

# **Internet Access Services: Status as of June 30, 2012**

Industry Analysis and Technology Division  
Wireline Competition Bureau  
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## Internet Access Services: Status as of June 30, 2012

**Introduction.** This report summarizes information about Internet access connections over 200 kilobits per second (kbps) in at least one direction in service in the United States on June 30, 2012, as collected by FCC Form 477. Form 477 gathers standardized information about *subscriptions* to Internet access services in the fifty states, District of Columbia, and inhabited insular areas (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands). The information is reported by telephone companies, cable system operators, terrestrial wireless service providers, satellite service providers, and other facilities-based providers of advanced telecommunications capability.<sup>1</sup> This is the eighth report to include details about subscribership differences among census tracts and counties, as well as subscribership differences among the states.<sup>2</sup>

Notable developments between June 2011 and June 2012 include:

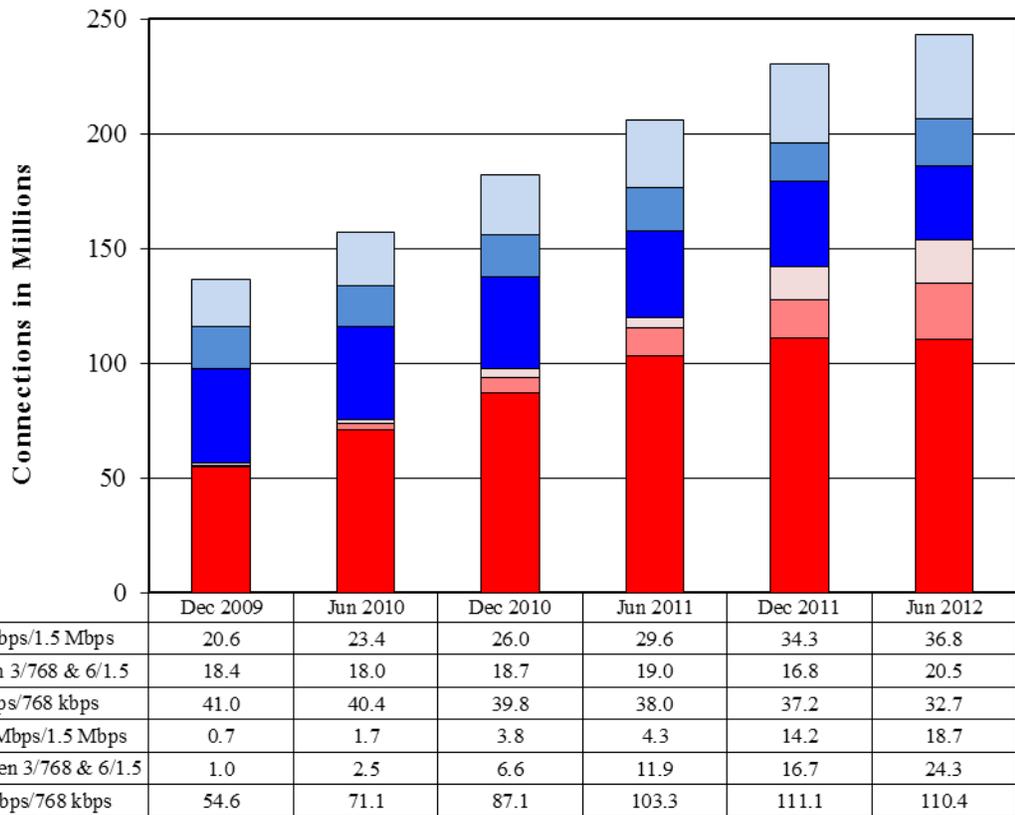
- Internet connections overall are growing. The number of connections over 200 kbps in at least one direction increased by 18% year-over-year to 243 million.
- Growth is particularly high in mobile Internet subscriptions, but fixed-location connections also continue to increase. The number of mobile subscriptions grew to 153 million – up 28% from June 2011. The number of fixed-location connections increased by 4% year-over-year, to 90 million.
- Both fixed and mobile services are shifting to higher speeds. The share of fixed connections with download speeds at or above 3 Mbps and upload speeds at or above 768 kbps increased from 56% to 64% of total fixed connections. Among mobile wireless subscriptions, the share increased from 14% to 28%.
- Despite the strong growth of *total* mobile connections, fixed connections continued to dominate among those connections with higher download and upload speeds. Figure 1 illustrates the trend in connections speeds from December 2009 through June 2012, and Figure 2 presents a side-by-side comparison of fixed and mobile connection speeds in June 2012.

<sup>1</sup> See the Technical Notes and the Glossary that appear at the end of this report for more-detailed information about the Form 477 data collection and the meaning of terms used in this report.

Readers should note two key aspects of the Form 477 data. First, if service connections of different speeds are *available* to a particular consumer for purchase – from one or more suppliers – then only the purchased connection is counted by Form 477. Second, the reported connection speed is typically the advertised speed of the purchased service, and it is possible that the purchased service will not operate at its advertised speed at all times. The Commission has sponsored tests of actual consumer broadband speeds. See, e.g., Federal Communications Commission, Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, *2013 Measuring Broadband America: A Report on Consumer Wireline Broadband Performance in the U.S.* (February 2013), available at [www.fcc.gov/measuring-broadband-america](http://www.fcc.gov/measuring-broadband-america).

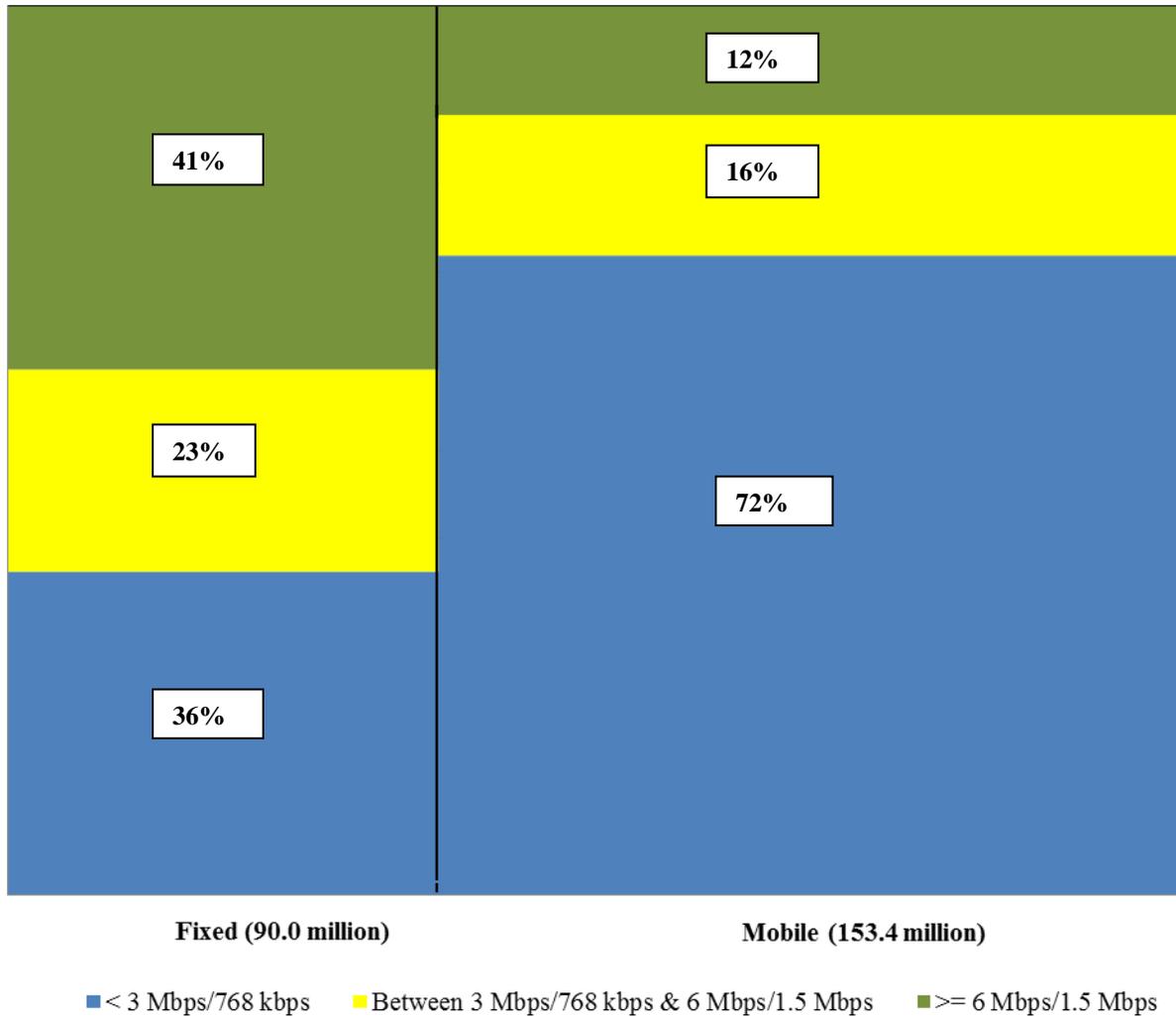
<sup>2</sup> Census tract-level data were first collected for December 2008. For an overview of program history, see *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010) (*December 2008 High-Speed Report*) at pp. 1-4, available at [www.fcc.gov/wcb/iatd/comp.html](http://www.fcc.gov/wcb/iatd/comp.html). Readers who are interested in historical trends in the Form 477 data should note the changes in reporting requirements that were effective in 2008 and earlier, in 2005.

