	0	20	20
2016	12,425	360	12,785	0	21	21
2017	10,469	293	10,763	0	11	11

Note : The Lifeline subscribers and Link Up beneficiaries represent USAC data for the time period January through December, including true-ups reported through September 2018. Data for 2011-2016 were revised because carriers can revise their filings. When carriers revise their line counts up, they receive more support and when carriers revise their line counts down, they receive less support.

¹ Subscriber data were not collected in 1997. Lifeline subscribership data were estimated by USAC. Link up data were not estimated.

Source : Universal Service Administrative Company.

Table 2.2
Low-Income Claims
(in Thousands of Dollars)

Year	Lifeline					Link Up			Total
	General	Additional Tribal ²	TLS ³	PICC ⁴	Total	Non-Tribal	Tribal	Total	
1988	\$31,952	\$0	\$0	\$0	\$31,952	\$1,991	\$0	\$1,991	\$33,943
1989	50,878	0	0	0	50,878	4,480	0	4,480	55,358
1990	62,464	0	0	0	62,464	11,351	0	11,351	73,815
1991	79,104	0	0	0	79,104	13,705	0	13,705	92,809
1992	93,766	0	0	0	93,766	15,342	0	15,342	109,108
1993	109,083	0	0	0	109,083	17,019	0	17,019	126,102
1994	123,284	0	0	0	123,284	18,573	0	18,573	141,857
1995	137,277	0	0	0	137,277	18,392	0	18,392	155,670
1996	148,186	0	0	0	148,186	18,247	0	18,247	166,433
1997	147,579	0	0	0	147,579	13,711	0	13,711	161,290
1998 ¹	416,504	0	2,700	2,802	422,006	42,461	0	42,461	464,467
1999	438,578	0	3,134	4,450	446,162	33,988	0	33,988	480,150
2000	482,052	522	2,846	3,168	488,588	30,411	30	30,441	519,029
2001	548,419	6,960	3,195	0	558,574	30,314	475	30,788	589,362
2002	623,350	17,955	3,779	0	645,083	30,323	700	31,022	676,106
2003	657,095	24,167	4,425	0	685,687	30,170	515	30,686	716,373
2004	695,188	30,502	5,111	0	730,800	30,898	1,230	32,129	762,929
2005	716,133	45,124	6,215	0	767,472	31,715	2,788	34,503	801,975
2006	703,958	61,524	8,885	0	774,367	29,832	2,869	32,701	807,068
2007	710,180	73,145	8,514	0	791,839	27,816	3,575	31,391	823,230
2008	695,015	80,914	8,634	0	784,563	30,682	6,578	37,260	821,823
2009	867,541	88,061	8,959	0	964,561	40,807	7,485	48,291	1,012,852
2010	1,125,599	92,877	22,197	0	1,240,674	67,268	9,798	77,066	1,317,740
2011	1,521,279	118,119	10,814	0	1,650,212	108,449	21,528	129,977	1,780,189
2012	1,919,834	210,389	6,646	0	2,136,870	34,770	11,940	46,710	2,183,580
2013	1,607,110	179,885	2,690	0	1,789,684	0	567	567	1,790,252
2014	1,491,972	137,353	0	0	1,629,325	0	640	640	1,629,965
2015	1,390,773	118,991	0	0	1,509,764	0	447	447	1,510,211
2016	1,418,442	103,409	0	0	1,521,851	0	486	486	1,522,337
2017	1,194,572	84,230	0	0	1,278,802	0	244	244	1,279,046

Note : Data for 2011-2016 were updated to account for true-ups.

¹ Effective in 1998, the federal Lifeline support mechanism was expanded so that a basic level of assistance would be provided in all states. Further, the basic level of federal support was increased in 1998.

² Tribal Lifeline subscribers also receive General support which is currently \$9.25 per subscriber. This amount is not included in Additional Tribal support.

³ TLS is an abbreviation for toll limitation service.

⁴ Carriers no longer charge a residential Presubscribed Interexchange Carrier Charge (PICC) as of July 1, 2000.

Source : Universal Service Administrative Company.

Table 2.3
Low-Income Claims by State: 2017
(in Thousands of Dollars)

State or Jurisdiction	Lifeline		Link Up		TLS ¹	Total
	General	Additional Tribal	Non-Tribal	Tribal		
Alabama	\$17,065	\$221	\$0	\$0	\$0	\$17,286
Alaska	3,494	8,294	0	13	0	11,800
American Samoa	84	0	0	0	0	84
Arizona	24,258	15,381	0	103	0	39,743
Arkansas	9,379	2	0	0	0	9,382
California	198,195	56	0	0	0	198,251
Colorado	8,665	0	0	0	0	8,665
Connecticut	11,607	0	0	0	0	11,607
Delaware	3,287	0	0	0	0	3,287
District Of Columbia	3,763	0	0	0	0	3,763
Florida	78,053	0	0	0	0	78,053
Georgia	43,600	0	0	0	0	43,600
Guam	110	0	0	0	0	110
Hawaii	1,332	553	0	0	0	1,885
Idaho	1,603	68	0	0	0	1,670
Illinois	38,463	0	0	0	0	38,463
Indiana	19,900	0	0	0	0	19,900
Iowa	7,045	3	0	0	0	7,048
Kansas	6,274	6	0	0	0	6,280
Kentucky	22,476	0	0	0	0	22,476
Louisiana	24,879	0	0	0	0	24,879
Maine	3,521	10	0	0	0	3,531
Maryland	20,179	0	0	0	0	20,179
Massachusetts	20,553	0	0	0	0	20,553
Michigan	45,731	105	0	0	0	45,836
Minnesota	9,959	869	0	0	0	10,828
Mississippi	12,669	472	0	0	0	13,141
Missouri	14,573	3	0	0	0	14,576
Montana	554	833	0	9	0	1,397
Nebraska	728	56	0	0	0	784
Nevada	10,301	227	0	0	0	10,528
New Hampshire	1,587	0	0	0	0	1,587
New Jersey	24,505	0	0	0	0	24,505
New Mexico	10,565	9,662	0	78	0	20,305
New York	85,964	0	0	0	0	85,964
North Carolina	30,523	15	0	0	0	30,537
North Dakota	817	807	0	8	0	1,632
Northern Mariana Islands	232	0	0	0	0	232
Ohio	52,780	0	0	0	0	52,780
Oklahoma	21,104	42,951	0	22	0	64,077
Oregon	5,178	34	0	0	0	5,212
Pennsylvania	52,769	0	0	0	0	52,769
Puerto Rico	57,909	0	0	0	0	57,909
Rhode Island	4,478	0	0	0	0	4,478
South Carolina	17,983	5	0	0	0	17,989
South Dakota	1,017	1,018	0	6	0	2,041
Tennessee	27,921	0	0	0	0	27,921
Texas	71,615	0	0	0	0	71,615
Utah	3,271	484	0	3	0	3,759
Vermont	1,720	0	0	0	0	1,720
Virgin Islands	270	0	0	0	0	270
Virginia	16,420	0	0	0	0	16,420
Washington	16,566	719	0	0	0	17,285
West Virginia	9,087	0	0	0	0	9,087
Wisconsin	17,711	852	0	1	0	18,563
Wyoming	282	524	0	0	0	806
Total	\$1,194,572	\$84,230	\$0	\$244	\$0	\$1,279,046

Notes : These dollars represent submitted claims to USAC for the time period January 2017 through December 2017, including true-ups reported through September 2018. Tribal Lifeline subscribers also receive General support which is currently \$9.25 per subscriber. This amount is not included in Tribal support. For Link Up, the payments and subscribers for the two categories of recipients are kept separate.

¹ TLS is an abbreviation for toll limitation service.

Source : Universal Service Administrative Company.

Table 2.4
Low-Income Claims Received by ILECs and CETCs
(in Thousands of Dollars)

	ILECs	CETCs	Total	Percent CETCs
1998	\$464,207	\$260	\$464,467	0.1 %
1999	479,353	796	480,150	0.2
2000	517,901	1,128	519,029	0.2
2001	585,790	3,572	589,362	0.6
2002	663,009	13,097	676,106	1.9
2003	693,378	22,994	716,373	3.2
2004	723,580	39,349	762,929	5.2
2005	734,344	67,631	801,975	8.4
2006	707,135	99,933	807,068	12.4
2007	701,990	121,240	823,230	14.7
2008	674,805	147,017	821,823	17.9
2009	642,644	370,208	1,012,852	36.6
2010	595,604	722,136	1,317,740	54.8
2011	532,226	1,247,963	1,780,189	70.1
2012	450,652	1,732,928	2,183,580	79.4
2013	295,984	1,494,268	1,790,252	83.5
2014	224,016	1,405,949	1,629,965	86.3
2015	165,725	1,344,486	1,510,211	89.0
2016	134,164	1,388,173	1,522,337	91.2
2017	104,801	1,174,245	1,279,046	91.8

Notes : CETCs include both wireless and wireline carriers. Data for 2011-2016 were updated to account for true-ups.

Source : Universal Service Administrative Company.

Table 2.5
Low-Income Claims by Program and by Affiliated Entities: 2017
(in Thousands of Dollars)

Rank	Affiliated Entity Name ¹	Lifeline Support	Link Up Support	Total Low-Income Support	Percent of Total	Cumulative Percent of Total
1	América Móvil ²	\$420,939	\$0	\$420,939	32.9%	32.9%
2	SoftBank Corp. ³	236,512	0	236,512	18.5	51.4
3	Quadrant Holdings Group LLC	157,162	0	157,162	12.3	63.7
4	Telrite Corporation	59,433	0	59,433	4.6	68.3
5	I-Wireless, LLC	49,916	0	49,916	3.9	72.2
6	AT&T Inc.	46,044	0	46,044	3.6	75.8
7	Boomerang Wireless, LLC	29,345	0	29,345	2.3	78.1
8	Smith Bagley, Inc.	27,634	165	27,799	2.2	80.3
9	Assist Wireless, LLC	25,361	0	25,361	2.0	82.3
10	TSC Acquisition Corporation	19,793	0	19,793	1.5	83.8
11	Amerimex Communications Corporation	18,311	0	18,311	1.4	85.3
12	Frontier Communications Corporation	14,750	0	14,750	1.2	86.4
13	American Broadband and Telecommunications Com	13,857	0	13,857	1.1	87.5
14	Telecom Service Bureau, Inc.	13,795	0	13,795	1.1	88.6
15	True Wireless, LLC	13,147	0	13,147	1.0	89.6
16	Verizon Communications Inc.	12,520	0	12,520	1.0	90.6
17	GCI Holdings LLC	10,673	2	10,675	0.8	91.4
18	Birch Capital, LLC	10,382	0	10,382	0.8	92.2
19	CenturyLink, Inc.	9,466	0	9,466	0.7	93.0
20	Air Voice Inc.	8,648	0	8,648	0.7	93.7
21	Blue Jay Wireless, LLC	7,879	0	7,879	0.6	94.3
22	PR Wireless LLC	7,619	0	7,619	0.6	94.9
23	ATN International, Inc.	6,997	0	6,997	0.5	95.4
24	Global Connection Inc. of America	6,086	0	6,086	0.5	95.9
25	TerraCom/YourTel America	5,577	0	5,577	0.4	96.3
26	Cox Communications, Inc.	4,531	0	4,531	0.4	96.7
27	Windstream Holdings, Inc.	3,014	0	3,014	0.2	96.9
28	Amvensys Telecom Holdings	2,776	0	2,776	0.2	97.1
29	Budget PrePay, Inc.	2,531	0	2,531	0.2	97.3
30	Head Start Telecom, Inc.	2,301	0	2,301	0.2	97.5
	Other Carriers	31,803	76	31,880	2.5	100.0
	All Affiliated Entities	\$1,278,802	\$244	\$1,279,046	100.0%	100.0%

¹ Affiliated entities include all commonly-controlled or commonly-owned affiliates as of year-end 2017.

² América Móvil owns TracFone Wireless.

³ SoftBank Corp. owns Sprint and Virgin Mobile USA.

Source : Universal Service Administrative Company.

Table 2.6
Total Monthly Lifeline Subscribers Since January 2014

Month	Tribal Lifeline Subscribers	Non-Tribal Lifeline Subscribers	Total Lifeline Subscribers
January-14	534,265	13,438,191	13,972,456
February-14	534,485	13,498,430	14,032,915
March-14	521,018	13,449,608	13,970,626
April-14	518,161	13,351,493	13,869,654
May-14	496,084	13,193,985	13,690,069
June-14	497,023	12,959,263	13,456,286
July-14	501,132	12,767,192	13,268,324
August-14	499,465	12,759,907	13,259,372
September-14	491,757	12,849,229	13,340,986
October-14	490,830	12,737,496	13,228,326
November-14	481,774	12,375,673	12,857,447
December-14	463,648	11,935,692	12,399,340
January-15	434,997	11,183,294	11,618,291
February-15	428,845	11,230,434	11,659,279
March-15	426,268	11,363,528	11,789,796
April-15	421,257	11,525,854	11,947,111
May-15	412,360	11,803,869	12,216,229
June-15	417,309	12,020,173	12,437,482
July-15	421,789	12,319,707	12,741,496
August-15	415,002	12,571,361	12,986,363
September-15	416,148	12,777,118	13,193,266
October-15	411,259	12,888,647	13,299,906
November-15	405,167	12,862,018	13,267,185
December-15	406,407	12,831,154	13,237,561
January-16	390,925	12,394,595	12,785,520
February-16	391,713	12,361,941	12,753,654
March-16	397,547	12,434,308	12,831,855
April-16	402,217	12,565,771	12,967,988
May-16	405,462	12,636,142	13,041,604
June-16	349,219	12,726,146	13,075,365
July-16	338,411	12,790,444	13,128,855
August-16	332,700	12,429,612	12,762,312
September-16	332,508	12,494,098	12,826,606
October-16	334,508	12,397,167	12,731,675
November-16	327,483	12,189,752	12,517,235
December-16	317,383	11,676,901	11,994,284
January-17	300,348	11,044,558	11,344,906
February-17	301,646	10,885,132	11,186,778
March-17	301,436	10,728,232	11,029,668
April-17	297,151	10,516,000	10,813,151
May-17	298,203	10,464,485	10,762,688
June-17	297,579	10,487,879	10,785,458
July-17	291,960	10,395,666	10,687,626
August-17	290,287	10,301,209	10,591,496
September-17	287,265	10,225,206	10,512,471
October-17	285,147	10,288,829	10,573,976
November-17	283,066	10,195,653	10,478,719
December-17	282,562	10,100,745	10,383,307
January-18	254,142	10,038,858	10,293,000
February-18	252,698	9,933,699	10,186,397
March-18	246,986	9,842,728	10,089,714
April-18	244,009	9,611,587	9,855,596
May-18	241,804	9,463,429	9,705,233
June-18	240,091	9,345,048	9,585,139

Source : Univeral Service Administration Company.

Table 2.7
Lifeline De-Enrollments or Scheduled De-Enrollments As a Result of Recertification by State in 2017
(in Thousands)

State	As a result of ETC recertification attempt ¹	As a result of attempt by State Administrator, ETC Access to Eligibility Data, or USAC ²	Total
Alabama	23	1	23
Alaska	3	1	4
American Samoa	0	0	0
Arizona	28	1	29
Arkansas	7	1	8
California	0	310	310
Colorado	5	0	5
Connecticut	18	0	18
Delaware	4	0	4
District of Columbia	7	0	7
Florida	47	5	52
Georgia	28	0	28
Guam	0	1	1
Hawaii	1	0	1
Idaho	1	0	1
Illinois	42	1	43
Indiana	21	0	21
Iowa	6	0	6
Kansas	8	1	8
Kentucky	23	3	25
Louisiana	25	0	26
Maine	3	1	4
Maryland	15	0	15
Massachusetts	17	1	18
Michigan	33	1	33
Minnesota	7	2	9
Mississippi	18	0	18
Missouri	18	1	19
Montana	0	1	1
Nebraska	0	1	1
Nevada	6	6	12
New Hampshire	2	0	2
New Jersey	15	0	15
New Mexico	9	1	10
New York	51	7	58
North Carolina	34	1	35
North Dakota	1	1	1
Northern Mariana Isl	1	0	1
Ohio	53	3	55
Oklahoma	18	20	38
Oregon	0	1	1
Pennsylvania	28	1	29
Puerto Rico	33	10	44
Rhode Island	3	0	4
South Carolina	20	1	21
South Dakota	0	2	3
Tennessee	21	1	22
Texas	1	48	49
Utah	2	0	3
Vermont	0	1	1
Virgin Islands	0	0	0
Virginia	24	0	24
Washington	6	2	8
West Virginia	11	0	11
Wisconsin	6	0	7
Wyoming	0	0	0
Total	750	443	1,193

Note: In 2017, FCC Form 555 data for subscribers with anniversary dates between January 2017 and June 2017 was not collected since the recertification requirement was waived for these subscribers due to a process transition to rolling recertification.

¹ Section G of the 2017 FCC Form 555.

² Section K of the 2017 FCC Form 555.

Source: Universal Service Administrative Company.

Table 2.8
Low-Income Subscribers by State in 2017 by Facilities Type of Carrier
(in Thousands)

State	Non-Tribal			Tribal			All		
	Facilities-Based		Total	Facilities-Based		Total	Facilities-Based		Total
	No	Yes		No	Yes		No	Yes	
Alabama	112	41	153	1	#	1	113	41	154
Alaska	0	0	0	0	31	31	0	31	31
American Samoa	0	1	1	0	0	0	0	1	1
Arizona	131	35	166	1	51	52	132	86	219
Arkansas	62	22	84	0	#	#	62	22	84
California	904	882	1,786	#	#	#	904	882	1,786
Colorado	55	23	78	#	0	#	55	23	78
Connecticut	65	40	105	0	0	0	65	40	105
Delaware	15	15	30	0	0	0	15	15	30
District of Columbia	31	3	34	0	0	0	31	3	34
Florida	450	253	703	0	0	0	450	253	703
Georgia	333	59	393	0	0	0	333	59	393
Guam	0	1	1	0	0	0	0	1	1
Hawaii	8	2	10	2	0	2	10	2	12
Idaho	9	5	14	#	#	#	9	5	14
Illinois	280	66	347	0	0	0	280	66	347
Indiana	147	33	179	0	0	0	147	33	179
Iowa	50	14	63	#	0	#	50	14	63
Kansas	47	9	56	#	#	#	48	9	57
Kentucky	177	25	202	0	0	0	177	25	202
Louisiana	188	36	224	#	0	#	188	36	224
Maine	22	9	32	0	#	#	22	9	32
Maryland	143	39	182	0	0	0	143	39	182
Massachusetts	92	94	185	0	0	0	92	94	185
Michigan	296	115	412	#	#	#	297	115	412
Minnesota	54	32	87	2	1	3	56	34	90
Mississippi	79	34	113	2	#	2	80	34	114
Missouri	114	17	131	0	#	#	114	17	131
Montana	0	2	2	0	3	3	0	5	5
Nebraska	1	6	6	0	#	#	1	6	7
Nevada	62	30	92	#	1	1	63	30	93
New Hampshire	11	3	14	0	0	0	11	3	14
New Jersey	119	102	221	0	0	0	119	102	221
New Mexico	29	33	62	0	33	33	29	67	95
New York	447	327	774	0	#	#	447	327	774
North Carolina	189	86	275	0	#	#	189	86	275
North Dakota	1	4	4	1	2	3	2	5	7
Northern Mariana Islands	0	2	2	0	0	0	0	2	2
Ohio	372	104	475	0	0	0	372	104	475
Oklahoma	38	5	43	132	15	147	170	20	190
Oregon	7	40	46	#	#	#	7	40	47
Pennsylvania	389	87	475	0	0	0	389	87	475
Puerto Rico	380	142	522	0	0	0	380	142	522
Rhode Island	26	14	40	0	0	0	26	14	40
South Carolina	137	25	162	#	#	#	137	25	162
South Dakota	1	4	5	0	4	4	1	8	9
Tennessee	196	56	252	0	0	0	196	56	252
Texas	493	153	645	#	0	#	493	153	645
Utah	22	6	28	0	2	2	22	7	29
Vermont	6	9	15	0	0	0	6	9	15
Virgin Islands	#	2	2	0	0	0	#	2	2
Virginia	99	49	148	0	0	0	99	49	148
Washington	111	36	147	1	1	2	112	37	149
West Virginia	75	7	82	0	0	0	75	7	82
Wisconsin	140	17	157	#	2	3	140	20	160
Wyoming	#	#	1	2	#	2	2	#	3
Total	7,216	3,253	10,469	145	148	293	7,361	3,402	10,763

Notes: # Indicates > 0 subscribers and less than 500

Non-facilities based carriers have either submitted a compliance plan with the FCC that they are not a facilities-based provider or have been approved to be a non-facilities-based provider by the FCC. Other carriers are assumed to be facilities-based.

Source: Universal Service Administrative Company.

Section 3 – Connect America Fund (High Cost)

Overview – Connect America Fund Program

The federal universal service Connect America Fund program (formerly High-Cost Support) is designed to ensure that consumers in rural, insular, and high-cost areas have access to modern communications networks capable of providing voice and broadband service, both fixed and mobile, at rates that are reasonably comparable to those in urban areas. The program fulfills this universal service goal by allowing eligible carriers who serve these areas to recover some of their costs from the federal USF. In 2011, the Commission adopted the *USF/ICC Transformation Order*, which comprehensively reformed and modernized the high-cost program to support networks capable of providing both voice and broadband services.¹ Among other actions taken in the *USF/ICC Transformation Order*, the Commission adopted a framework, known as the Connect America Fund (CAF).²

For price-cap areas (those areas of the United States and its territories historically served by larger incumbent local exchange carriers (ILEC)), there are several CAF programs: CAF Phase I (completed); CAF Phase II (model-based support), CAF Intercarrier Compensation (CAF ICC), the Rural Broadband Experiments, and the CAF Phase II auction.

For rate-of-return areas (typically the more rural parts of the United States), the Commission established two paths for providers to receive high-cost support for building, supporting and maintaining voice and broadband networks — 1) model-based support as determined by the Alternative Connect America Cost Model (A-CAM) or 2) legacy cost-based mechanisms as reformed to allow support for standalone broadband connections.³ The Commission also created an Alaska Plan to fund voice and broadband services for rate-of-return carriers serving Alaska, due to their unique challenges.⁴

¹ See *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform—Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC 17663 (2011) (*USF/ICC Transformation Order*), *aff'd In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

² See Connect America Fund (CAF) <https://www.fcc.gov/general/connect-america-fund-caf>.

³ See *Connect America Fund; ETC Annual Reports and Certifications; Establishing Just and Reasonable Rates for Local Exchange Carriers; Developing a Unified Intercarrier Compensation Regime; WC Docket Nos. 10-90, 14-58, and 07-135, CC Docket No. 01-92; Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration*, FCC 18-176 (rel. Dec. 12, 2018).

⁴ *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10142, para. 6 (2016) (*Alaska Plan Order*).

As in the 2017 Report, all support dollar values in these tables reflect claims⁵ as opposed to disbursements.⁶ These claims are subject to true-ups. For example, claims for support in 2015 may be trueed-up in 2015; such a true-up is reflected in the year supported (2012), not in the year the true-up was made (2017). Data on changes in local exchange carriers and High-Cost ILEC support data by study area are available at <http://www.fcc.gov/encyclopedia/neca-usac-data-0>. Please note that the information provided in this report is based upon the program rules through June 30, 2018.

⁵ A “claim” is the distribution of funds *in support of a specified time period*. These funds were distributed in that period and possibly a later time period. The disbursements in later time periods are the result of true-ups to resolve differences between initial payments and disbursements necessitated by revisions to supporting data made at that later date. Claims are positive values with the possible exceptions of CAF Inter-carrier Compensation (CAF ICC) support and Connect America Cost Model (CACM) support. CAF ICC claims can be negative when a study area’s actual access recovery charge revenues in the prior two years substantially exceed the forecasted amount. Some CACM initial claims were negative as a result of true-ups when Frozen High Cost support exceeded CACM support.

⁶ A “disbursement” is the distribution of funds in a specified time period. These funds were distributed in support of high-cost mechanisms in that period and possibly in support of earlier time periods. The disbursements in support of earlier time periods are the result of true-ups to resolve differences between initial payments and disbursements necessitated by revisions to supporting data. It is possible for disbursements to be negative, thus requiring the recipient to return dollars to the high-cost fund. Some negative disbursements are penalties (see the file “HC Penalties” in the Supplementary Material). Penalties are not included in claims.

Table 3.1
High-Cost Support Fund Claim History
(in Millions of Dollars)

Year	ACAM Carriers	Legacy Carriers	Rate-of-Return Carriers	Price Cap Carriers	ILEC Total	CETC Total	Total Support
2009	\$0	\$ 1,850	\$ 1,850	\$ 1,183	\$ 3,033	\$ 1,299	\$ 4,331
2010	0	1,928	1,928	1,108	3,036	1,242	4,278
2011	0	1,957	1,957	1,029	2,986	1,156	4,142
2012	0	1,961	1,961	1,202	3,163	967	4,131
2013	0	2,014	2,014	1,346	3,360	782	4,142
2014	0	2,041	2,041	1,121	3,162	608	3,770
2015	0	2,059	2,059	1,849	3,909	615	4,524
2016	0	2,042	2,042	1,848	3,890	675	4,565
2017	730	1,547	2,277	1,793	4,070	645	4,715
2018*	720	1,713	2,433	1,759	4,192	606	4,798

Notes : Details may not appear to add up to totals due to rounding. Data for 2012-2016 were updated to account for true-ups. ACAM is an abbreviation for Alternative Connect America Model. ILEC is an abbreviation for Incumbent Local Exchange Carrier. CETC is an abbreviation for Competitive Eligible Telecommunication Carrier.

* FCC Staff Estimate.

Source : Universal Service Administrative Company filings to the FCC with prior-period adjustments through July 2018.

Table 3.2
High-Cost Support Fund Claim History - Rate of Return
(in Millions of Dollars)

Year	High-Cost Loop Support	Safety Net Additive Support	Safety Valve Support	Local Switching Support	CAF-ICC from ACAM / AK Plan Carriers ²	CAF-ICC from Legacy Carriers ²	Broadband Loop Support ¹	Alternative Connect America Model	Alaska Plan	Total Support
2009	\$ 798	\$ 29	\$ 5	\$ 239	\$ 0	\$ 0	\$ 780	\$ 0	\$ 0	\$ 1,850
2010	817	49	6	226	0	0	830	0	0	1,928
2011	806	65	6	218	0	0	862	0	0	1,957
2012	791	48	6	109	0	168	839	0	0	1,961
2013	767	31	6	0	0	342	868	0	0	2,014
2014	745	28	5	0	0	355	906	0	0	2,041
2015	717	20	5	0	0	377	941	0	0	2,059
2016	691	12	5	0	0	396	939	0	0	2,042
2017	516	4	4	0	149	244	714	591	54	2,277
2018*	572	0	4	0	146	244	828	584	54	2,433

Note : Details may not appear to add up to totals due to rounding. Data for 2012-2016 were updated to account for true-ups.

* FCC Staff Estimate.

¹ Interstate Common Line Support was expanded to include standalone broadband in January 2017 and became Connect America Fund Broadband Loop Support (CAF BLS).

² Intercarrier Compensation was divided into ACAM/AK and Legacy categories.

Source : Universal Service Administrative Company filings to the FCC with prior-period adjustments through July 2018.