**Figure 1**  
**Fixed Connections and Mobile Connections by Speed\* 2009-2012**



\* Some previously published data have been revised. Figures may not sum to totals elsewhere in this report due to rounding. Connections include both residential and business connections. In June 2012, total connections were reported as 34% residential fixed connections, 3% business fixed connections, 47% mobile connections to non-business subscribers, and 16% mobile connections to business subscribers.

**Figure 2**  
**Speed Composition of Fixed Connections and Mobile Connections**  
**as of June 30, 2012**

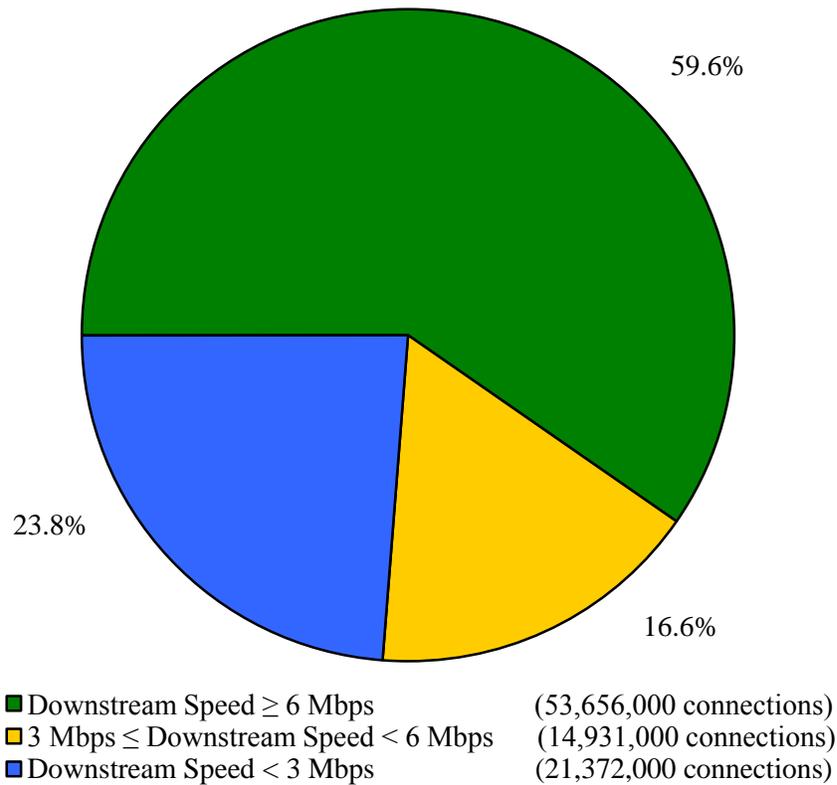


**Connection speeds in detail.** The Form 477 program categorizes reportable connections into 72 speed tiers defined by eight ranges of downstream and nine ranges of upstream speed. In this overview discussion, we organize the extensive information collected for December 2011 into three groups of downstream speeds and three groups of upstream speeds. We do this separately for fixed-location connections and for mobile connections. For the breakpoints between the speed groups, we use the Form 477-defined breakpoints that the Commission has discussed as potential proxies for the broadband

availability benchmark.<sup>3</sup> These breakpoints are 3 Mbps and 6 Mbps for downstream speeds and 768 kbps and 1.5 Mbps for upstream speeds.<sup>4,5</sup>

**Fixed connections – downstream speeds.** Figure 3(a) illustrates how the 90 million fixed connections reported for June 2012 were distributed across the three ranges of *downstream speed* defined by breakpoints at 3 Mbps and at 6 Mbps.

**Figure 3(a)**  
**Distribution of Reportable Fixed Connections (89,959,000) by**  
**Downstream Speed as of June 30, 2012**



<sup>3</sup> The Commission benchmarked broadband as a transmission service that enables an end user actually to download Internet content at 4 megabits per second (Mbps) and to upload Internet content at 1 Mbps over the service provider’s network. *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Amended by the Broadband Data Improvement Act*, GN Docket Nos. 09-137, 09-51, Report, 25 FCC Rcd 95560, 9563, para. 11 (2010) (*Sixth Broadband Deployment Report*).

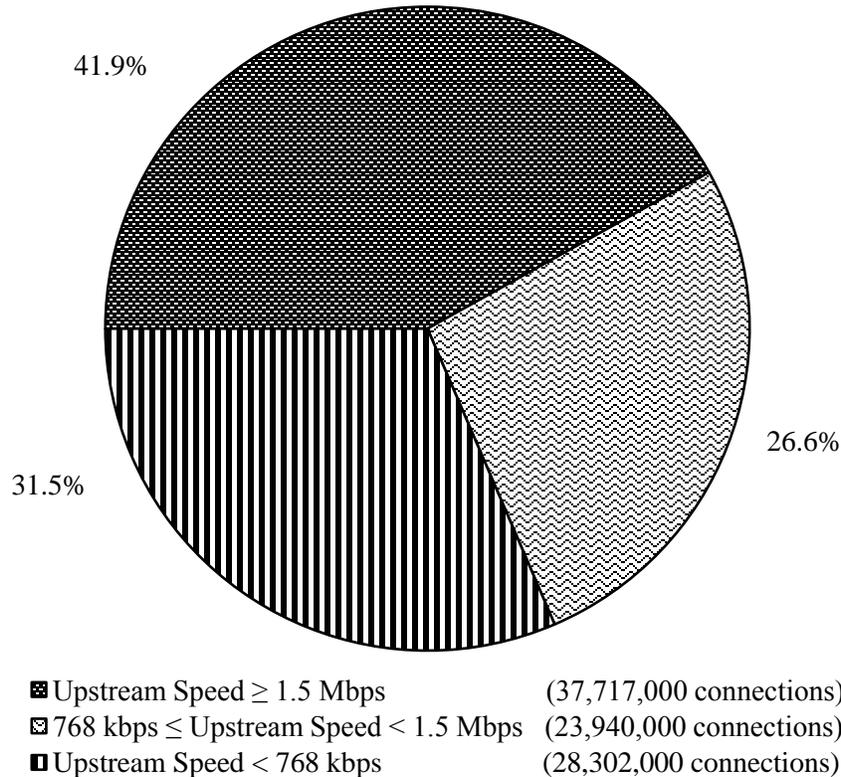
<sup>4</sup> *See Sixth Broadband Deployment Report*, 25 FCC Rcd at 9568, para. 20. As explained there, the Commission decided to evaluate the evidence of broadband availability using 3 Mbps downstream and 768 kbps upstream to proxy the speed benchmark of 4 Mbps downstream and 1 Mbps upstream. Subsequent reports have used this proxy; *see, e.g., Eighth Broadband Progress Report*, 27 FCC Rcd 10342, 10364, para. 29 (2012).

<sup>5</sup> Our narrative discussion of the speeds of fixed connections is summarized more concisely in Chart 2, at p. 19, and our narrative discussion of the speeds of mobile connections is summarized more concisely in Chart 5, at p. 22.

- In June 2012, 24% of reportable fixed connections (or 21.4 million connections) were slower than 3 Mbps in the downstream direction, 17% (or 14.9 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 60% (or 53.7 million connections) were at least 6 Mbps in the downstream direction.<sup>6</sup>
- For speeds in the downstream direction, over three-quarters (76%) of fixed connections met the broadband availability proxy of 3 Mbps or higher that was used in the *Eighth Broadband Progress Report*.

**Fixed connections – upstream speeds.** Figure 3(b) illustrates how the 90 million fixed connections reported for December 2011 were distributed across the three ranges of *upstream speed* defined by breakpoints at 768 kbps and at 1.5 Mbps.

**Figure 3(b)**  
**Distribution of Reportable Fixed Connections (89,959,000) by Upstream Speed as of June 30, 2012**



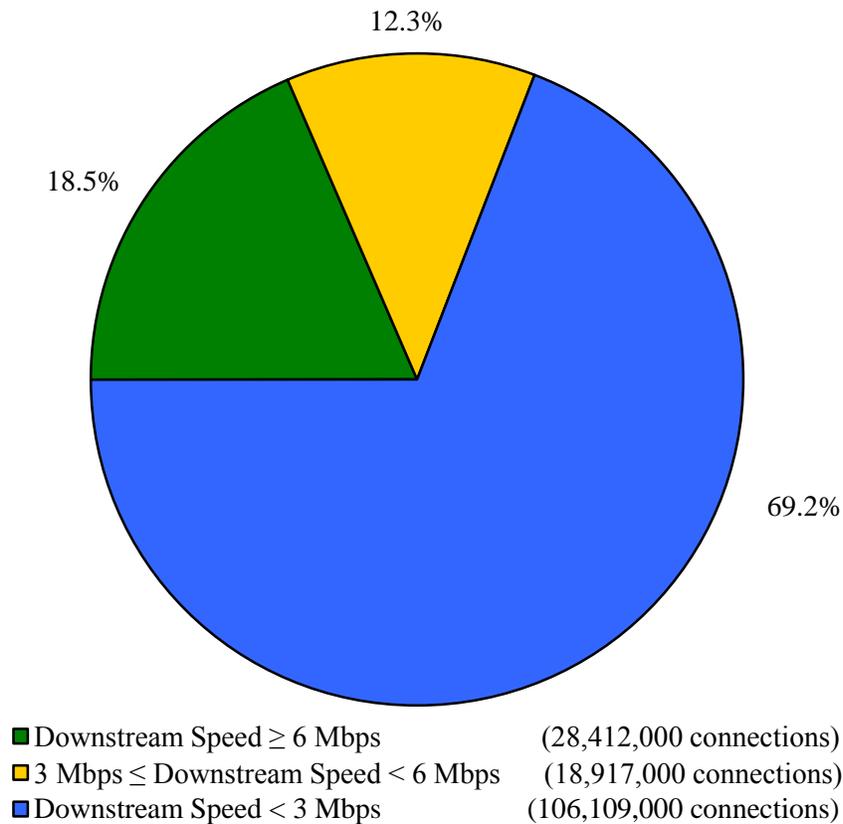
<sup>6</sup> See Chart 2, at p. 19.