Table 3.3
High-Cost Support Fund Claim History - Price Cap
(in Millions of Dollars)

Year	High Cost Loop Support	Safety Net Additive Support	High Cost Model Support	Interstate Access Support	Local Switching Support	Frozen High Cost Support ¹	Intercarrier Compensation Support	Connect America Cost Model	Incremental Support	Interstate Common Line Support	Total Support
2009	\$ 209	\$ 9	\$ 169	\$ 456	\$ 50	\$ 0	\$ 0	\$ 0	\$ 0	\$ 290	\$ 1,183
2010	145	11	156	455	61	0	0	0	0	280	1,108
2011	100	11	145	441	63	0	0	0	0	270	1,029
2012	0	0	0	0	1	1,037	46	0	112	5	1,202
2013	0	0	0	0	0	1,034	90	0	220	2	1,346
2014	0	0	0	0	0	1,035	72	0	11	2	1,121
2015	0	0	0	0	0	641	49	1,159	0	0	1,849
2016	0	0	0	0	0	162	38	1,648	0	0	1,848
2017	0	0	0	0	0	173	30	1,590	0	0	1,793
2018*	0	0	0	0	0	174	22	1,563	0	0	1,759

Note : Details may not appear to add up to totals due to rounding. Data for 2012-2016 were updated to account for true-ups.

* FCC Staff Estimate.

¹ Hurricane support for Puerto Rico and Virgin Islands is included in Frozen High Cost Support.

Table 3.4
High-Cost Support Fund Claim History - Competitive Eligible Telecommunications Carriers
(in Millions of Dollars)

Year	High Cost Loop Support	Safety Net Additive Support	Safety Valve Support	High Cost Model	Interstate Access Support	Local Switching Support	Frozen High Cost Support¹	Remote Alaska Support	Mobility Fund Phase I Support	Rural Broadband Experiments	Interstate Common Line Support	Alaska Plan	Total Support
2009	\$ 391	\$ 14	\$ 0	\$ 159	\$ 110	\$ 100	\$ 0	\$ 0	\$ 0	\$ 0	\$ 524	\$ 0	\$ 1,299
2010	358	17	1	155	94	95	0	0	0	0	521	0	1,242
2011	307	21	2	146	81	90	0	0	0	0	508	0	1,156
2012	7	0	0	0	0	1	889	62	0	0	8	0	967
2013	7	0	0	0	0	1	629	62	74	0	8	0	782
2014	7	0	0	0	0	1	525	63	4	0	8	0	608
2015	2	0	0	0	0	0	513	74	16	8	2	0	615
2016	0	0	0	0	0	0	508	78	85	4	0	0	675
2017	0	0	0	0	0	0	537	0	31	3	0	74	645
2018*	0	0	0	0	0	0	528	0	0	3	0	74	606

Notes : Details may not appear to add up to totals due to rounding. Data for 2012-2016 were updated to account for true-ups.

* FCC Staff Estimate.

¹ Hurricane support for Puerto Rico and Virgin Islands is included in Frozen High Cost Support.

Table 3.5
High-Cost Support Fund Claims - States: 2017
(in Thousands of Dollars)

State	Rate-of-Return Carriers	Price-Cap Carriers	ILEC Total	CETC Total	Total Support	CETC's Share
Alabama	\$ 38,170	\$ 45,347	\$ 83,517	\$ 5,015	\$ 88,532	6 %
Alaska	74,271	19,694	93,965	112,296	206,261	54
American Samoa	1,620	0	1,620	1,586	3,206	49
Arizona	43,384	23,471	66,855	6,012	72,867	8
Arkansas	49,240	61,128	110,368	2,951	113,319	3
California	43,698	101,180	144,879	38	144,917	0
Colorado	22,661	31,769	54,429	8,174	62,604	13
Connecticut	0	447	447	0	447	0
Delaware	0	228	228	0	228	0
Florida	8,548	46,010	54,559	3,143	57,702	5
Georgia	59,772	53,745	113,518	241	113,758	0
Guam	5,407	0	5,407	5,405	10,812	50
Hawaii	0	4,424	4,424	0	4,424	0
Idaho	29,071	14,249	43,320	3,250	46,571	7
Illinois	53,368	51,438	104,805	8,336	113,142	7
Indiana	61,860	51,128	112,988	62	113,050	0
Iowa	105,809	54,628	160,437	30,896	191,333	16
Kansas	110,307	35,965	146,272	20,509	166,781	12
Kentucky	69,518	57,127	126,645	16,227	142,872	11
Louisiana	22,192	41,802	63,994	24,247	88,240	27
Maine	11,838	13,637	25,475	6,661	32,136	21
Maryland	1,280	2,303	3,584	0	3,584	0
Massachusetts	885	1,467	2,353	0	2,353	0
Michigan	38,324	60,513	98,837	4,423	103,260	4
Minnesota	113,716	90,064	203,780	1,939	205,719	1
Mississippi	24,803	67,738	92,541	87,529	180,070	49
Missouri	69,357	92,460	161,817	10,065	171,882	6
Montana	96,670	16,310	112,981	5,206	118,187	4
Nebraska	73,299	23,672	96,971	14,263	111,234	13
Nevada	12,314	4,019	16,333	1,243	17,576	7
New Hampshire	8,058	4,377	12,435	131	12,566	1
New Jersey	570	450	1,020	0	1,020	0
New Mexico	53,977	20,146	74,123	3,818	77,941	5
New York	24,636	30,945	55,581	1,464	57,045	3
North Carolina	38,354	27,070	65,424	1,789	67,213	3
North Dakota	90,176	5,657	95,833	26,276	122,109	22
Northern Mariana Islands	0	2,627	2,627	581	3,209	18
Ohio	23,151	60,763	83,914	0	83,914	0
Oklahoma	111,086	9,835	120,921	26,353	147,274	18
Oregon	46,151	22,967	69,118	11,520	80,638	14
Pennsylvania	16,201	52,717	68,918	741	69,659	1
Puerto Rico	0	54,081	54,081	118,627	172,708	69
Rhode Island	0	30	30	0	30	0
South Carolina	85,921	17,394	103,315	1,579	104,894	2
South Dakota	85,483	9,117	94,600	2,029	96,629	2
Tennessee	51,981	32,199	84,180	668	84,848	1
Texas	164,210	103,409	267,619	9,416	277,035	3
Utah	33,109	4,442	37,551	88	37,639	0
Vermont	10,927	8,789	19,717	0	19,717	0
Virgin Islands	0	24,726	24,726	101	24,827	0
Virginia	34,107	51,082	85,189	1,517	86,706	2
Washington	23,771	37,595	61,366	18,482	79,848	23
West Virginia	10,588	38,068	48,656	8,560	57,216	15
Wisconsin	97,284	95,439	192,723	19,219	211,942	9
Wyoming	25,863	12,901	38,764	12,513	51,277	24
United States	2,276,989	1,792,791	4,069,780	645,191	4,714,970	14

Notes : Details may not appear to add up to totals due to rounding.

Source : Universal Service Administrative Company filings to the FCC with prior-period adjustments through July 2018.

Table 3.6
Annual High-Cost Fund Support Claims - Affiliates: 2015 - 2017
(in Millions of Dollars)

Rank	Affiliate's Name ¹	2015	2016	2017	Total	CETC's Share ²
1	AT&T Inc.	\$ 615	\$ 606	\$ 612	\$ 1,832	27 %
2	CenturyLink, Inc.	573	559	545	1,678	0
3	Frontier Communications Corporation	355	398	361	1,114	0
4	Windstream Holdings, Inc.	232	216	202	649	0
5	Telephone and Data Systems, Inc.	179	199	209	586	53
6	Consolidated Communications, Inc.	94	86	78	258	0
7	GCI Holdings LLC	83	74	85	242	92
8	Verizon Communications Inc. ³	80	80	80	239	27
9	América Móvil	63	63	95	221	43
10	Telapex, Inc. ⁴	51	51	54	157	88
11	Golden West Telecommunications Cooperative, Inc.	26	30	30	86	0
12	Deutsche Telekom AG	21	36	29	85	100
13	Rural Telephone Service/Golden Belt	28	26	31	85	40
14	Triangle Telephone Cooperative Assn., Inc.	25	26	25	76	0
15	ATN International, Inc.	18	31	26	74	23

¹ This column refers to "affiliate name" rather than "holding company" so as to include all entities under common ownership or control, to the extent this information is readily available to the Commission. In most cases, the "affiliate name" is reported by the entity or entities in FCC Form 477. Affiliate groups appear on this list if they are in the top 10 for any of the presented years.

² In the *USF/ICC Transformation Order*, the Commission eliminated the rule providing identical support to CETCs, determining the rule did not provide an "appropriate level of support for the efficient deployment of mobile services in areas that do not support a private business case for mobile voice and broadband." *Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking*, 26 FCC Red 17666, 17851-59, para. 502 (2011), *aff'd* In re: FCC 11-161, 753 F.3d 1015 (10th Cir. 2014). The Commission, however, transitioned the elimination of that support over five years, beginning on July 1, 2012. *See USF/ICC Transformation Order*, 26 FCC Red at 17853, para. 513. This phase down of support for competitive ETCs was halted at 40 percent on June 30, 2014 under the terms adopted in the *USF/ICC Transformation Order* because the Mobility Fund Phase II is not yet operational. *See id.* at 17832, para. 519.

³ Verizon Wireless and Sprint Nextel, in separate transactions in 2008, each committed to phase down their CETC high-cost universal service support in 20 percent increments over five years, beginning in 2009. These commitments were not implemented until the Commission released an Order on August 31, 2010 providing guidance to the Universal Service Administrative Company regarding the methodology to achieve those commitments. *See High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, Request for Review of Decision of Universal Service Administrator by Corr Wireless Communications, LLC, WC Docket No. 05-337, CC Docket No. 96-45, Order and Notice of Proposed Rulemaking*, 25 FCC Red 12854 (2010). To the extent that Verizon Wireless received support prior to the August 31, 2010 Order that should have been surrendered under its commitment, USAC reclaimed that support in 2010 and 2011.

⁴ Telapex, Inc. owns C Spire Wireless.

Source: Universal Service Administrative Company.

Table 3.7
High-Cost Support Fund Claims - Affiliates: 2017
(in Millions of Dollars)

Rank	Affiliate's Name ¹	Rate-of-Return Carriers	Price-Cap Carriers	ILEC Support	CETC Support	Total Support	CETC's Share ²
1	AT&T Inc.	\$ 0	\$ 439	\$ 439	\$ 173	\$ 612	28 %
2	CenturyLink, Inc.	0	545	545	0	545	0
3	Frontier Communications Corporation	0	361	361	0	361	0
4	Telephone and Data Systems, Inc.	113	0	113	95	209	46
5	Windstream Holdings, Inc.	0	202	202	0	202	0
6	América Móvil	0	54	54	41	95	43
7	GCI Holdings LLC	6	0	6	80	85	93
8	Verizon Communications Inc.	0	58	58	22	80	27
9	Consolidated Communications, Inc.	0	78	78	0	78	0
10	Telapex, Inc.	8	0	8	46	54	84
11	Pioneer Telephone Cooperative (OK)	25	0	25	9	34	26
12	LICT Corporation	31	0	31	0	31	0
13	Rural Telephone Service/Golden Belt	19	0	19	11	31	37
14	Golden West Telecommunications Cooperative, Inc.	30	0	30	0	30	0
15	Deutsche Telekom AG	0	0	0	29	29	100
16	ATN International, Inc.	0	25	25	1	26	5
17	Arvig Enterprises, Inc.	26	0	26	0	26	0
18	Triangle Telephone Cooperative Assn., Inc.	25	0	25	0	25	0
19	Hargray Communications Group, Inc.	21	0	21	0	21	0
20	American Broadband Communications et al.	20	0	20	1	21	4
21	Copper Valley Telephone Cooperative	12	0	12	9	21	42
22	Matanuska Telephone Association, Inc.	20	0	20	0	20	1
23	Great Plains Communications, Inc.	20	0	20	0	20	0
24	Nemont Telephone Cooperative, Inc.	16	0	16	4	20	21
25	Alaska Communications Systems Holdings, Inc.	0	20	20	0	20	0

Notes : Details may not add up due to rounding.

¹ This column refers to “affiliate name” rather than “holding company” so as to include all entities under common ownership or control, to the extent this information is readily available to the Commission. In most cases, the “affiliate name” is reported by the entity or entities in FCC Form 477.

² See Table 3.6 n.2.

Source : Universal Service Administrative Company filings to the FCC with prior-period adjustments through July 2018.

Section 4 – E-Rate (Schools and Libraries)

Overview – Schools and Libraries Program

The Schools and Libraries universal service support program, commonly known as the E-Rate program, helps schools and libraries obtain affordable broadband Internet access, internal network connections, and telecommunications services.

Eligible schools, school districts and libraries may apply individually or as part of a consortium. Funding may be requested under two categories of eligible services: category one services to a school or library (e.g., data transmission services and Internet access), and category two services that deliver Internet access within schools and libraries (e.g., internal connections, basic maintenance of internal connections, and managed internal broadband services). Discounts for support depend on the level of poverty, as calculated by eligibility for a free or reduced price lunch or other federally-approved alternative mechanism, and whether the school or library is located in an urban or rural area. The discounts range from 20 percent to 90 percent of the costs of eligible services. E-Rate program funding is based on demand up to an annual Commission-established cap, which is \$4.06 billion for 2018 and is adjusted annually for inflation.

The E-Rate program is administered by the Universal Service Administrative Company (USAC) under the direction of the FCC. Specifically, USAC is responsible for processing the applications for support, confirming eligibility, and reimbursing service providers and eligible schools and libraries for the discounted services. USAC also ensures that the applicants and service providers comply with the E-Rate rules and procedures established by the FCC.

Additional information about the Schools and Library program can be found on the Commission's website at <http://www.fcc.gov/encyclopedia/e-rate-schools-libraries-usf-program> and on USAC's website at <http://www.usac.org/sl/>.

Table 4.1
Schools and Libraries Funding Commitments and Disbursements
by Applicant Type and Year
(in Thousands of Dollars)

Year	Funding Commitments						Funding Disbursements					
	Total Commitments	Libraries ¹	Schools	School Districts	Statewide Contract ²	Other Consortia	Total Disbursements	Libraries ¹	Schools	School Districts	Statewide Contract ²	Other Consortia
1998	\$1,699,124	\$65,988	\$110,701	\$1,288,420	\$0	\$234,015	\$1,398,980	\$49,883	\$83,265	\$1,069,742	\$0	\$196,090
1999	2,147,991	66,165	180,741	1,598,383	0	302,701	1,650,002	47,457	140,129	1,265,896	0	196,521
2000	2,078,759	65,879	110,839	1,692,230	0	209,810	1,647,003	43,566	88,513	1,384,103	0	130,821
2001	2,170,240	57,819	164,553	1,733,379	0	214,490	1,695,696	42,052	117,475	1,400,501	0	135,668
2002	2,114,423	62,925	165,637	1,635,926	0	249,935	1,595,826	42,697	106,197	1,284,333	0	162,599
2003	2,522,028	63,302	199,555	1,998,120	0	261,051	1,937,525	44,467	136,108	1,584,476	0	172,475
2004	2,032,947	54,296	158,686	1,566,744	0	253,221	1,535,317	39,776	107,120	1,208,889	0	179,532
2005	2,007,269	54,498	152,740	1,585,324	0	214,708	1,623,663	48,598	111,851	1,285,373	0	177,840
2006	1,948,405	59,711	129,477	1,498,871	0	260,346	1,566,529	46,138	96,193	1,220,610	0	203,587
2007	2,356,315	60,628	174,759	1,877,346	0	243,582	1,953,343	47,964	135,868	1,561,244	0	208,267
2008	2,375,489	75,771	150,719	1,889,981	0	259,017	1,923,647	58,103	114,132	1,529,977	0	221,436
2009	2,807,065	84,709	195,343	2,262,188	0	264,825	2,325,285	69,201	154,079	1,875,517	0	226,488
2010	2,998,984	91,252	211,174	2,412,616	0	283,942	2,441,398	71,886	156,944	1,972,451	0	240,117
2011	2,669,381	95,122	218,118	2,042,432	0	313,708	2,143,773	73,128	162,119	1,659,621	0	248,905
2012	2,952,180	96,432	288,228	2,267,790	12,130	287,600	2,319,980	77,685	205,810	1,789,874	8,790	237,822
2013	2,199,444	91,579	134,826	1,668,199	20,209	284,631	1,753,426	75,329	97,674	1,342,021	10,809	227,593
2014	2,345,768	93,646	159,037	1,773,793	38,370	280,922	1,845,054	78,921	115,122	1,400,569	27,445	222,997
2015	3,265,939	108,890	182,398	2,622,884	24,848	326,919	2,730,390	90,817	132,299	2,226,508	23,889	256,876
2016	2,889,737	99,335	121,634	2,228,605	0	440,162	2,191,619	81,494	94,791	1,765,364	0	249,970
2017	2,314,243	87,161	117,588	1,801,874	0	307,620	1,005,895	38,554	52,697	842,015	0	72,629

Note : Activity through June 30, 2018. Funding Year 2018 commitment and disbursement information have not been displayed because only a small fraction of commitments (and no disbursements) have been made for that funding year. A substantial amount of commitments and disbursements for funding year 2018 will be made. Also, because of the appeals process, funding commitments and disbursements can be made after the end of the program year. Disbursements may also continue beyond the end of the program year in the event of delayed internal connections installation. Other adjustments and corrections may also be made.

¹ Starting in fund year 2016, Libraries includes both Library and Library System applicants.

Source : Universal Service Administrative Company

² Starting January 2011, applicants could designate their consortium as a statewide entity if the application encompassed all public schools, private schools and/or all public libraries in the state. See http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-10-2218A1.pdf. In 2016, applicants filing as a consortium, school district, and library system could designate their sub-type as a statewide entity. These applicant's commitments and disbursements are included within their primary applicant type column and are not included in the Statewide Contract column.

Table 4.2
Schools and Libraries Funding Commitments and Disbursements from Program Inception through June 30, 2018
by State and Applicant Type
(in Thousands of Dollars)

State/Territory	Library/Library Consortium		Schools		School Districts		Statewide Contracts		Other Consortium		Totals	
	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed
Alabama	\$15,280	\$11,956	\$21,085	\$15,538	\$679,231	\$569,088	\$86	\$1	\$109,178	\$81,590	\$824,860	\$678,173
Alaska	12,045	9,041	5,443	4,184	757,578	591,341	0	0	27,136	19,398	802,203	623,964
American Samoa	0	0	0	0	4,343	1,843	0	0	38,344	31,121	42,687	32,964
Arizona	26,688	26,512	164,606	110,481	1,042,780	761,444	0	0	39,003	18,698	1,273,076	917,135
Arkansas	8,416	6,383	9,299	7,601	308,194	229,470	25,836	17,082	195,221	103,678	546,965	364,214
California	131,506	86,134	319,287	218,086	6,394,574	4,768,233	106	51	325,308	203,092	7,170,781	5,275,595
Colorado	16,845	11,957	24,264	17,323	426,042	319,948	0	0	28,869	20,211	496,021	369,439
Connecticut	7,519	5,210	52,775	37,246	311,410	250,583	0	0	115,339	97,228	487,043	390,267
Delaware	1,386	1,185	3,881	2,730	22,145	18,280	2,246	2,246	25,220	17,915	54,879	42,356
District of Columbia	11,165	6,355	30,614	19,287	187,457	122,945	0	0	17,947	8,599	247,184	157,187
Florida	68,033	50,525	177,926	129,120	1,380,290	1,105,804	0	0	113,204	88,872	1,739,453	1,374,321
Georgia	100,679	82,259	40,580	32,366	1,308,270	1,045,726	4,411	4,328	192,438	165,102	1,646,377	1,329,780
Guam	171	42	269	138	29,704	21,471	0	0	0	0	30,144	21,652
Hawaii	2,760	1,594	60,932	30,743	51,887	32,244	3,128	2,381	1,223	834	119,929	67,796
Idaho	5,814	4,432	9,165	5,679	129,242	96,435	0	0	1,490	13,890	145,711	120,437
Illinois	46,085	34,009	152,554	112,536	1,851,908	1,405,464	0	0	76,739	55,301	2,127,287	1,607,309
Indiana	73,115	54,076	43,376	30,653	608,957	466,762	0	0	96,691	44,164	822,139	595,655
Iowa	4,970	3,310	16,545	11,826	193,517	137,077	0	0	82,744	69,067	297,776	221,280
Kansas	14,069	10,850	11,383	7,976	316,878	246,004	0	0	24,302	19,556	366,632	284,386
Kentucky	22,146	15,894	8,059	5,254	620,668	458,982	0	0	202,087	103,130	852,961	583,261
Louisiana	75,090	60,370	62,230	44,788	854,276	703,208	0	0	34,648	25,745	1,026,245	834,110
Maine	1,635	1,225	16,286	11,962	68,886	48,532	0	0	67,398	60,938	154,205	122,657
Maryland	20,109	14,773	32,150	21,189	399,821	291,794	0	0	34,025	25,129	486,105	352,885
Massachusetts	43,385	30,556	71,686	51,563	531,310	413,753	11	0	54,499	28,803	700,891	524,675
Michigan	42,197	31,979	67,685	44,911	904,777	685,473	0	0	171,963	133,608	1,186,623	895,972
Minnesota	32,137	25,390	49,958	33,218	347,782	262,031	0	0	143,432	122,799	573,309	443,439
Mississippi	46,454	28,273	20,820	14,996	523,049	397,345	144	105	114,134	80,872	704,600	521,591
Missouri	24,549	20,306	50,163	36,753	574,611	449,740	0	0	224,783	149,709	874,106	656,507
Montana	1,741	1,223	5,263	3,854	92,645	73,405	0	0	609	448	100,258	78,930
Nebraska	4,892	3,738	9,159	7,048	145,715	121,571	0	0	34,669	31,460	194,434	163,817
Nevada	4,946	3,275	9,056	5,850	134,896	92,513	0	0	0	0	148,898	101,638
New Hampshire	395	219	8,474	5,972	47,484	33,248	0	0	1,831	1,402	58,185	40,841
New Jersey	33,986	23,389	151,457	104,327	1,054,247	759,985	0	0	19,644	13,149	1,259,333	900,850
New Mexico	7,049	4,047	84,520	59,042	581,069	426,511	0	0	142,009	59,370	814,648	548,970
New York	215,697	151,712	634,207	456,560	2,585,417	2,073,456	0	0	620,693	458,484	4,056,014	3,140,212
North Carolina	35,903	28,655	50,503	37,626	1,120,965	925,061	23,594	22,755	79,928	60,893	1,310,892	1,074,990
North Dakota	206	156	10,173	7,648	30,360	22,631	0	0	44,766	37,143	85,505	67,577
Northern Mariana Isl.	245	170	186	161	20,301	16,580	0	0	0	0	20,733	16,911
Ohio	62,807	49,783	156,321	111,790	1,267,364	981,672	0	0	93,997	77,038	1,580,489	1,220,283
Oklahoma	45,200	35,930	50,471	35,728	965,779	752,392	0	0	14,273	5,343	1,075,723	829,393
Oregon	7,038	4,403	12,807	9,039	279,432	220,456	0	0	46,459	28,038	345,736	261,936
Pennsylvania	50,743	41,134	185,872	124,708	1,123,938	929,896	0	0	176,949	146,655	1,537,503	1,242,393
Puerto Rico	82,737	44,855	103,882	70,372	272,596	190,066	0	0	117,405	58,769	576,620	364,061
Rhode Island	2,316	1,808	9,602	7,099	82,088	62,161	19	19	47,233	44,271	141,258	115,359
South Carolina	8,127	5,590	27,732	18,437	549,403	423,230	0	0	313,239	263,017	898,500	710,275
South Dakota	582	255	22,958	16,921	49,340	35,410	2,745	2,553	40,963	27,264	116,587	82,404
Tennessee	22,342	15,794	20,024	15,808	941,593	681,972	0	0	237,113	193,800	1,221,073	907,374
Texas	63,161	42,064	195,061	147,384	4,401,536	3,448,875	0	0	220,599	142,942	4,880,358	3,781,265
Utah	2,464	1,229	5,588	3,374	109,055	85,385	0	0	275,382	161,456	392,489	251,444
Vermont	1,100	672	15,448	9,661	38,992	27,381	0	0	2,441	1,773	57,982	39,486
Virgin Islands	431	222	14,633	11,112	10,665	9,412	3,429	3,044	64,469	57,585	93,627	81,376
Virginia	37,025	28,838	28,592	22,479	649,266	519,737	0	0	14,813	13,153	729,695	584,207
Washington	35,799	27,574	21,043	15,887	475,039	361,418	78	78	93,723	72,736	625,683	477,692
West Virginia	4,664	3,593	3,971	2,295	212,932	151,903	19,735	9,892	64,817	49,725	306,118	217,409
Wisconsin	16,624	12,337	53,121	36,474	420,110	319,870	0	0	182,431	146,388	672,285	515,070
Wyoming	666	458	4,921	3,582	30,516	21,867	9,990	6,395	35,850	26,878	81,944	59,180
Totals	\$1,603,137	\$1,167,717	\$3,418,069	\$2,408,385	\$38,522,332	\$29,669,083	\$95,557	\$70,932	\$5,543,669	\$3,968,234	\$49,182,763	\$37,284,350

Note: Activity through June 30, 2018. Unlike in Table 4.1, all commitments and disbursements have been included, including those in funding year 2018. Because of the appeals process, funding commitments and disbursements can be made after the end of the program year. Also, disbursements may continue beyond the end of the program year in the event of delayed internal connections installation. Other adjustments and corrections may also be made.

Source: Universal Service Administrative Company

Section 5 – Rural Health Care

Overview – Rural Health Care Program

The Rural Health Care (RHC) Program provides funding to eligible public or non-profit health care providers for broadband and telecommunications services necessary for the provision of health care. The goal of the program is to improve the quality of health care available to patients in rural communities by ensuring that eligible public or non-profit health care providers have access to broadband and telecommunications services. RHC Program support is provided on a funding year basis. Funding years run from July 1 through June 30 of the subsequent year. Beginning in funding year (FY) 2017, funding for the RHC Program is capped at \$571 million and annually adjusted for inflation beginning in FY2018. Prior to FY2017, the RHC Program cap was \$400 million. The RHC Program is administered by the Universal Service Fund (USF) administrator, the Universal Service Administrative Company (USAC), under the direction of the Commission.

The RHC Program provides funding through two programs: the Telecommunications (Telecom) Program and the Healthcare Connect Fund Program. The Telecom Program, established in 1997, ensures that rural health care providers pay no more than their urban counterparts for telecommunications services. Specifically, an applicant's program support is based on the difference between rural rates charged for telecommunications services in the rural areas where the health care provider is located, and the urban rates charged for similar telecommunications services in the State. The rural health care provider pays only the urban rate for the telecommunications service, and the USF pays the difference between the urban rate and rural rate for the service to the service provider – in effect, providing a discount to the health care provider in the amount of the “rural-urban differential.” The Healthcare Connect Fund Program, established in 2012, provides a flat 65% discount on an array of communications services to both individual rural health care provider and consortia, which can include non-rural health care providers (if the consortium has a majority of rural sites). These services include Internet access, dark fiber, business data, traditional DSL, and private carriage services. With the Healthcare Connect Fund Program, the Commission intended to promote the use of broadband services and facilitate the formation of healthcare provider consortia recognizing the increasing need for rural health care providers to have access to specialists who are often located in urban areas, as well as the advent of certain communications-based trends in healthcare delivery, such as the move towards electronic health records.

Additional information about the RHC Program can be found on the Commission's website at <http://www.fcc.gov/encyclopedia/rural-health-care> and on USAC's website at <http://www.usac.org/rhc/>.