- In June 2012, 31% of reportable fixed connections (or 28.3 million connections) were slower than 768 kbps in the upstream direction, 27% (or 23.9 million connections) were at least 768 kbps in the upstream direction but slower than 1.5 Mbps, and 42% (or 37.7 million connections) were at least 1.5 Mbps in the upstream direction.<sup>7</sup>
- For speeds in the upstream direction, 69% of fixed connections met the broadband availability proxy of 768 kbps or higher that was used in the *Eighth Broadband Progress Report*.

**Fixed connections – summary.** Considering both downstream and upstream speeds, 64% of the 90 million fixed connections reported for June 2012 (or 57 million connections) met the broadband availability proxy of 3 Mbps or higher downstream and 768 kbps or higher upstream that was used in the *Eighth Broadband Progress Report*.<sup>8</sup>

**Mobile connections – downstream speeds.** Figure 4(a) illustrates how the 153 million mobile connections reported for June 2012 were distributed across the three ranges of *downstream speed* defined by breakpoints at 3 Mbps and at 6 Mbps.

**Figure 4(a)**  
**Distribution of Reportable Mobile Connections (153,438,000) by**  
**Downstream Speed as of June 30, 2012**



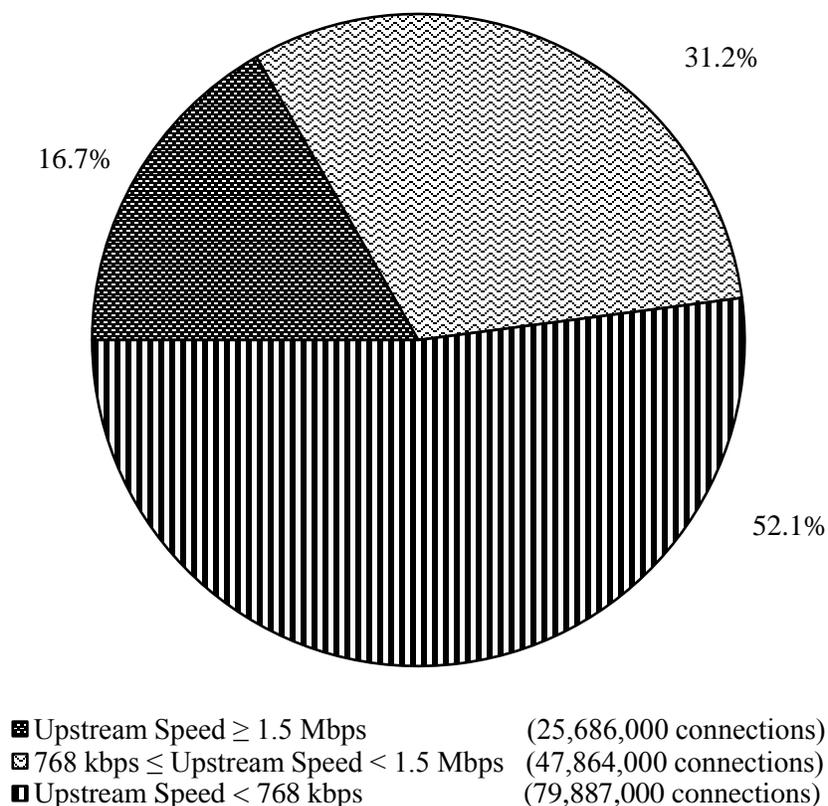
<sup>7</sup> *Ibid.*

<sup>8</sup> Compare Tables 1 and 2, at p. 17.

- In June 2012, 69% of reportable mobile connections (or 106.1 million connections) were slower than 3 Mbps in the downstream direction, 12% (or 18.9 million connections) were at least 3 Mbps in the downstream direction but slower than 6 Mbps, and 19% (or 28.4 million connections) were at least 6 Mbps in the downstream direction.<sup>9</sup>
- For speeds in the downstream direction, 31% of mobile connections met the downstream speed of 3 Mbps or higher that was used in the *Eighth Broadband Progress Report*.

**Mobile connections – upstream speeds.** Figure 4(b) illustrates how the 153 million mobile connections reported for June 2012 were distributed across the three ranges of *upstream speed* defined by breakpoints at 768 kbps and at 1.5 Mbps.

**Figure 4(b)**  
**Distribution of Reportable Mobile Connections (153,438,000) by**  
**Upstream Speed as of June 30, 2012**



<sup>9</sup> See Chart 5, at p. 22.

- In June 2012, about 52% of reportable mobile connections (or 79.9 million connections) were slower than 768 kbps in the upstream direction, 31% (or 47.9 million connections) were at least 768 kbps in the upstream direction but slower than 1.5 Mbps, and 17% (or 25.7 million connections) were at least 1.5 Mbps in the upstream direction.<sup>10</sup>
- For speeds in the upstream direction, about 48% of mobile connections met the upstream speed of 768 kbps or higher that was used in the *Eighth Broadband Progress Report*.

**Mobile connections – summary.** Considering both downstream and upstream speeds, 28% of the 153 million fixed connections reported for June 2012 (or 43 million connections) met the downstream speed of 3 Mbps or higher and the upstream speed of 768 kbps or higher that were used in the *Eighth Broadband Progress Report*.<sup>11</sup>

**Providers by census tract by connection speed.** In earlier reports in which we summarized Form 477 data through June 2008, we included summary statistics for the percentage of 5-digit geographical ZIP Codes in which differing numbers of providers (zero providers, one provider, two providers, etc.) had customers for their reportable connections.<sup>12</sup> The ZIP Code-based data did not include information about the speeds of the connections that were purchased in particular ZIP Codes. However, the census tract-level information collected on Form 477 for December 2008 and later dates does include the speeds of purchased fixed-location connections.<sup>13</sup> In Figure 5(a), we use that information to estimate the percentages of households located in census tracts where zero, one, two, or three or more providers reported residential fixed-location connections of several different speeds in December 2011. In doing so, however, we emphasize that a provider who reports residential fixed-location connections of a particular speed in a particular census tract may not necessarily offer service at that speed everywhere in the census tract. Accordingly, the number of providers shown in Figure 5(a) does not necessarily reflect the number of choices available to a particular household.

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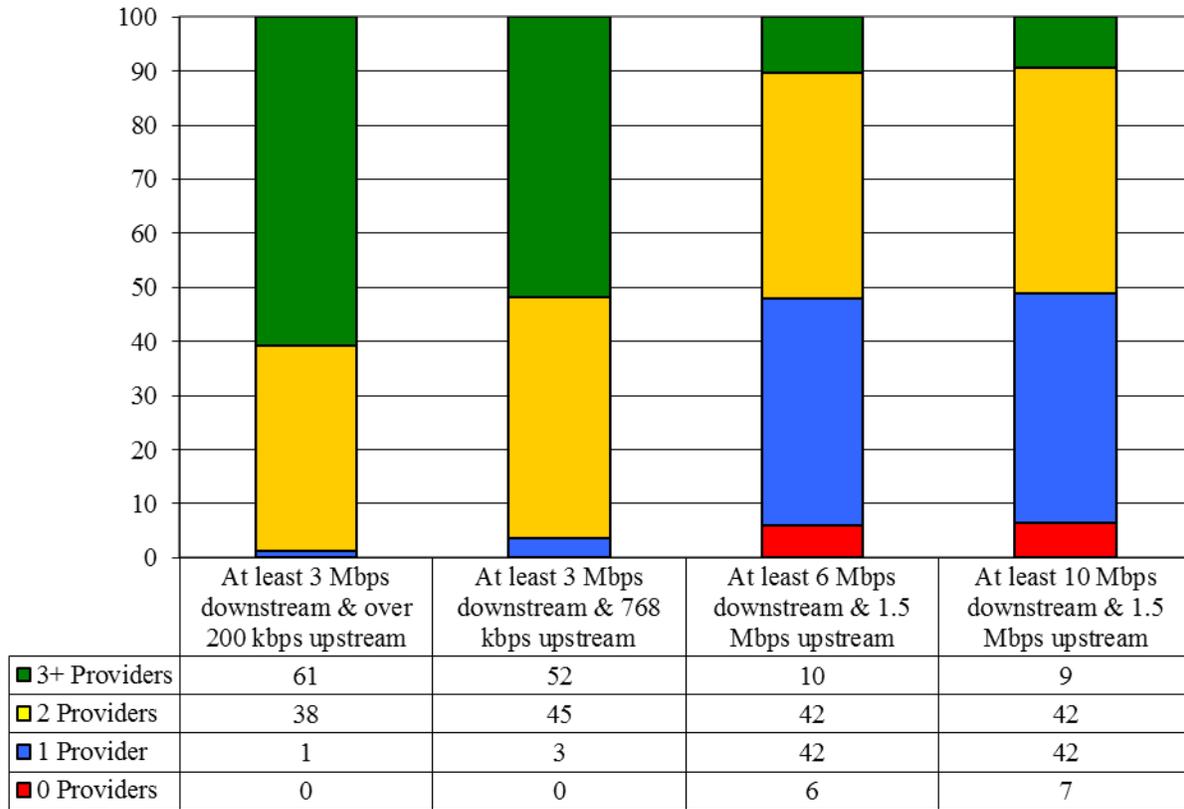
<sup>10</sup> *Ibid.*

<sup>11</sup> Compare Tables 1 and 2, at p. 17.