Table 5.1
Rural Health Care Funding Commitments and Disbursements by Program and Year
(in Thousands of Dollars)

Funding year	Telecommunications and Internet Access Program		Pilot		Healthcare Connect		Totals	
	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed
1998	\$ 3,388	\$ 3,369	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,388	\$ 3,369
1999	4,653	4,291	0	0	0	0	4,653	4,291
2000	10,711	10,196	0	0	0	0	10,711	10,196
2001	19,582	18,477	0	0	0	0	19,582	18,477
2002	23,344	21,366	0	0	0	0	23,344	21,366
2003	27,908	25,726	0	0	0	0	27,908	25,726
2004	32,128	30,962	0	0	0	0	32,128	30,962
2005	40,742	39,999	0	0	0	0	40,742	39,999
2006	45,989	45,092	0	0	0	0	45,989	45,092
2007	56,210	54,818	467	467	0	0	56,677	55,285
2008	67,765	66,661	14,734	14,300	0	0	82,499	80,961
2009	72,828	71,439	350,702	281,372	0	0	423,531	352,810
2010	92,053	87,326	0	0	0	0	92,053	87,326
2011	104,360	101,291	0	0	0	0	104,360	101,291
2012	117,236	116,940	0	0	0	0	117,236	116,940
2013	133,412	128,663	0	0	47,703	45,664	181,115	174,327
2014	137,167	135,257	0	0	95,183	88,930	232,350	224,187
2015	184,569	168,500	0	0	117,081	95,556	301,650	264,057
2016	193,819	175,130	0	0	146,276	90,693	340,095	265,823
2017	51,781	20,995	0	0	171,432	30,008	223,213	51,003

Note : Activity through June 30, 2018. Funding Year 2018 commitment and disbursement information has not been displayed because by June 30, the data cutoff date for this report, no commitments or disbursements for funding year 2018 were made during that time. However, we anticipate that a substantial amount of commitments and disbursements for funding year 2018 will be made. Also, because of the appeals process, funding commitments and disbursements can be made after the end of the program year. Disbursements may also continue beyond the end of the program year in the event of delayed internal connections installation. Other adjustments and corrections may also be made.

Source : USAC data.

Table 5.2
Rural Health Care Funding Commitments and Disbursements from Program Inception through June 30, 2018
by State and Program
(in Thousands of Dollars)

State	Telecommunications and Internet Access Program		Pilot		Healthcare Connect		Totals	
	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed	Funds Committed	Funds Disbursed
Alabama	\$ 11,718	\$ 9,391	\$ 2,749	\$ 2,746	\$ 5,245	\$ 3,490	\$ 19,712	\$ 15,628
Alaska	727,890	698,686	1,882	209	1,875	795	731,646	699,690
American Samoa	1,512	1,419	0	0	0	0	1,512	1,419
Arizona	29,320	26,651	7,506	5,637	6,664	4,543	43,491	36,831
Arkansas	19,766	18,067	4,218	4,132	30,049	19,026	54,033	41,225
California	49,596	46,965	22,903	11,136	55,404	34,661	127,903	92,761
Colorado	4,209	3,767	10,870	10,702	31,712	22,710	46,791	37,179
Connecticut	12	12	0	0	3,219	922	3,231	934
Delaware	1	1	0	0	53	19	54	20
District of Columbia	18	8	0	0	0	0	18	8
Florida	6,212	5,733	63	63	11,391	8,641	17,666	14,437
Georgia	38,875	35,968	2,233	2,166	13,856	10,092	54,964	48,225
Guam	767	762	89	83	171	133	1,027	979
Hawaii	2,435	2,376	4,653	2,100	277	126	7,365	4,602
Idaho	7,420	6,808	0	0	4,545	2,534	11,966	9,342
Illinois	19,495	18,310	21,071	21,070	14,555	8,618	55,121	47,998
Indiana	9,787	7,386	15,458	12,800	37,921	17,608	63,167	37,794
Iowa	7,291	6,752	17,368	17,291	13,687	8,492	38,346	32,535
Kansas	10,198	9,429	0	0	12,316	7,511	22,514	16,940
Kentucky	15,909	14,221	2,945	913	16,700	9,886	35,555	25,019
Louisiana	8,847	8,105	15,570	375	4,726	3,076	29,144	11,556
Maine	595	488	12,957	12,639	6,775	2,613	20,327	15,740
Maryland	232	161	0	0	1,128	799	1,360	961
Massachusetts	948	945	0	0	3,115	2,026	4,063	2,971
Michigan	21,776	19,947	19,449	19,230	14,985	8,895	56,210	48,073
Minnesota	34,626	32,478	5,714	5,297	10,059	5,597	50,399	43,371
Mississippi	31,556	28,255	0	0	8,465	4,957	40,021	33,213
Missouri	18,358	16,289	2,538	2,193	11,575	7,875	32,471	26,357
Montana	11,479	10,922	15,413	14,756	3,505	2,066	30,397	27,744
Nebraska	22,425	20,911	18,010	18,010	12,264	6,642	52,699	45,562
Nevada	3,059	2,960	0	0	799	599	3,859	3,558
New Hampshire	234	224	6,400	6,335	3,941	1,589	10,575	8,148
New Jersey	0	0	0	0	93	57	93	57
New Mexico	11,490	10,479	11,770	11,029	7,365	5,122	30,625	26,630
New York	2,309	1,979	15,492	14,681	17,498	11,721	35,299	28,380
North Carolina	8,307	7,473	12,169	12,115	25,443	15,527	45,918	35,115
North Dakota	15,112	14,370	912	835	4,675	2,871	20,700	18,076
Northern Mariana Islands	43	21	46	44	0	0	89	65
Ohio	8,476	7,302	27,209	26,478	12,653	7,728	48,338	41,509
Oklahoma	30,523	29,152	0	0	20,278	12,892	50,801	42,045
Oregon	3,810	3,540	18,130	17,129	17,531	12,330	39,471	32,998
Pennsylvania	1,602	1,439	6,793	6,035	13,026	9,648	21,421	17,123
Puerto Rico	0	0	0	0	92	87	92	87
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	3,571	1,195	8,763	8,282	14,883	9,423	27,217	18,900
South Dakota	10,728	10,495	4,585	4,482	6,575	3,891	21,888	18,868
Tennessee	13,820	12,796	6,834	0	6,011	3,707	26,665	16,504
Texas	68,166	58,162	15,250	0	33,843	15,215	117,259	73,377
Utah	9,566	8,550	8,815	8,176	2,819	1,854	21,200	18,580
Vermont	899	777	6,078	6,047	2,261	864	9,239	7,688
Virgin Islands	852	846	0	0	0	0	852	846
Virginia	25,593	22,703	2,698	1,965	9,053	6,261	37,344	30,930
Washington	3,047	2,717	118	117	9,844	4,173	13,009	7,007
West Virginia	5,912	4,556	7,070	5,751	3,972	2,479	16,954	12,787
Wisconsin	75,999	70,467	2,312	2,303	27,501	17,477	105,812	90,247
Wyoming	3,254	3,083	797	784	1,282	984	5,333	4,852
Totals	\$ 1,419,645	\$ 1,326,499	\$ 365,903	\$ 296,139	\$ 577,675	\$ 350,851	\$ 2,363,223	\$ 1,973,489

Note: Disbursements through June 30, 2018. Unlike in Table 5.1, all commitments and disbursements (if any) have been included, including those in funding year 2018. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data.

Section 6 – Subscribership

Overview – Subscribership: Voice & Internet

Continuing analysis of telephone subscribership statistics allows one to examine the aggregate effects of Commission actions and industry evolution on households' decisions to maintain, acquire or drop telephone service. In addition to telephone subscribership statistics, recent surveys by the Census Bureau now also provide information about the subscribership of high-speed Internet services. Starting in 2016, this section includes telephone and internet expense statistics for lower income households. Starting in 2017, this section includes fixed broadband deployment and subscription information for ILECs. This chapter presents comprehensive data on telephone subscribership and expense statistics and information collected by the Bureau of the Census, the Bureau of Labor Statistics, and the FCC primarily through the American Community Survey (ACS), the Current Population Survey (CPS), the Consumer Expenditures Survey (CE), and FCC Form 477. The chapter also provides national and state-level estimates of high-speed Internet adoption based on the ACS. Along with telephone and high-speed Internet subscribership statistics for the nation and each of the states, data are provided on subscribership for various demographics. For telephone service, particular attention is given to subscribership and expenses for lower income households given the Commission's various low-income programs such as Lifeline.

To provide regular, high-quality data on telephone subscribership, the Commission requested that the Census Bureau include questions on telephone availability as part of its CPS, which monitors demographic trends between decennial censuses. The CPS is a staggered panel survey in which the people residing at particular addresses are included in the survey for four consecutive months in one year and the same four months in the following year. Use of the CPS has several advantages: it is conducted every month by an independent and expert agency, the sample is large, and the questions are consistent. Thus, changes in the results can be compared over time with a reasonable degree of confidence.

In addition to the CPS, the ACS also provides data for calculating a measure of telephone subscribership. The ACS replaced the decennial census long form and thus also provides a wealth of data and large sample sizes, though on a less frequent basis than the CPS. Whereas the CPS reports household subscribership, the ACS follows the design of past decennial censuses and reports telephone subscribership for occupied housing units. In this chapter, subscribership measures from the CPS, the ACS, and decennial censuses (prior to the ACS) are reported as complements to each other.¹

While the ACS provides telephone subscribership data, the ACS now also provides data for calculating high-speed Internet subscribership. Specifically, the ACS for the first time in 2013 asked whether households have access to the Internet. The ACS asks, "At this house, apartment, or mobile home – do you or any member of this household access the Internet?" Statistics based on 2016 data from the ACS on high-speed Internet subscribership has been incorporated into this report. Since the ACS is conducted throughout the year, a 1-year average is calculated using the data.

¹ Subscribership statistics derived from the CPS cannot be directly compared with the subscribership estimates based on the responses to the long forms of the 1990 and 2000 decennial censuses or the ACS. This is due to differences in sampling techniques and survey methodologies as well as differences in the context in which the questions are asked. For example, the 2013 ACS reported 97.7% of all occupied housing units in the United States had telephone service available, whereas the March 2013 CPS data showed a household subscribership of 96.0%. This difference is statistically significant and may indicate that the CPS value is on the low side and the ACS value is on the high side, with the most probable value lying somewhere in between.

The specific questions regarding telephone availability asked in the CPS are: “Does this house, apartment, or mobile home have telephone service from which you can both make and receive calls? Please include cell phones, regular phones, and any other type of telephone.” And, if the answer to the first question is “no,” this is followed up with: “Is there a telephone elsewhere on which people in this household can be called?” If the answer to the first question is “yes,” the household is counted as having a telephone “in unit.” If the answer to either the first or second question is “yes,” the household is counted as having a telephone “available.” In contrast to the CPS, the ACS simply asks: “Does this house, apartment, or mobile home have telephone service from which you can both make and receive calls? Include cell phones.” Thus, the ACS question is most similar to the CPS’s “in unit” subscribership rather than “available”.

Although the CPS is conducted every month, not all questions are asked every month. The telephone questions are asked once every four months. The changes in the CPS estimates reflect changes over the preceding four months. Aggregated summaries of the responses are reported to the Commission, based on the surveys conducted through March, July, and November of each year. The ACS provides annual telephone subscribership statistics based on data collected monthly throughout the year.

The CPS data are based on a nationwide sample of about 50 to 60 thousand households in the 50 states and the District of Columbia. The CPS does not cover outlying areas that are not states, such as Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Northern Mariana Islands.² The ACS form is sent to approximately 250 thousand addresses per month, for a total of about 3 million addresses per year. The ACS covers the states, the District of Columbia, and Puerto Rico.

The questions and answer categories used to collect ACS data on computer and internet use were revised in 2016. The changes in high-speed internet subscribership may be due to the revised wording and improved measurement, rather than a result of changes in the internet use.

² Annual data for Puerto Rico have been available from the ACS starting with 2005. The percentage of occupied housing units with voice service for the last five years of available data are reported in Table 6.6.

Table 6.1
Household Voice Subscribership in the United States, 1983 - 2018

Month	Year	Households (millions)	Households with a Telephone in Unit (millions)	Percentage with Telephone in Unit	Households without a Telephone in Unit (millions)	Percentage without Telephone in Unit
November	1983	85.8	78.4	91.4	7.4	8.6
November	1984	87.4	79.9	91.4	7.5	8.6
November	1985	88.8	81.6	91.9	7.2	8.1
November	1986	89.9	83.1	92.4	6.8	7.6
November	1987	91.3	84.3	92.3	7.0	7.7
November	1988	92.6	85.7	92.5	6.9	7.5
November	1989	93.9	87.3	93.0	6.6	7.0
November	1990	94.7	88.4	93.3	6.3	6.7
November	1991	95.7	89.4	93.4	6.3	6.6
November	1992	97.0	91.0	93.8	6.0	6.2
November	1993	98.8	93.0	94.2	5.8	5.8
November	1994	99.8	93.7	93.8	6.2	6.2
November	1995	100.4	94.2	93.9	6.2	6.1
November	1996	101.3	95.1	93.9	6.2	6.1
November	1997	102.8	96.5	93.8	6.3	6.2
November	1998	104.1	98.0	94.2	6.1	5.8
November	1999	105.4	99.1	94.1	6.3	5.9
November	2000	106.5	100.2	94.1	6.3	5.9
November	2001	107.7	102.2	94.9	5.5	5.1
November	2002	109.0	104.0	95.3	5.1	4.7
November	2003	113.1	107.1	94.7	6.0	5.3
November	2004	113.8	106.4	93.5	7.4	6.5
November	2005	115.2	107.0	92.9	8.2	7.1
November	2006	116.4	108.8	93.4	7.6	6.6
November	2007	118.2	112.2	94.9	6.0	5.1
November	2008	118.6	112.7	95.0	5.9	5.0
November	2009	119.2	114.0	95.7	5.1	4.3
March	2010	118.3	113.6	96.0	4.7	4.0
July	2010	118.3	113.5	96.0	4.8	4.0
November	2010	119.4	114.0	95.5	5.4	4.5
March	2011	119.8	114.9	95.9	4.9	4.1
July	2011	119.3	114.1	95.6	5.2	4.4
November	2011	119.7	114.4	95.6	5.3	4.4
March	2012	121.9	117.0	96.0	4.9	4.0
July	2012	121.7	117.0	96.1	4.7	3.9
November	2012	122.0	116.9	95.8	5.1	4.2
March	2013	123.3	118.3	96.0	5.0	4.0
July	2013	123.1	118.3	96.1	4.8	3.9
November	2013	123.7	118.4	95.7	5.3	4.3
March	2014	124.2	119.5	96.3	4.7	3.7
July	2014	123.9	119.0	96.0	4.9	4.0
November	2014	124.8	119.9	96.1	4.9	3.9
March	2015	125.5	121.1	96.5	4.4	3.5
July	2015	125.8	121.7	96.3	4.1	3.5
November	2015	126.1	122.2	96.3	3.9	3.1
March	2016	127.2	122.7	96.5	4.5	3.5
July	2016	127.0	122.4	96.4	4.6	3.6
November	2016	127.3	122.6	96.3	4.7	3.7
March	2017	127.4	122.6	96.2	4.8	3.8
July	2017	127.5	122.9	96.4	4.6	3.6
November	2017	127.5	122.1	95.8	5.4	4.2
March	2018	128.8	124.2	96.4	4.6	3.6
July	2018	129.1	123.9	96.0	5.2	4.0

Source: United States Census Bureau, Current Population Survey

Table 6.2
Household Voice Subscription by Income, 1997-2018
(in 1984 Dollars)

	\$9,999 or Less	\$10,000 - \$19,000	\$20,000 - \$29,999	\$30,000 - \$39,999	\$40,000 or Greater	All Households
1997	86.0	93.0	96.5	97.6	98.2	94.0
1998	85.7	93.7	96.1	97.4	98.2	94.1
1999	85.5	92.9	96.0	97.2	98.2	94.0
2000	87.5	93.3	96.1	97.3	98.0	94.5
2001	87.6	93.4	95.9	97.1	97.8	94.4
2002	89.1	94.3	96.9	98.1	98.8	95.5
2003	89.2	94.6	97.0	98.1	98.8	95.5
2004	88.0	93.2	95.3	96.7	97.7	94.2
2005	86.4	91.2	94.1	95.2	96.0	92.5
2006	86.3	91.8	94.4	95.4	96.5	92.9
2007	88.4	94.1	95.9	96.8	97.9	94.6
2008	89.7	94.3	96.2	97.4	98.3	95.2
2009	90.4	95.2	96.6	97.3	98.3	95.6
2010	91.9	95.8	96.9	97.7	98.6	96.1
2011	91.5	95.9	96.8	97.8	98.3	95.9
2012	92.0	95.3	96.9	97.8	98.3	95.9
2013	92.6	95.6	97.0	97.2	98.3	96.0
2014	93.1	95.9	96.7	97.9	98.2	96.3
2015	93.2	96.0	97.1	97.7	98.1	96.4
2016	93.2	96.4	97.0	97.6	98.0	96.4
2017	93.1	96.1	96.8	97.5	97.8	96.3
2018	92.9	96.3	97.1	97.5	97.6	96.3

Note : Income groups classified by 1984 dollars. For a conversion to current-year dollars, consult Table 6.3. Total subscribership may differ slightly from those in Table 6.1 due to sampling differences between the March CPS and the March CPS Supplement.

Note : The reported 2017 household voice subscribership by income is correction from the 2017 Monitoring Report.

Source : U.S. Census Bureau, Current Population Survey (March CPS Supplement).

Table 6.3
Nominal Dollar Equivalents by Year

1984	\$10,000	\$20,000	\$30,000	\$40,000
1997	15,595	31,190	46,785	62,380
1998	15,809	31,618	47,427	63,236
1999	16,082	32,164	48,246	64,328
2000	16,686	33,372	50,058	66,744
2001	17,173	34,346	51,519	68,692
2002	17,427	34,854	52,281	69,708
2003	17,953	35,906	53,859	71,812
2004	18,265	36,530	54,795	73,060
2005	18,840	37,680	56,520	75,360
2006	19,474	38,948	58,422	77,896
2007	20,015	40,030	60,045	80,060
2008	20,812	41,624	62,436	83,248
2009	20,732	41,464	62,196	82,928
2010	21,212	42,423	63,635	84,846
2011	21,780	43,561	65,341	87,122
2012	22,358	44,716	67,074	89,432
2013	22,687	45,375	68,062	90,750
2014	23,031	46,061	69,092	92,122
2015	23,014	46,027	69,041	92,054
2016	23,210	46,419	69,629	92,839
2017	23,762	47,525	71,287	95,049
2018	24,323	48,646	72,969	97,292

Note : All numbers based on CPI non-adjusted series, March 1984 base of 102.6

Table 6.4
Historical Voice Subscribership Estimates

	Percentage of Occupied Housing Units with Telephone Service ¹	Percentage of Households with Telephone Service ²
1920	35.0	
1930	40.9	
1940	36.9	
1950	61.8	
1960	78.3	
1970	90.5	
1980	92.9	
1990	94.8	93.3
2000	97.6	94.4
2001	96.9	94.9
2002	96.6	95.3
2003	96.2	95.1
2004	95.7	93.8
2005	94.8	93.1
2006	94.1	93.6
2007	94.6	94.8
2008 ³	98.2	95.2
2009	97.7	95.7
2010	97.5	95.8
2011	97.4	95.7
2012	97.4	95.9
2013	97.7	95.9
2014	97.6	96.1
2015	97.4	96.3
2016	97.0	96.4
2017	98.5	96.1
2018	NA ⁴	96.0

¹ Housing Unit subscribership statistics are from the U.S. Census Bureau's *Historical Statistics of the United States, Colonial Times to 1970*, Part 2, page 783 (1920 - 1970); the decennial censuses (1980 - 2000); and the Census Bureau's American Community Survey (ACS) 1-year estimates (2001 - 2017).

² Household subscribership data (1990 - 2017) are annual averages from the U.S. Census based on the Current Population Survey. For 2018, July CPS data are used.

³ Errata #53: released April 12, 2010, regarding 2008 ACS 1-year and 2006-2008 ACS 3-year estimates for household kitchen facilities and telephone service. Two errors were found affecting the 2008 ACS 1-year data and the 2006-2008 ACS 3-year data for telephone service. The errors involve the last two items in Question 8 on the housing section of the 2008 ACS questionnaire which asks whether the housing unit has telephone service (including cell phones). The error involved the incorrect capture of the responses to those items. It affected the estimates of householders who reported no telephone service, resulting in an underestimate of "no" responses and an increased imputation rate for both items. At the national level, the percent of households reporting no telephone service in 2008 was 1.8 percent; however, after correcting the data capture error, the percent reporting no telephone service is approximately 2.8 percent.

⁴ ACS statistics for 2018 are not available.

Table 6.5
Voice Subscribership by Selected Demographic Characteristics
(Percentage of Households with Voice Service)

Characteristic	2014	2015	2016	2017	2018
Persons in Household					
1	94.2	94.6	94.6	94.1	94.4
2 - 3	96.8	96.9	97.0	96.9	96.7
4 - 5	97.1	97.4	97.3	97.2	96.9
6 +	96.4	96.9	96.2	96.0	96.4
Age of Householder					
15 - 24 Yrs Old	94.6	95.5	95.0	95.9	96.5
25 - 54 Yrs Old	95.9	96.2	96.3	96.0	95.8
55 - 59 Yrs Old	96.5	96.9	96.8	95.9	96.2
60 - 64 Yrs Old	96.4	96.7	96.7	96.6	96.3
65 - 69 Yrs Old	97.1	97.1	96.9	96.9	96.9
70 - 99 Yrs Old	96.6	96.2	96.4	95.9	95.9
Race of Householder					
White	96.6	96.8	96.7	96.5	96.5
Black	93.7	94.1	94.7	94.0	93.5
Hispanic Origin	93.5	94.7	94.7	94.4	93.6
Total United States	96.1	96.3	96.4	96.1	96.0

Note : 2014 to 2017 values are annual averages. For 2018, values are July 2018 figures since complete 2018 figures were unavailable at the time of publication.

Source : U.S. Census Bureau, Current Population Survey.

Table 6.6
Voice Subscribership by State, 2012 - 2017
(Percentage of Occupied Housing Units with Voice Service)

	2012	2013	2014	2015	2016	2017
Alabama	97.3	97.4	97.4	97.2	96.9	98.4
Alaska	97.7	98.0	98.1	97.3	97.5	98.9
Arizona	97.2	97.3	97.5	97.4	96.4	98.1
Arkansas	96.2	97.2	97.3	96.4	96.3	97.8
California	97.9	98.0	97.9	97.8	97.4	98.8
Colorado	97.7	97.7	97.9	97.9	96.9	98.7
Connecticut	98.5	98.6	98.5	98.5	97.9	98.9
Delaware	97.8	98.1	97.9	98.3	97.4	98.2
District of Columbia	97.0	97.2	97.6	97.2	96.4	97.0
Florida	96.5	97.0	97.1	97.1	96.4	98.3
Georgia	96.0	97.6	97.3	97.3	97.0	98.5
Hawaii	97.4	97.7	97.7	97.7	97.0	98.4
Idaho	97.1	97.1	97.3	97.3	96.4	98.2
Illinois	97.7	97.7	97.4	97.6	96.9	98.5
Indiana	96.7	97.4	97.5	97.4	97.1	98.2
Iowa	97.4	97.9	97.6	97.5	96.9	98.4
Kansas	97.3	97.4	97.4	97.1	96.4	98.0
Kentucky	96.8	97.2	97.1	97.3	97.0	98.2
Louisiana	97.4	97.3	97.0	97.2	97.0	98.0
Maine	98.2	97.6	98.1	97.6	97.6	98.5
Maryland	97.8	98.1	97.6	97.7	97.4	98.8
Massachusetts	98.4	98.4	98.2	98.1	98.1	98.9
Michigan	97.2	97.4	97.6	97.4	97.0	98.5
Minnesota	98.0	98.1	97.9	97.3	97.5	98.8
Mississippi	97.2	96.8	97.2	97.0	96.7	98.2
Missouri	97.1	97.6	97.1	97.2	96.9	98.3
Montana	97.4	96.9	97.0	97.0	96.3	97.9
Nebraska	97.6	97.5	97.7	97.3	97.2	98.6
Nevada	97.5	97.9	96.5	97.2	96.5	98.3
New Hampshire	98.0	97.9	98.3	98.3	98.2	98.9
New Jersey	98.2	98.5	98.5	97.8	97.4	99.0
New Mexico	96.5	96.8	97.2	96.6	96.2	97.6
New York	97.5	98.0	97.8	97.9	97.3	98.6
North Carolina	97.6	97.8	97.7	97.6	96.6	98.5
North Dakota	97.3	97.8	98.1	96.9	97.6	98.6
Ohio	96.8	97.2	97.3	97.3	96.7	98.6
Oklahoma	97.7	97.5	97.1	97.0	96.6	98.2
Oregon	97.5	97.6	97.6	97.3	96.7	98.7
Pennsylvania	98.0	98.0	98.2	98.0	97.7	98.5
Rhode Island	97.9	98.3	97.8	98.1	97.5	99.0
South Carolina	97.3	97.7	97.6	97.0	96.1	98.3
South Dakota	97.2	97.5	97.2	96.7	96.4	97.6
Tennessee	97.3	97.6	97.5	97.6	97.1	98.4
Texas	97.4	97.7	97.7	97.4	96.3	98.2
Utah	97.6	97.9	98.0	97.7	97.2	98.4
Vermont	98.6	98.1	98.1	97.9	97.2	98.6
Virginia	97.6	98.2	98.1	97.6	97.5	98.9
Washington	97.4	97.9	97.6	97.5	97.0	99.0
West Virginia	96.5	97.0	96.9	97.3	96.9	97.1
Wisconsin	97.7	97.9	97.7	97.3	97.0	98.4
Wyoming	97.7	98.1	97.9	97.4	97.1	98.9
Total United States	97.4	97.7	97.6	97.4	97.0	98.5
Puerto Rico	94.2	93.8	94.3	95.5	96.0	96.0

Note : 'Total United States' does not include Puerto Rico.

Source : American Factfinder, Table S0201.

Table 6.7
Voice Subscribership by State, Selected Years
(Percentage of Households with a Telephone in Unit)

	1984	1996	2000	2007	2017
Alabama	88.4	92.2	91.9	91.8	96.4
Alaska	86.5	94.4	94.3	96.5	97.2
Arizona	86.9	93.1	93.9	92.9	96.7
Arkansas	86.6	86.9	88.6	92.0	92.5
California	92.5	95.0	95.8	96.5	94.7
Colorado	93.2	95.5	96.3	96.8	97.5
Connecticut	95.5	97.5	96.4	96.6	97.8
Delaware	94.3	96.1	96.3	94.9	96.5
District of Columbia	94.9	93.0	93.2	91.6	97.5
Florida	88.7	93.1	92.1	93.6	94.4
Georgia	86.2	89.7	91.1	92.6	95.2
Hawaii	93.5	94.8	94.7	96.0	94.9
Idaho	90.7	92.9	93.9	96.4	96.9
Illinois	94.2	93.0	91.5	94.1	96.2
Indiana	91.6	93.7	94.5	90.4	95.6
Iowa	96.2	96.6	96.2	97.0	98.1
Kansas	94.3	93.9	94.8	96.2	95.9
Kentucky	88.1	92.3	93.3	94.4	96.6
Louisiana	89.7	91.1	92.6	94.9	96.3
Maine	93.4	96.5	97.9	96.6	98.1
Maryland	95.7	96.7	95.0	95.5	96.3
Massachusetts	95.9	95.7	94.6	96.3	98.5
Michigan	92.8	95.0	95.0	95.0	97.9
Minnesota	95.8	97.1	97.4	97.9	98.6
Mississippi	82.4	87.5	89.2	90.5	95.6
Missouri	91.5	95.3	95.8	96.1	96.9
Montana	91.0	94.3	94.6	95.4	97.0
Nebraska	95.7	96.0	97.3	93.7	98.7
Nevada	90.4	93.5	94.0	95.2	95.8
New Hampshire	94.3	96.1	97.7	96.8	97.4
New Jersey	94.8	93.6	94.6	95.7	93.8
New Mexico	82.0	86.2	91.2	91.6	92.4
New York	91.8	93.4	95.1	93.4	94.2
North Carolina	88.3	93.5	93.9	94.5	95.3
North Dakota	94.6	96.3	95.8	98.0	98.5
Ohio	92.4	94.5	94.8	95.9	98.0
Oklahoma	90.3	91.3	91.2	94.9	96.8
Oregon	90.6	96.0	94.8	96.7	97.7
Pennsylvania	94.9	96.9	96.6	97.0	98.5
Rhode Island	93.6	95.7	94.9	95.3	95.4
South Carolina	83.7	91.3	93.2	90.6	94.8
South Dakota	93.2	93.3	94.3	97.2	96.9
Tennessee	88.5	94.0	95.5	93.2	94.4
Texas	88.4	91.0	93.5	93.5	96.8
Utah	92.5	96.7	95.9	96.8	95.0
Vermont	92.3	95.9	95.6	97.4	98.1
Virginia	93.1	94.9	95.4	95.3	97.1
Washington	93.0	94.5	94.9	96.8	97.3
West Virginia	87.7	92.9	94.0	94.5	97.0
Wisconsin	95.2	97.0	94.8	96.8	98.0
Wyoming	89.9	95.0	94.7	96.1	95.5
Total United States	91.6	93.9	94.4	94.8	96.1

Source : U.S. Census Bureau, Current Population Survey.