<sup>12</sup> For the most recent such report, see *High-Speed Services for Internet Access: Status as of June 30, 2008* (July 2009) (*June 2008 High-Speed Report*) at pp. 1-4, available at [www.fcc.gov/wcb/iatd/comp.html](http://www.fcc.gov/wcb/iatd/comp.html).

<sup>13</sup> Mobile wireless providers report the number of service subscriptions they have sold, and the speeds of those service subscriptions, at the state level only. For individual census tracts, they report the speeds of mobile wireless service subscriptions that they *offer* for sale – that is, the capability of the network that they operate in the census tract.

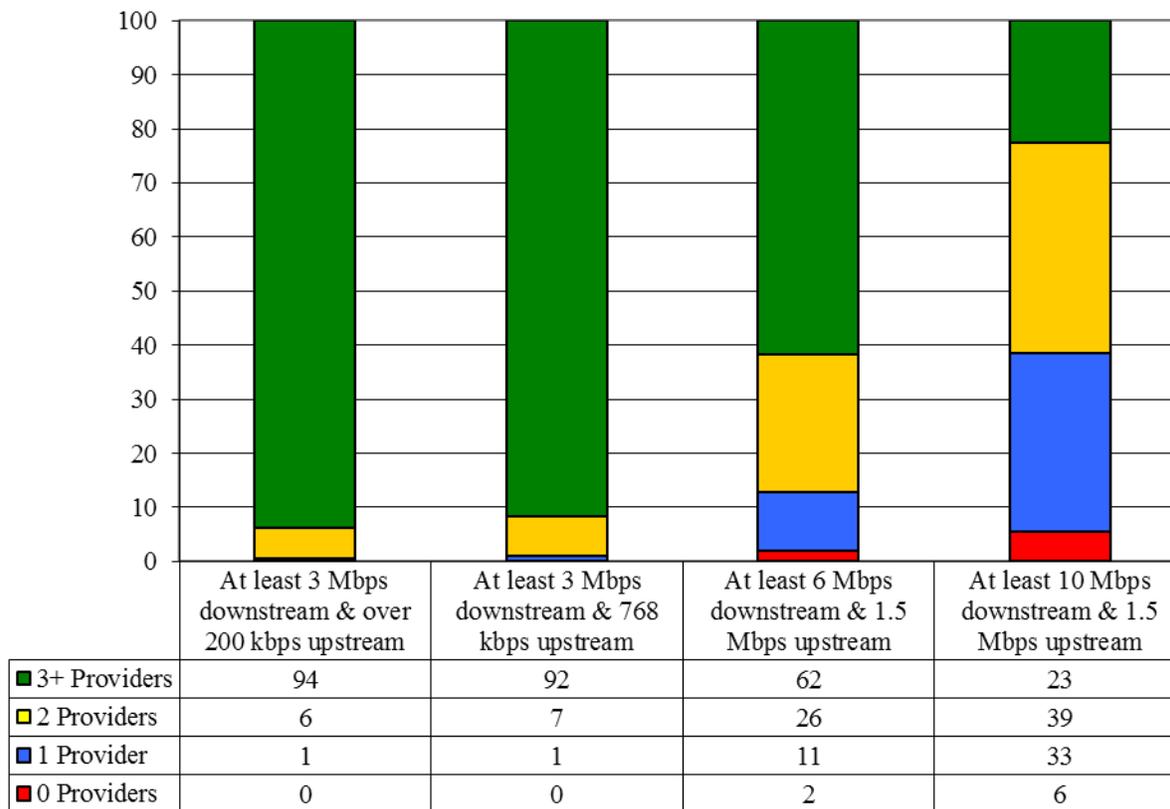
**Figure 5(a)**  
**Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds as of June 30, 2012**



Figures may not sum to 100% due to rounding.

In Figure 5(b), we estimate the percentages of households in census tracts where providers reported purchased residential fixed-location connections of different speeds *or* reported operating a mobile wireless network capable of sending or receiving data at the indicated speeds. Again, we emphasize that such providers may not necessarily offer services at those speeds everywhere in the census tract.

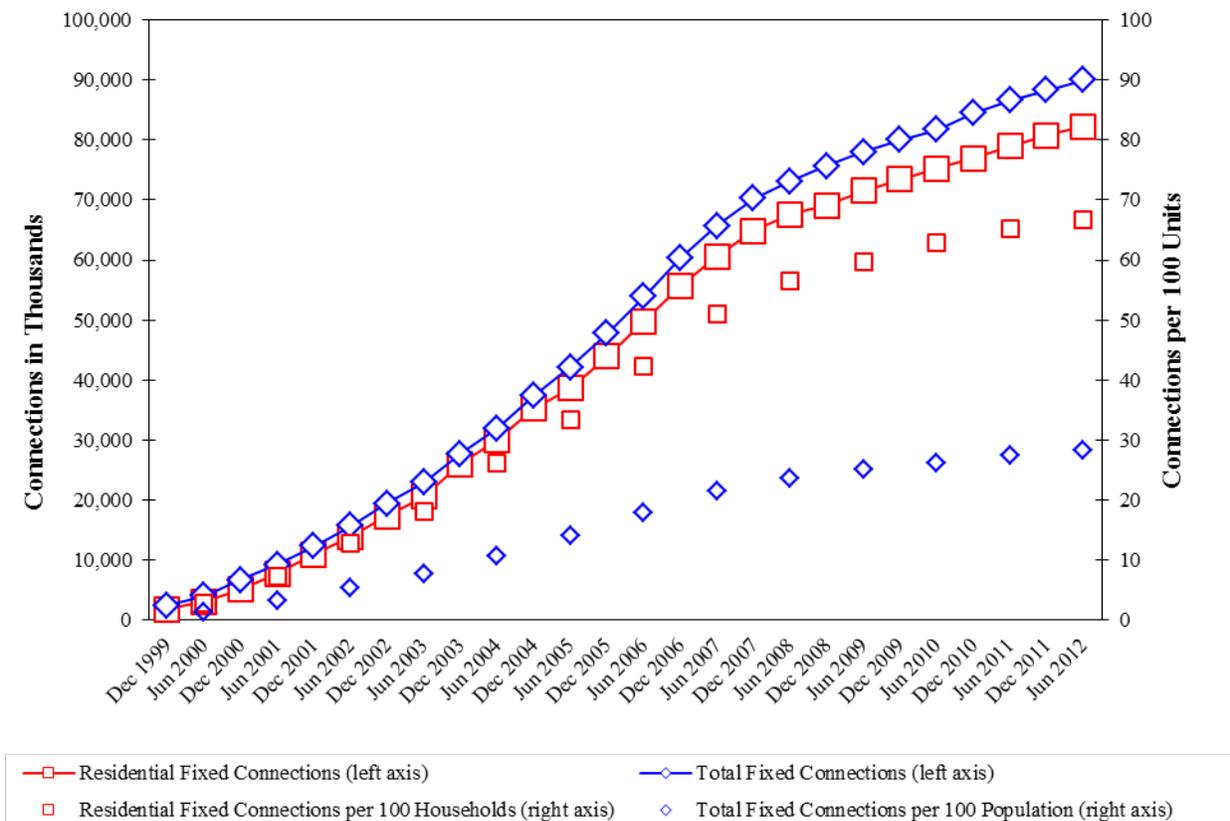
**Figure 5(b)**  
**Percentages of Households Located in Census Tracts Where Providers Report Residential Fixed-Location Connections of Various Speeds or Operate a Mobile Wireless Network Capable of Delivering Service of Various Speeds as of June 30, 2012**



Figures may not sum to 100% due to rounding.

**Internet access adoption.** The Commission has systematically collected, compiled, and published data about the adoption of fixed-location Internet access connections faster than 200 kbps in at least one direction for more than a decade. Figure 6 illustrates the adoption of fixed-location Internet access connections (that is, all reportable connections except mobile wireless connections) since 1999.<sup>14</sup>

**Figure 6  
Fixed-Location Connections 1999-2012**



- Between June 2002 and June 2012, total (business and residential) reportable fixed-location connections grew from nearly 16 million connections to 90 million connections – at a compound annual growth rate of 19% per year.<sup>15</sup>
- Over the same ten-year period, residential fixed-location connections grew from 14 million connections to 82 million connections – also at a compound annual growth rate of 19% per year.

<sup>14</sup> Historical fixed-location connection counts not included in this report may be found in *June 2008 High-Speed Report* at Tables 1 and 3, available in Excel format at [www.fcc.gov/wcb/iatd/comp.html](http://www.fcc.gov/wcb/iatd/comp.html).

<sup>15</sup> The compound annual growth rate (CAGR) is a smoothed rate of growth calculated in three steps. First, divide the ending (June 2012) value by the beginning (June 2002) value. Second, raise the result of that division to a power equal to one divided by the number of years in the period (in this case, 10 years, so the power is 1/10). Third, subtract the number one from the result of the second step.