Table 6.8
Household Voice Subscribership by State and Income, 2018

	\$9,999 or Less	\$10,000 to \$19,999	\$19,999 to \$29,999	\$30,000 to \$39,999	\$40,000 or More	All Households
Alabama	94.6	95.3	98.2	100.0	97.5	96.6
Alaska	93.8	98.7	96.5	100.0	100.0	98.2
Arizona	89.6	97.0	99.8	98.6	96.5	96.2
Arkansas	89.6	95.0	93.2	97.8	96.4	93.9
California	89.1	94.8	95.4	96.8	97.5	95.1
Colorado	95.9	97.9	99.6	99.4	99.1	98.6
Connecticut	93.4	95.4	99.1	98.9	98.4	97.2
Delaware	94.5	97.7	97.0	99.2	99.4	97.7
District of Columbia	95.8	98.9	98.9	97.6	98.8	98.1
Florida	88.8	92.5	94.8	96.0	93.4	92.7
Georgia	96.1	98.3	96.6	97.6	97.7	97.3
Hawaii	86.3	91.4	94.0	95.3	98.0	94.0
Idaho	92.4	98.4	98.3	97.7	99.7	97.6
Illinois	95.0	97.3	98.0	97.4	98.3	97.3
Indiana	95.4	95.6	98.4	98.2	97.9	97.1
Iowa	95.1	98.7	99.0	100.0	98.1	98.2
Kansas	95.1	98.7	98.0	98.2	99.1	97.9
Kentucky	94.3	96.1	99.5	98.6	99.2	97.3
Louisiana	95.0	94.9	96.9	99.6	99.1	96.6
Maine	94.3	99.0	98.5	95.2	99.4	97.5
Maryland	93.2	93.6	97.4	93.7	98.2	96.0
Massachusetts	94.7	98.4	98.8	98.3	98.8	98.0
Michigan	94.7	98.5	97.6	98.2	98.4	97.5
Minnesota	94.1	97.2	97.8	100.0	99.5	98.0
Mississippi	91.9	95.3	97.7	97.6	97.7	95.4
Missouri	96.0	97.5	97.9	98.9	98.4	97.7
Montana	94.6	95.9	99.0	100.0	98.1	97.3
Nebraska	97.5	99.4	100.0	99.3	99.4	99.1
Nevada	87.5	90.4	96.1	98.3	90.9	92.1
New Hampshire	95.6	94.7	100.0	100.0	100.0	98.3
New Jersey	88.2	92.3	94.1	91.6	94.6	92.6
New Mexico	83.6	94.0	92.5	92.1	93.5	90.6
New York	91.0	93.2	95.7	93.8	95.8	94.0
North Carolina	91.8	97.5	96.5	95.0	97.3	95.6
North Dakota	93.6	99.4	99.0	99.4	99.8	98.3
Ohio	96.8	99.5	96.5	98.5	99.3	98.2
Oklahoma	94.6	94.6	96.6	99.6	99.1	96.7
Oregon	93.7	98.7	99.7	100.0	99.3	98.2
Pennsylvania	98.1	99.3	97.2	98.5	99.1	98.5
Rhode Island	92.4	93.1	93.9	97.8	95.6	94.5
South Carolina	88.6	95.1	97.4	100.0	98.6	95.5
South Dakota	92.0	100.0	95.7	100.0	99.7	97.8
Tennessee	93.9	96.4	97.1	97.2	95.6	95.9
Texas	94.6	98.2	97.9	98.0	97.4	97.2
Utah	100.0	98.4	97.6	96.9	96.3	97.5
Vermont	94.4	97.5	98.9	100.0	98.6	97.8
Virginia	95.4	96.2	99.0	98.4	98.8	97.7
Washington	92.0	97.7	97.9	98.7	98.2	97.2
West Virginia	94.4	98.9	97.6	100.0	99.0	97.6
Wisconsin	97.4	98.0	97.9	99.3	100.0	98.6
Wyoming	89.4	94.8	95.5	98.1	97.5	95.1
Total United States	92.9	96.3	97.1	97.5	97.6	96.3

Note : Income categories use 1984 dollars. For a conversion to current-year dollars, consult Table 6.3.

Source : U.S. Census Bureau, Current Population Survey (March CPS Supplement).

Table 6.9
Internet Use by Selected Characteristics, 2017

	Percent with some Internet subscription	Percent with high-speed Internet subscription ¹
All Households	83.8	83.5
Household Income²		
Less than \$20,000	59.7	59.3
\$20,000 - \$74,999	82.0	81.6
\$75,000 or more	95.2	95.0
Metropolitan Status³		
Metropolitan Area	NA	84.2
Nonmetropolitan Area	NA	72.7
Urban / Rural Area³		
Rural Area	NA	78.8
Urban Area	NA	84.6

All Individuals	87.3	87.0
Age⁴		
Under 18	90.4	90.3
18 - 64	89.3	89.1
65 +	74.7	74.0
Race and Hispanic Origin⁵		
White alone, non-Hispanic	89.0	88.7
Black alone, non-Hispanic	80.3	80.2
Asian alone, non-Hispanic	93.5	93.4
Hispanic (of any race)	84.2	84.1
American Indian	74.2	73.9

Note : Income categories are in nominal 2017 dollars.

¹ High-speed service includes all internet service other than dial-up.

² *Source* : American Factfinder, Table S2801

³ *Source* : American Factfinder, Table GCT2801

⁴ *Source* : American Factfinder, Table B28005

⁵ *Source* : American Factfinder, Table B28009

Table 6.10
High-Speed Internet Subscribership for Households by State,
2013 - 2017 ¹

	2013	2014	2015	2016	2017
Alabama	63.5	65.8	68.3	74.7	78.1
Alaska	79.0	81.4	81.7	85.7	86.1
Arizona	73.9	75.5	78.1	83.1	85.7
Arkansas	60.9	63.5	64.2	70.9	73.0
California	77.9	80.0	81.3	85.4	87.7
Colorado	79.4	81.2	83.0	86.9	88.2
Connecticut	77.5	80.5	82.0	84.1	85.5
Delaware	74.5	75.5	77.4	83.3	86.2
District of Columbia	73.4	73.4	76.8	79.8	82.7
Florida	74.3	75.8	77.5	81.2	83.2
Georgia	72.2	73.4	74.8	80.7	82.7
Hawaii	78.6	80.6	82.2	83.2	84.5
Idaho	73.2	73.6	76.7	79.4	82.5
Illinois	74.0	75.5	76.9	82.0	83.6
Indiana	69.7	71.4	73.3	79.2	81.2
Iowa	72.2	74.2	75.0	79.6	81.8
Kansas	73.0	74.5	76.2	80.3	83.0
Kentucky	68.5	68.9	70.9	77.3	78.9
Louisiana	64.8	66.6	68.7	74.4	75.6
Maine	72.9	74.9	77.1	80.7	82.0
Maryland	78.9	80.1	81.4	85.8	87.7
Massachusetts	79.6	80.5	82.6	85.5	86.8
Michigan	70.7	72.9	74.4	80.5	82.8
Minnesota	76.5	78.3	79.5	83.5	85.9
Mississippi	57.4	59.1	61.0	70.7	73.4
Missouri	69.8	71.6	73.3	79.3	81.3
Montana	72.1	72.9	75.0	78.9	81.3
Nebraska	72.9	74.8	78.1	81.6	84.4
Nevada	75.6	76.3	79.0	80.9	83.4
New Hampshire	80.9	82.1	84.5	86.4	88.4
New Jersey	79.1	80.9	81.6	84.2	86.8
New Mexico	64.4	67.5	67.2	73.7	76.4
New York	75.3	76.5	77.8	81.7	83.4
North Carolina	70.8	72.4	74.1	79.0	81.6
North Dakota	72.5	74.7	76.3	81.4	81.3
Ohio	71.2	73.9	76.1	80.9	83.2
Oklahoma	66.7	69.2	70.8	77.2	79.7
Oregon	77.5	78.9	80.8	84.9	86.8
Pennsylvania	72.4	73.9	75.7	80.5	81.5
Rhode Island	76.5	76.5	78.2	82.8	85.5
South Carolina	66.6	68.1	69.9	77.0	79.2
South Dakota	71.1	71.6	75.3	79.5	80.6
Tennessee	67.0	68.2	70.2	76.7	79.4
Texas	71.8	73.0	74.3	80.5	83.3
Utah	79.6	81.7	83.1	85.4	87.8
Vermont	75.3	76.3	78.7	81.1	81.4
Virginia	75.8	77.2	78.6	83.4	84.8
Washington	78.9	81.9	83.9	87.4	89.1
West Virginia	64.9	66.2	69.8	74.2	76.0
Wisconsin	73.0	75.3	76.9	81.3	83.3
Wyoming	75.5	76.1	77.8	83.2	83.7
Total United States	73.4	75.1	76.7	81.4	83.5
Puerto Rico	45.2	48.1	51.8	59.3	60.9

¹ High-speed internet service includes all internet service other than dial-up.

Source : American Factfinder, Table GCT2801

Table 6.11
Residential Fixed Connections per Household by Speed Tier as of December 31, 2017
(Households and Subscribers in thousands)

	Households	At least 200 Kbps in any direction		10 Mbps Download 1 Mbps upload		25 Mbps Download 3 Mbps Upload		100 Mbps 10 Mbps Upload	
		Subscribers	Ratio	Subscribers	Ratio	Subscribers	Ratio	Subscribers	Ratio
Alabama	1,851	1,331	0.72	1,050	0.57	791	0.43	266	0.14
Alaska	250	201	0.80	158	0.63	*	*	*	*
American Samoa	10	*	*	0	0.00	0	0.00	0	0.00
Arizona	2,449	2,119	0.87	1,667	0.68	1,361	0.56	655	0.27
Arkansas	1,141	770	0.67	562	0.49	362	0.32	112	0.10
California	12,807	11,251	0.88	9,977	0.78	8,215	0.64	4,175	0.33
Colorado	2,052	1,864	0.91	1,487	0.72	1,362	0.66	534	0.26
Connecticut	1,355	1,201	0.89	1,080	0.80	882	0.65	423	0.31
Delaware	348	327	0.94	311	0.89	300	0.86	116	0.33
District of Columbia	277	242	0.87	224	0.81	213	0.77	*	*
Florida	7,393	7,134	0.96	6,395	0.86	5,319	0.72	2,654	0.36
Georgia	3,612	2,983	0.83	2,493	0.69	1,942	0.54	733	0.20
Guam	42	*	*	*	*	*	*	0	0.00
Hawaii	452	423	0.94	418	0.92	*	*	*	*
Idaho	596	495	0.82	302	0.51	236	0.40	48	0.08
Illinois	4,802	3,834	0.80	3,328	0.69	2,630	0.55	904	0.19
Indiana	2,514	1,934	0.77	1,572	0.63	1,194	0.48	524	0.21
Iowa	1,243	935	0.75	658	0.53	544	0.44	181	0.15
Kansas	1,116	883	0.79	696	0.62	489	0.44	255	0.23
Kentucky	1,718	1,272	0.74	958	0.56	673	0.39	449	0.26
Louisiana	1,731	1,256	0.73	1,031	0.60	742	0.43	266	0.15
Maine	551	484	0.88	367	0.67	243	0.44	138	0.25
Maryland	2,177	1,888	0.87	1,778	0.82	1,674	0.77	659	0.30
Massachusetts	2,559	2,334	0.91	2,195	0.86	2,113	0.83	857	0.33
Michigan	3,860	3,021	0.78	2,610	0.68	2,108	0.55	602	0.16
Minnesota	2,135	1,740	0.81	1,344	0.63	1,177	0.55	318	0.15
Mississippi	1,099	675	0.61	500	0.46	310	0.28	78	0.07
Missouri	2,372	1,801	0.76	1,388	0.59	1,042	0.44	415	0.17
Montana	413	337	0.82	239	0.58	204	0.49	50	0.12
Nebraska	742	579	0.78	445	0.60	342	0.46	173	0.23
Nevada	1,031	909	0.88	778	0.75	612	0.59	*	*
New Hampshire	521	471	0.90	409	0.78	369	0.71	166	0.32
New Jersey	3,195	2,942	0.92	2,805	0.88	2,712	0.85	1,394	0.44
New Mexico	763	557	0.73	358	0.47	305	0.40	81	0.11
New York	7,266	6,244	0.86	5,842	0.80	5,282	0.73	3,287	0.45
North Carolina	3,815	3,248	0.85	2,629	0.69	2,273	0.60	1,456	0.38
North Dakota	305	250	0.82	223	0.73	194	0.63	51	0.17
Northern Mariana Isl.	16	*	*	*	*	*	*	0	0.00
Ohio	4,601	3,673	0.80	3,066	0.67	2,153	0.47	1,224	0.27
Oklahoma	1,462	1,024	0.70	770	0.53	519	0.36	211	0.14
Oregon	1,546	1,320	0.85	1,087	0.70	965	0.62	351	0.23
Pennsylvania	4,962	4,078	0.82	3,554	0.72	3,155	0.64	1,331	0.27
Puerto Rico	1,237	*	*	293	0.24	*	*	*	*
Rhode Island	410	358	0.87	345	0.84	311	0.76	*	*
South Carolina	1,839	1,511	0.82	1,278	0.69	892	0.48	276	0.15
South Dakota	334	261	0.78	230	0.69	204	0.61	26	0.08
Tennessee	2,522	1,911	0.76	1,643	0.65	1,303	0.52	541	0.21
Texas	9,290	7,513	0.81	6,460	0.70	4,959	0.53	2,698	0.29
Utah	918	822	0.89	653	0.71	573	0.62	221	0.24
Vermont	257	232	0.90	176	0.68	141	0.55	56	0.22
Virgin Islands	43	*	*	*	*	*	*	*	*
Virginia	3,090	2,568	0.83	2,261	0.73	2,036	0.66	887	0.29
Washington	2,697	2,415	0.90	2,025	0.75	1,848	0.69	802	0.30
West Virginia	739	537	0.73	390	0.53	312	0.42	142	0.19
Wisconsin	2,310	1,808	0.78	1,459	0.63	1,061	0.46	371	0.16
Wyoming	227	179	0.79	135	0.59	111	0.49	17	0.07
Total	119,064	98,830	0.83	84,148	0.71	69,442	0.58	32,040	0.27

Mbps = megabits per second and kbps = kilobits per second. * = Data withheld to maintain firm confidentiality.