- Between June 2002 and June 2012, household adoption – which we track in Figure 6 by comparing the number of residential fixed-location connections to the number of households – increased from 13 connections per 100 households to 67 connections per 100 households.<sup>16,17</sup>

## **Other report highlights.**

### **Residential subscribership**

- Residential fixed-location Internet access connections over 200 kbps in at least one direction increased by 4% between June 2011 and June 2012, to 82 million. See Table 3.
- Reported residential mobile wireless service subscribers with mobile devices and data plans for full Internet access increased by 23%, to 114 million, between June 2011 and June 2012. See Table 3.
- The reported data show a 24% annual increase in the number of residential fixed-location connections that are at least 6 Mbps downstream and 1.5 Mbps upstream (from 27.9 million to 34.5 million) and a 26% annual increase in the number of connections that are at least 10 Mbps downstream and 1.5 Mbps upstream (from 27.1 million to 34.1 million). See Chart 12.

### **Household adoption of faster speeds**

- As a national average in June 2012, there were 45 residential fixed-location connections per 100 households for connections with speeds that were reported to be at least 3 Mbps downstream and 768 kbps upstream.<sup>18</sup> See Table 13.

<sup>16</sup> In Figure 6, we calculated residential fixed connections per 100 *households* using, in the denominator, U.S. household estimates from the Census Bureau’s Current Population Survey (CPS) for July of each year and, for Puerto Rico and the other inhabited island areas, Census 2010 households for 2010 and later years and Census 2000 households for the earlier years. (The CPS also estimates U.S. households for March and November of each year.) Ratios calculated for different dates or by using alternative household estimates will differ somewhat from the ratios reported in Figure 6.

<sup>17</sup> We also show total (including business as well as residential) fixed-location connections per 100 *population* in Figure 6, which we calculated using U.S. Census Bureau population estimates for the United States and Puerto Rico – which are as of July 1 each year – and, for the remaining inhabited island areas, Census 2010 population for 2010 and later years and Census 2000 population for the earlier years. This statistic, which is routinely reported by the Organization for Economic Cooperation and Development (OECD), incorporates connections to business locations into a comparison to persons. A more accurately measured indicator of this type would include only connections to residential locations, but OECD does not have comprehensive, consistent information about residential connections in the member countries. (We note that the ratio of accurately measured *residential* fixed-location connections to population has a maximum value for any given country and point in time – the value when *every* household is connected – if we assume that no household would have more than one fixed connection to its premises. For the United States in June 2012, for example, the maximum value would be 39 because there were about 123 million households in the United States and inhabited insular areas and a population of about 318 million according to the sources used for Figure 6.)

<sup>18</sup> Increases over time in the ratio of residential fixed-location connections to households indicate that increasing shares of households are connected at home. The ratio is somewhat different from the “take rate” of offered service (which may also be called an “adoption rate”) because, as discussed in connection with Figure 5(a), some households may be located in areas where no fixed-location service is offered. These methodological differences are discussed in greater detail in *Eighth Broadband Progress Report*, 27 FCC Rcd 10386, para. 94.

### **Census tract and county shares of households with reportable connections**

- We estimate the share of households with fixed-location Internet access connections over 200 kbps in at least one direction in individual census tracts and counties as of June 30, 2012. Our estimates continue to indicate that there are substantial areas of relatively low and relatively high household adoption around the national average. See Charts 15 and 16.
- For both census tracts and counties, we continue to find estimates above 100% for the share of households with reportable fixed-location Internet access connections. These results suggest that some filers are not accurately assigning customer connections to census tracts, and anecdotal evidence supports that conclusion.<sup>19</sup>

### **Household adoption rates and subscribership demographics**

- The report includes charts that illustrate correlations between household subscribership, or *adoption*, rates and demographic measures. We update charts based on income, household density, education, age, and race. The data indicate that some demographic variables are correlated with the adoption of Internet access service. See Charts 17-29.

### **Maps of providers by census tract**

- Maps depict the number of providers of reportable connections by census tract. These maps are similar to previously published maps of providers by ZIP Code, but differ in important respects. In particular, instead of a single map combining providers of connections over all technologies and to both residential and business end users, now separate maps depict: (1) providers of total (combined residential and business) reportable fixed-location connections, (2) providers of *residential* reportable fixed-location connections, (3) providers of *residential* fixed-location connections at least 3 Mbps downstream and 768 kbps upstream, and (4) providers making reportable mobile wireless service *available*.<sup>20</sup>

**Remainder of the report.** The remainder of the report consists of tables, charts, and maps that highlight different aspects of Internet access service subscriptions. This information is organized into four sections, as described below. As always, publicly accessible data that are too voluminous to include in this report are available online at [www.fcc.gov/wcb/iatd/comp.html](http://www.fcc.gov/wcb/iatd/comp.html).

- Detailed Summary Statistics: The Nation. Tables 1-12 and Charts 1-14 focus in order on: number of connections, speed of connections, technology of connections, and number of providers.
- Detailed Summary Statistics: The States. Tables 13-22 present comparable information for the individual states and our estimates of the shares of households that are connected at different speeds.

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<sup>19</sup> For example, while contacting Form 477 filers with questions about reported data, FCC staff continue to find situations in which all connections reported for a county have been assigned to a single, anomalous census tract.

<sup>20</sup> As discussed in the Technical Notes, a mobile wireless provider should only report service availability in census tracts where the provider operates a network capable of sending or receiving data at speeds above 200 kbps.

- Detailed Summary Statistics: Counties and Census Tracts. Charts 15-16 and Tables 23-27 present information about differences among counties and census tracts. This section concludes with two maps that illustrate differences among census tracts in the estimated share of connected households and the four maps (discussed above) that illustrate providers by census tract.
- Detailed Correlation Results: Demographic Measures. Charts 17-29 present details of the correlations observed between the estimated share of connected households and demographic measures.

\* \* \* \*

We invite users of this information to suggest improvements in the data analysis by using the attached customer response form or sending comments to [IATDreports@fcc.gov](mailto:IATDreports@fcc.gov) for subject: June 2012 Internet services data, and to participate in proceedings the Commission undertakes to improve the data collection.

## Detailed Summary Statistics: The Nation

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**Table 1**  
**Connections over 200 kbps in at Least One Direction 2008-2012**  
(In thousands)

<i>Technology</i>	2008		2009		2010		2011		2012
	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>
Total	132,814	102,239	119,433	136,294	157,017	182,065	206,131	230,387	243,397
Total Fixed	73,123	75,707	77,997	79,994	81,764	84,521	86,575	88,320	89,959
Mobile Wireless <sup>1</sup>	59,691	26,532	41,436	56,300	75,253	97,544	119,556	142,066	153,438

**Table 2**  
**Connections at Least 3 Mbps Downstream and 768 kbps Upstream 2008-2012**  
(In thousands)

<i>Technology</i>	2008		2009		2010		2011		2012
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	
Total	31,120	33,332	40,669	45,552	55,110	64,819	82,013	100,271	
Total Fixed	30,987	33,108	38,963	41,364	44,694	48,577	51,095	57,247	
Mobile Wireless <sup>1</sup>	133	224	1,706	4,188	10,416	16,242	30,918	43,025	

**Table 3**  
**Residential Connections over 200 kbps in at Least One Direction 2008-2012**  
(In thousands)

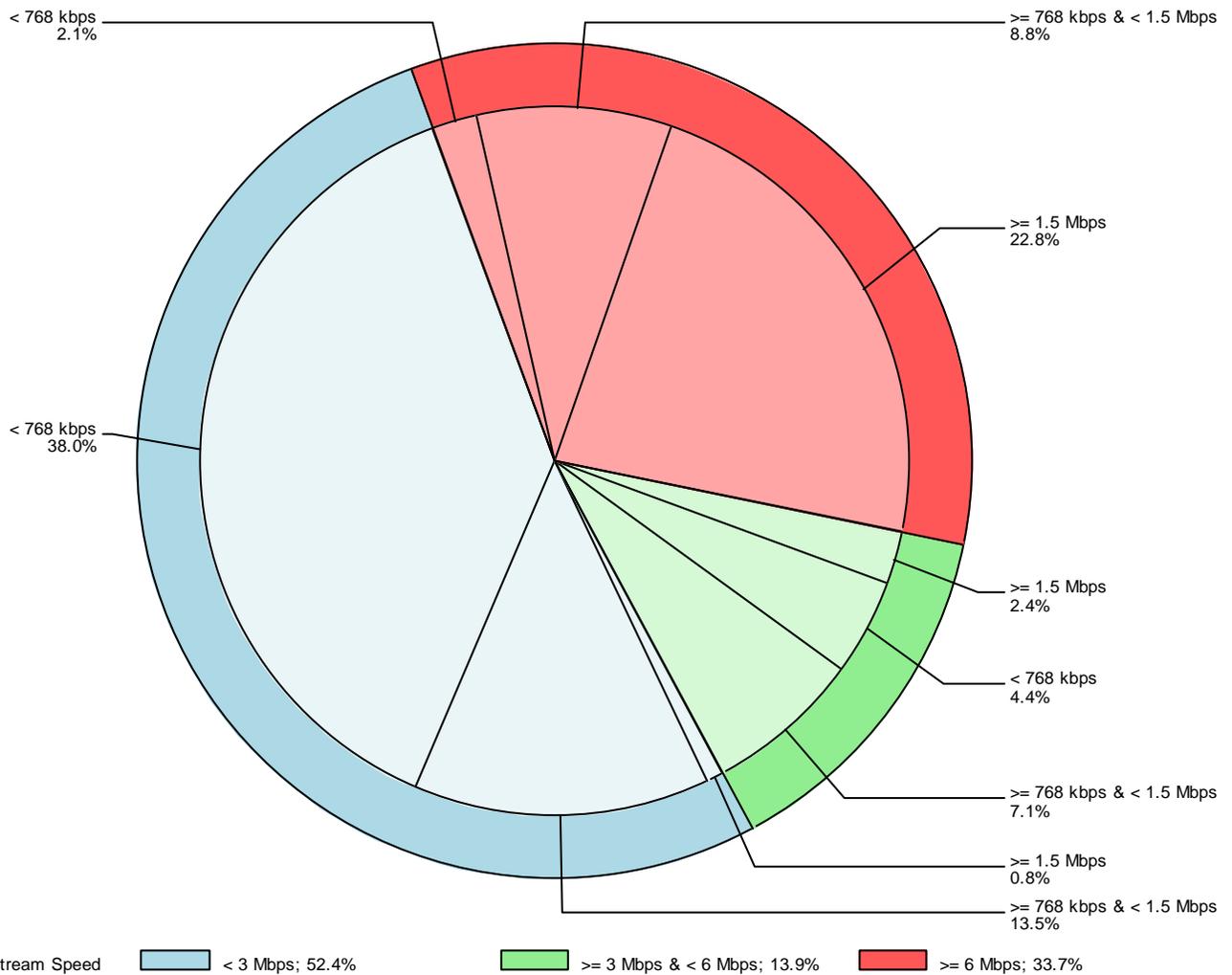
<i>Technology</i>	2008		2009		2010		2011		2012
	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>
Total	79,090	88,190	103,300	117,089	132,567	149,441	171,773	186,702	196,704
Total Fixed	67,554	69,047	71,509	73,394	75,251	76,918	78,906	80,709	82,233
Mobile Wireless <sup>1</sup>	11,536	19,142	31,791	43,695	57,316	72,523	92,867	105,993	114,472