Note: Figures may not sum to totals due to rounding.

Sources: FCC Form 477 (Connections); 2013-2017 ACS 5 -Year Estimates (Households for the fifty states, District of Columbia and Puerto Rico) Census 2010 (Housing Units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

Table 6.12
Telephone Service, Internet Access, Telephone Expenses, and Internet Expenses
in Low-Income Households, 2017

Percent of Low-Income Households with Telephone / Internet Services		
	Low-Income Group 1	Low-Income Group 2
Telephone Service	94.4	96.1
Internet Access	66.9	75.7

Low-Income Household Expenses for Telephone/Cellular Phone/Internet Services as a Percent of Total Expenses		
	Low-Income Group 1	Low-Income Group 2
Telephone Expenses¹		
All	2.9	3.4
With Expenses Only	3.3	3.8
Cellular Phone Expenses		
All	2.3	2.6
With Expenses Only	2.6	2.9
Internet Expenses		
All	1.0	1.2
With Expenses Only	1.6	1.9

All statistics between group 1 and group 2 are statistically significantly different at a confidence level of 99.9%.

Note : Group 1 contains occupied housing units where the household income is less than or equal to 135% of the 2017 Federal Poverty Guideline for the household. Group 2 contains occupied housing units where household income is greater than 135% of the Federal Poverty Guideline, but less than or equal to 200% of the Federal Poverty Guideline for that Household.

Note : Expenses are calculated for everyone in the income groups (All) and for only those who have telephone or internet expenses in the income groups (With Expenses Only).

Note : The 2016 Lifeline Modernization Order included affordability of voice and broadband service as a component of the program's goals and directed WCB to measure the extent to which voice and broadband service expenditures exceed two percent of low income consumers' disposable household income as compared to the next highest income group. *Lifeline and Link Up Reform and Modernization, et al.* , WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4112, para. 408 (2016).

¹ The telephone expenses include residential phone service, VOIP, phone cards, and cellular phone service.

Source : American Community Survey 2017 Public Use Microdata Sample (PUMS) data for telephone service and internet access and Consumer Expenditure Survey 2017 public-use microdata (PUMD) for telephone and internet expenses and after tax income.

Table 6.13
Switched Access Lines and Interconnected VoIP Subscribers for ILECs
(in thousands)

	Rate-of-Return Carriers			Price Cap Carriers	Total
	Total	Acam Estimate ¹	Legacy Estimate ¹		
December 2010	4,635			92,862	97,497
December 2011	4,495			84,932	89,427
December 2012	4,268			77,846	82,114
December 2013	4,123			70,959	75,082
December 2014	3,858			65,566	69,424
December 2015	3,749			59,930	63,679
December 2016	3,697	35 %	65 %	54,564	58,261
December 2017	3,553	34 %	66 %	49,473	53,026

Note : ILEC stands for Incumbent Local Exchange Carrier.

Note : Data from 2014 - 2016 are revisions from 2017 Monitoring Report due to respondents' refilling of Form 477.

¹ ACAM and Legacy Carrier estimates are estimated based on data from NECA's Annual USF filing.

Source : FCC Form 477 Submissions.

Table 6.14
Fixed Connections for ILECs (in Thousands)

Rate-of-Return Carriers	Residential	Business	Total
At Least 4 Mbps			
December 2015	1,355	146	1,500
December 2016	1,599	165	1,764
December 2017	1,813	191	2,004
At Least 10 Mbps			
December 2015	853	90	943
December 2016	1,120	114	1,234
December 2017	1,420	150	1,570
At Least 25 Mbps			
December 2015	264	22	286
December 2016	417	35	452
December 2017	715	61	776

Price Cap Carriers	Residential	Business	Total
At Least 4 Mbps			
December 2015	19,169	1,426	20,595
December 2016	20,692	1,602	22,293
December 2017	22,257	1,760	24,017
At Least 10 Mbps			
December 2015	16,430	1,211	17,641
December 2016	17,946	1,388	19,334
December 2017	19,967	1,567	21,534
At Least 25 Mbps			
December 2015	7,282	511	7,794
December 2016	8,904	596	9,500
December 2017	12,350	781	13,131

Notes : ILEC stands for Incumbent Local Exchange Carrier. All connections below 25 Mbps have a minimum upstream speed of 1 Mbps. All connections with at least 25 Mbps have a minimum upstream of 3 Mbps.

Note : Data from 2015 - 2016 are revisions from 2017 Monitoring Report due to respondents' refilling of Form 477.

Source : FCC Form 477 Submissions.

Table 6.15
Fixed Deployment for ILECs (in Thousands)

Rate-of-Return Carriers	# of Deployed Census Blocks	Population in Deployed Census Blocks	Housing Units in Deployed Census Blocks
At Least 4 Mbps			
December 2015	854	9,549	4,463
December 2016	894	9,996	4,685
December 2017	926	10,300	4,833
At Least 10 Mbps			
December 2015	733	8,730	4,057
December 2016	788	9,349	4,363
December 2017	839	9,767	4,573
At Least 25 Mbps			
December 2015	435	5,593	2,594
December 2016	499	6,512	3,035
December 2017	571	7,227	3,379

Price Cap Carriers	# of Deployed Census Blocks	Population in Deployed Census Blocks	Housing Units in Deployed Census Blocks
At Least 4 Mbps			
December 2015	2,990	189,794	79,810
December 2016	3,615	209,928	88,054
December 2017	3,954	228,951	96,385
At Least 10 Mbps			
December 2015	2,904	187,939	78,990
December 2016	3,361	200,943	84,327
December 2017	3,791	224,541	94,470
At Least 25 Mbps			
December 2015	942	69,608	28,865
December 2016	1,842	144,462	59,386
December 2017	2,167	165,184	68,091

Notes : ILEC stands for Incumbent Local Exchange Carrier. All connections below 25 Mbps have a minimum upstream speed of 1 Mbps. All connections of at least 25 Mbps have a minimum upstream of 3 Mbps.

Source : FCC Form 477 Submissions.

Section 7 – Price Indices

Overview – Price Indices

This section contains information on telephone price indices using data from the Consumer Price Index (CPI) maintained by the Bureau of Labor Statistics (BLS). The BLS collects information on telephone service as part of the CPI.¹ Monthly CPI data can be found on the Internet at www.bls.gov/cpi/. The monthly price indices represent prices sampled in the middle of the month.

The CPI for telephone services is based on a “market basket” intended to represent the telephone-related expenditures of a typical urban household. It includes both land-line telephone service and wireless telephone service. In January 2010, BLS discontinued collecting four land-line telephone indices, including local charges, long distance charges, interstate toll calls, and intrastate toll calls. These four indices were combined into a single land-line telephone service index, which began in December 2009.

The Producer Price Index (PPI), also published by BLS, continues to release sub-indices for telephone services. We no longer include them in this report because they have become less meaningful as the bundling of telephone services has become more common in the land-line telephone industry.²

¹ BLS publishes two sets of Consumer Price Indices. The CPI-U, used herein, is based on expenditures of all urban consumers. The CPI-W series is based on expenditures of urban wage earners and clerical workers.

² PPI data are available on the BLS website at www.bls.gov/ppi/.

Table 7.1
Long-Term Changes for Various Price Indices
(Compound Average Growth Rate)

	1969 - 2017	2007 - 2017
CPI All Items (SA0)	4.0	1.8
CPI All Services (SAS)	4.8	2.3
CPI Telephone Services (SEED)	1.4	- 0.6
CPI Major Categories:		
- Food & Beverages (SAF)	4.0	2.2
- Housing (SAH)	4.3	2.0
- Apparel (SAA)	1.6	0.2
- Transportation (SAT)	3.7	1.3
- Medical Care (SAM)	5.8	3.1
- Recreation (SAR)	*	0.6
- Other Goods & Services (SAG)	5.1	2.7
CPI Public Transportation (SETG)	4.4	1.4
CPI Utility (Piped) Gas Service (SEHF02)	4.7	- 2.1
CPI Electricity (SEHF01)	4.0	2.2
CPI Water & Sewerage Maint. (SEHG01)	6.0	5.4
CPI Postage (SEEC01)	4.4	3.2

* Series not established until after 1969.

Note : The CPI Telephone Services index was revised in December of 1997. To calculate values in this table, Series MUUR0000SE270A is used for periods prior to this revision and CUUR0000SEED is used for periods after the revision. After each row, the series ID is provided and should be preceded by CUUR0000 when referencing the series.

Note : The Compound Annual Growth Rate is a smoothed rate of growth calculated in three steps. First, divide the ending value by the beginning value. Second, raise the result of that division to a power equal to one divided by the number of years in the period. Finally, subtract 1 from the result of the second step.

Source : Bureau of Labor Statistics.

Table 7.2
Annual Changes in CPI Telephone Services and All Items Indices

	All Goods and Services	Telephone Services	Land-line Telephone Services	Wireless Telephone Services
BLS Series ID	CUUR0000SA0	CUUR0000SEED	CUUR0000SEED04	CUUR0000SEED03
2000	3.4	-2.3	*	-12.3
2001	1.6	1.3	*	-5.5
2002	2.4	0.2	*	0.3
2003	1.9	-2.7	*	-1.3
2004	3.3	-2.5	*	-1.4
2005	3.4	0.4	*	-1.5
2006	2.5	1.7	*	0.0
2007	4.1	2.1	*	-0.9
2008	0.1	2.9	*	0.5
2009	2.7	1.0	*	-1.1
2010	1.5	-0.9	2.2	-3.6
2011	3.0	-0.3	1.9	-2.3
2012	1.7	0.3	1.9	-0.8
2013	1.5	0.0	3.0	-2.0
2014	0.8	-2.1	1.8	-4.0
2015	0.7	0.7	2.2	0.0
2016	2.1	-2.8	0.9	-4.2
2017	2.1	-6.5	2.2	-10.2

* Series not established until December 2009.

Note : Values report the percent change from December of the previous year through December of the year shown.

Sources : Bureau of Labor Statistics.

Table 7.3
Monthly Consumer Price Indices
(December 2009 = 100)

	All Goods and Services	Telephone Services	Land-line Telephone Services	Wireless Telephone Services
BLS Series ID	CUUR0000SA0	CUUR0000SEED	CUUR0000SEED04	CUUR0000SEED03
2014 January	108.32	99.35	111.11	91.37
February	108.72	98.94	110.81	90.92
March	109.42	98.85	110.82	90.80
April	109.78	98.95	110.78	90.95
May	110.16	98.87	111.14	90.70
June	110.37	98.79	111.00	90.65
July	110.33	98.82	111.09	90.65
August	110.14	98.79	111.09	90.61
September	110.23	98.78	111.25	90.52
October	109.95	97.51	111.20	88.81
November	109.35	97.09	111.04	88.29
December	108.73	96.86	111.37	87.84
2015 January	108.22	96.82	112.32	87.40
February	108.69	96.70	112.70	87.08
March	109.34	96.32	113.10	86.40
April	109.56	96.22	113.03	86.28
May	110.12	95.87	113.28	85.71
June	110.51	95.96	113.48	85.74
July	110.51	96.18	113.63	85.98
August	110.36	96.79	113.83	86.74
September	110.19	97.04	113.94	87.05
October	110.14	97.20	114.00	87.25
November	109.90	97.63	113.90	87.87
December	109.53	97.59	113.86	87.83
2016 January	109.71	97.73	114.60	87.77
February	109.80	97.13	115.14	86.86
March	110.27	97.08	114.90	86.88
April	110.80	97.10	114.88	86.90
May	111.25	96.69	114.88	86.39
June	111.62	96.56	114.23	86.42
July	111.43	96.33	114.02	86.20
August	111.53	96.42	114.71	86.10
September	111.80	95.25	113.78	84.92
October	111.94	94.89	113.78	84.46
November	111.76	94.84	114.42	84.20
December	111.80	94.87	114.84	84.12
2017 January	112.45	94.81	115.01	83.98
February	112.81	94.21	116.45	82.79
March	112.90	89.55	116.16	77.01
April	113.23	88.54	116.37	75.68
May	113.33	88.33	115.70	75.62
June	113.43	87.84	115.64	75.02
July	113.35	87.74	116.04	74.78
August	113.69	87.74	116.17	74.73
September	114.30	87.89	115.89	75.01
October	114.22	88.17	115.94	75.35
November	114.23	88.50	116.53	75.58
December	114.16	88.67	117.34	75.54
2018 January	114.78	88.56	117.47	75.39
February	115.30	88.24	117.67	74.98
March	115.56	88.21	116.73	75.16
April	116.02	88.19	116.52	75.18
May	116.50	88.32	116.81	75.26
June	116.50	88.36	117.12	75.24
July	116.70	88.48	117.79	75.24

Note: Series values for All Goods and Services are converted from the 1982-1984 base index series reported by the Bureau of Labor Statistics (BLS). Series values for Telephone Services and Wireless Telephone Services are converted from the December 1997 base index series reported by BLS. Series are not seasonally adjusted. Series may be referenced via the BLS website with the Series ID listed at the top of each column.

Source: Bureau of Labor Statistics.