**Table 4**  
**Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream 2008-2012**  
(In thousands)

<i>Technology</i>	2008		2009		2010		2011		2012
	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	<i>Dec</i>	<i>Jun</i>	
Total	29,127	31,356	38,426	42,243	47,632	51,783	63,734	78,616	
Total Fixed	29,013	31,161	36,844	39,037	41,769	45,263	47,425	53,077	
Mobile Wireless <sup>1</sup>	114	196	1,582	3,206	5,863	6,520	16,309	25,539	

<sup>1</sup> Reporting instructions for mobile wireless changed between the June 2008 and December 2008 data. See Technical Notes at the end of the report.  
Note: Some historical data have been revised. Figures may not sum to totals due to rounding.  
Source: FCC Form 477, Parts I and VI.

**Chart 1**  
**Distribution of Connections over 200 kbps in at Least One Direction**  
**as of June 30, 2012**



Connections over 200 kbps in at Least One Direction (in thousands)

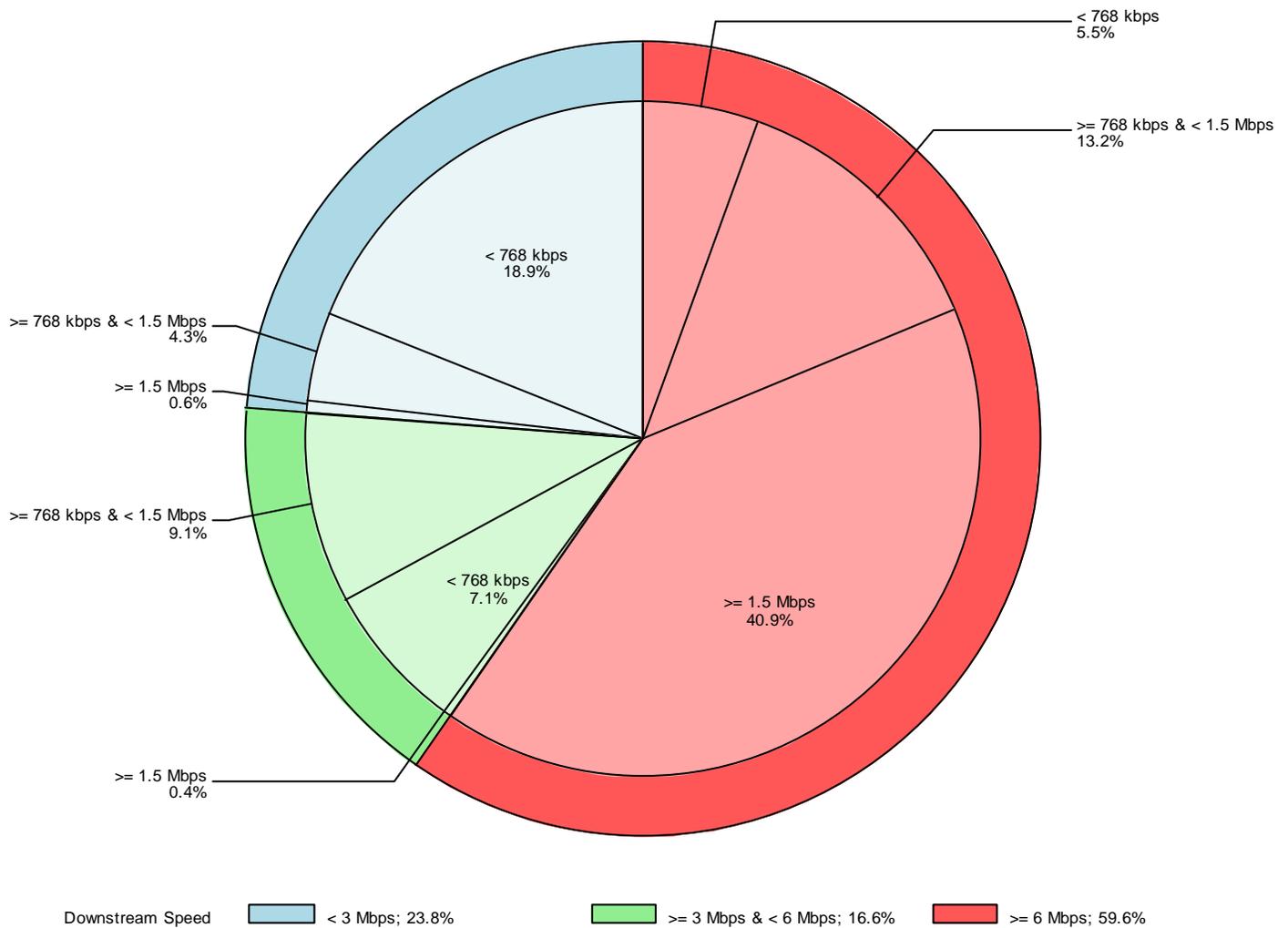
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	92,545	10,624	5,021	108,189
At least 768 kbps & Less than 1.5 Mbps	32,945	17,351	21,508	71,804
At least 1.5 Mbps	1,991	5,873	55,539	63,404
<b>Total</b>	<b>127,481</b>	<b>33,848</b>	<b>82,068</b>	<b>243,397</b>

Percentages

Less than 768 kbps	38.0	4.4	2.1	44.4
At least 768 kbps & Less than 1.5 Mbps	13.5	7.1	8.8	29.5
At least 1.5 Mbps	0.8	2.4	22.8	26.0
<b>Total</b>	<b>52.4</b>	<b>13.9</b>	<b>33.7</b>	<b>100.0</b>

Note: Figures may not sum to totals due to rounding.  
 Source: FCC Form 477, Part I.

**Chart 2**  
**Distribution of Fixed Connections over 200 kbps in at Least One Direction**  
**as of June 30, 2012**



Fixed Connections over 200 kbps in at Least One Direction (in thousands)

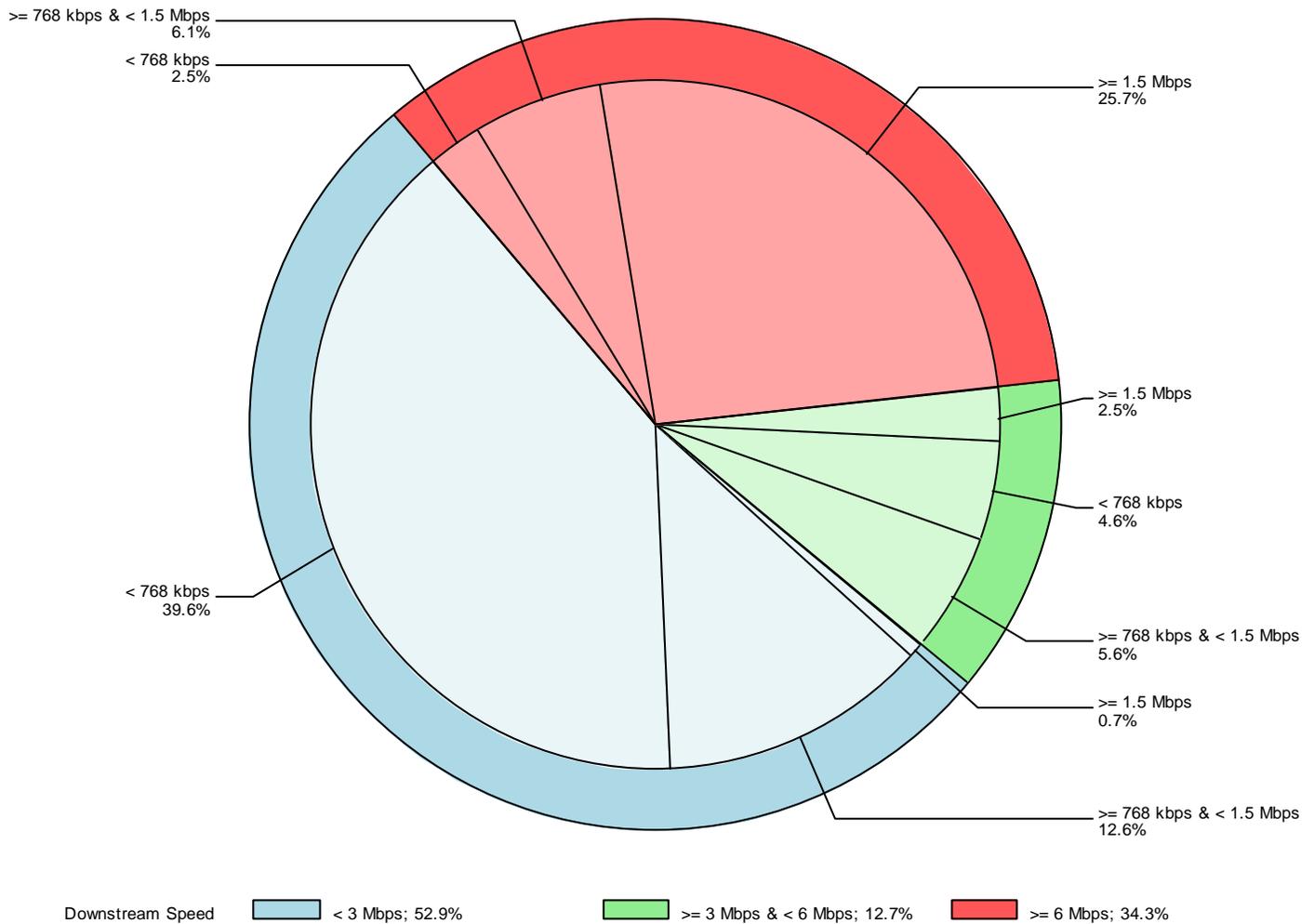
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	16,962	6,353	4,987	28,302
At least 768 kbps & Less than 1.5 Mbps	3,830	8,231	11,879	23,940
At least 1.5 Mbps	581	347	36,790	37,717
<b>Total</b>	<b>21,372</b>	<b>14,931</b>	<b>53,656</b>	<b>89,959</b>

Percentages

Less than 768 kbps	18.9	7.1	5.5	31.5
At least 768 kbps & Less than 1.5 Mbps	4.3	9.1	13.2	26.6
At least 1.5 Mbps	0.6	0.4	40.9	41.9
<b>Total</b>	<b>23.8</b>	<b>16.6</b>	<b>59.6</b>	<b>100.0</b>

Note: Figures may not sum to totals due to rounding.  
Source: FCC Form 477, Part I.

**Chart 3**  
**Distribution of Residential Connections over 200 kbps in at Least One Direction**  
**as of June 30, 2012**



Residential Connections over 200 kbps in at Least One Direction (in thousands)

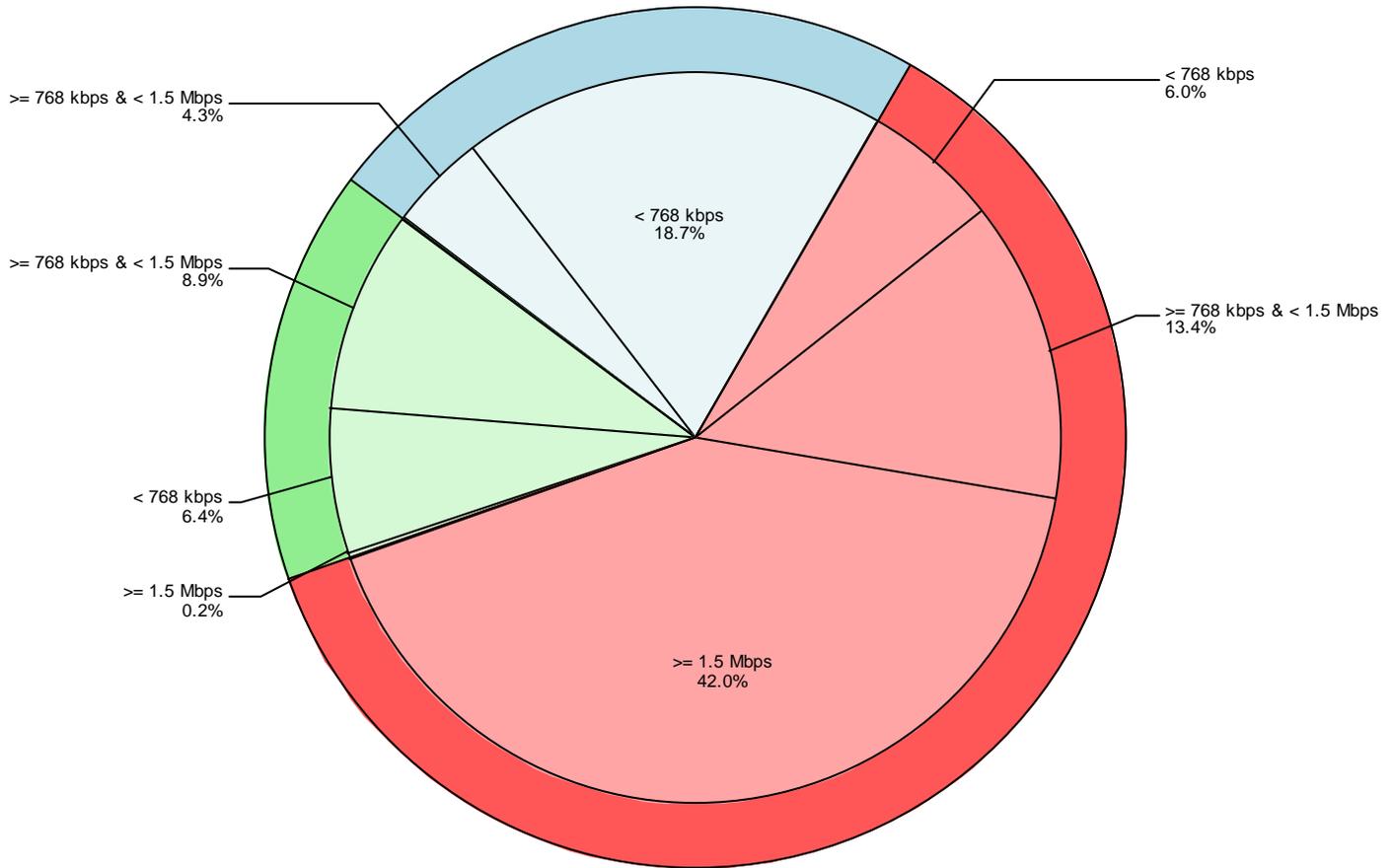
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	77,854	9,025	4,945	91,825
At least 768 kbps & Less than 1.5 Mbps	24,864	11,074	12,004	47,942
At least 1.5 Mbps	1,399	4,959	50,579	56,938
<b>Total</b>	<b>104,118</b>	<b>25,058</b>	<b>67,528</b>	<b>196,704</b>

Percentages

Less than 768 kbps	39.6	4.6	2.5	46.7
At least 768 kbps & Less than 1.5 Mbps	12.6	5.6	6.1	24.4
At least 1.5 Mbps	0.7	2.5	25.7	28.9
<b>Total</b>	<b>52.9</b>	<b>12.7</b>	<b>34.3</b>	<b>100.0</b>

Note: Figures may not sum to totals due to rounding.  
 Source: FCC Form 477, Parts I and VI.

**Chart 4**  
**Distribution of Residential Fixed Connections over 200 kbps in at Least One Direction**  
**as of June 30, 2012**



Downstream Speed ■ < 3 Mbps; 23.0% ■ >= 3 Mbps & < 6 Mbps; 15.6% ■ >= 6 Mbps; 61.3%

Note: Inner circle (light shading) represents upstream speeds.

Residential Fixed Connections over 200 kbps in at Least One Direction (in thousands)

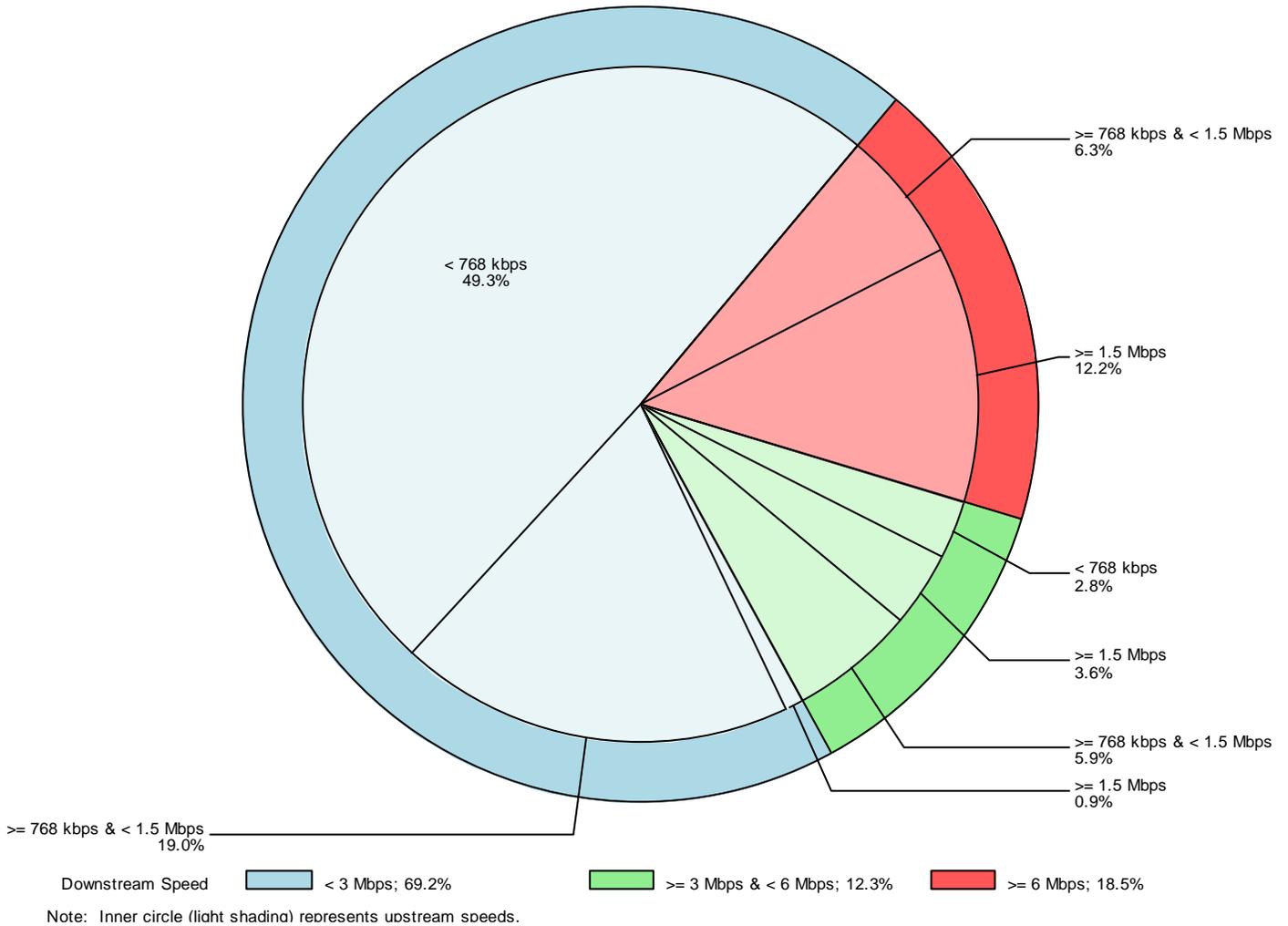
Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	15,359	5,286	4,916	25,561
At least 768 kbps & Less than 1.5 Mbps	3,521	7,357	10,981	21,860
At least 1.5 Mbps	74	191	34,546	34,812
<b>Total</b>	<b>18,954</b>	<b>12,835</b>	<b>50,443</b>	<b>82,233</b>

Percentages

Less than 768 kbps	18.7	6.4	6.0	31.1
At least 768 kbps & Less than 1.5 Mbps	4.3	8.9	13.4	26.6
At least 1.5 Mbps	0.1	0.2	42.0	42.3
<b>Total</b>	<b>23.0</b>	<b>15.6</b>	<b>61.3</b>	<b>100.0</b>

Note: Figures may not sum to totals due to rounding.  
 Source: FCC Form 477, Part VI.

**Chart 5**  
**Distribution of Mobile Wireless Connections over 200 kbps in at Least One Direction**  
**as of June 30, 2012**



Mobile Wireless Connections over 200 kbps in at Least One Direction (in thousands)

Upstream Speed	Downstream Speed			Total
	Less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps	
Less than 768 kbps	75,583	4,271	34	79,887
At least 768 kbps & Less than 1.5 Mbps	29,115	9,120	9,629	47,864
At least 1.5 Mbps	1,411	5,526	18,749	25,686
<b>Total</b>	<b>106,109</b>	<b>18,917</b>	<b>28,412</b>	<b>153,438</b>

Percentages				
Less than 768 kbps	49.3	2.8	0.0	52.1
At least 768 kbps & Less than 1.5 Mbps	19.0	5.9	6.3	31.2
At least 1.5 Mbps	0.9	3.6	12.2	16.7
<b>Total</b>	<b>69.2</b>	<b>12.3</b>	<b>18.5</b>	<b>100.0</b>

Note: Figures may not sum to totals due to rounding.  
 Source: FCC Form 477, Part I.

**Table 5**  
**Connections over 200 kbps in at Least One Direction by Technology 2008-2012**  
(In thousands)

Technology	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total	132,814	102,239	119,433	136,294	157,017	182,065	206,131	230,387	243,397
Total Fixed	73,123	75,707	77,997	79,994	81,764	84,521	86,575	88,320	89,959
aDSL	29,964	30,198	30,631	30,987	30,759	31,470	31,611	31,341	31,188
sDSL	275	241	217	225	191	167	159	148	140
Other Wireline <sup>1</sup>	670	709	689	719	755	795	778	795	769
Cable Modem	38,190	40,251	41,434	42,439	43,923	45,334	46,698	48,257	49,663
FTTP <sup>2</sup>	2,346	2,884	3,548	3,980	4,441	4,993	5,477	5,898	6,299
Satellite	869	938	990	1,116	1,144	1,176	1,204	1,190	1,217
Fixed Wireless	808	485	488	527	551	587	649	692	683
Mobile Wireless <sup>3</sup>	59,691	26,532	41,436	56,300	75,253	97,544	119,556	142,066	153,438

<sup>1</sup> Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

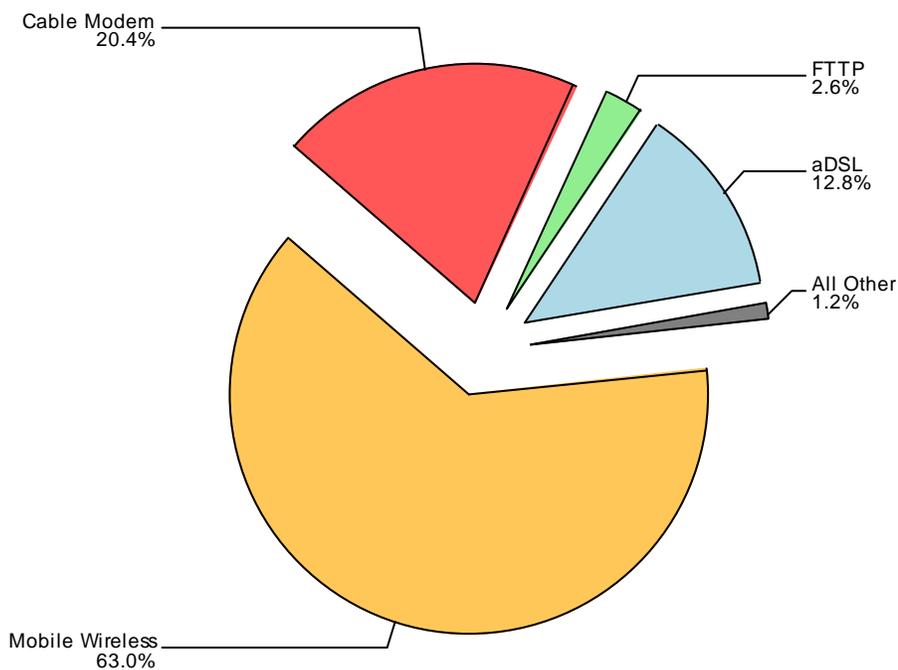
<sup>2</sup> Fiber to the premises.

<sup>3</sup> Reporting instructions for mobile wireless changed between the June 2008 and December 2008 data.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Chart 6**  
**Connections by Technology as of June 30, 2012**



**Table 6**  
**Residential Connections over 200 kbps in at Least One Direction by Technology 2008-2012**  
(In thousands)

Technology	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total	79,090	<b>88,190</b>	<b>103,300</b>	<b>117,089</b>	<b>132,567</b>	<b>149,441</b>	<b>171,773</b>	<b>186,702</b>	<b>196,704</b>
Total Fixed	67,554	<b>69,047</b>	<b>71,509</b>	<b>73,394</b>	<b>75,251</b>	<b>76,918</b>	<b>78,906</b>	<b>80,709</b>	<b>82,233</b>
aDSL	26,950	<b>26,488</b>	<b>27,047</b>	<b>27,402</b>	<b>27,488</b>	<b>27,467</b>	<b>27,754</b>	<b>27,767</b>	<b>27,650</b>
sDSL	81	<b>74</b>	<b>71</b>	<b>85</b>	<b>65</b>	<b>53</b>	<b>52</b>	<b>54</b>	<b>49</b>
Other Wireline <sup>1</sup>	37	<b>47</b>	<b>49</b>	<b>56</b>	<b>61</b>	<b>76</b>	<b>45</b>	<b>40</b>	<b>13</b>
Cable Modem	36,901	<b>38,681</b>	<b>39,909</b>	<b>40,872</b>	<b>42,178</b>	<b>43,295</b>	<b>44,480</b>	<b>45,826</b>	<b>47,032</b>
FTTP <sup>2</sup>	2,139	<b>2,717</b>	<b>3,348</b>	<b>3,758</b>	<b>4,185</b>	<b>4,704</b>	<b>5,118</b>	<b>5,521</b>	<b>5,892</b>
Satellite	705	<b>630</b>	<b>668</b>	<b>767</b>	<b>787</b>	<b>811</b>	<b>885</b>	<b>886</b>	<b>998</b>
Fixed Wireless	741	<b>410</b>	<b>417</b>	<b>454</b>	<b>486</b>	<b>513</b>	<b>572</b>	<b>615</b>	<b>598</b>
Mobile Wireless <sup>3</sup>	11,536	<b>19,142</b>	<b>31,791</b>	<b>43,695</b>	<b>57,316</b>	<b>72,523</b>	<b>92,867</b>	<b>105,993</b>	<b>114,472</b>

<sup>1</sup> Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

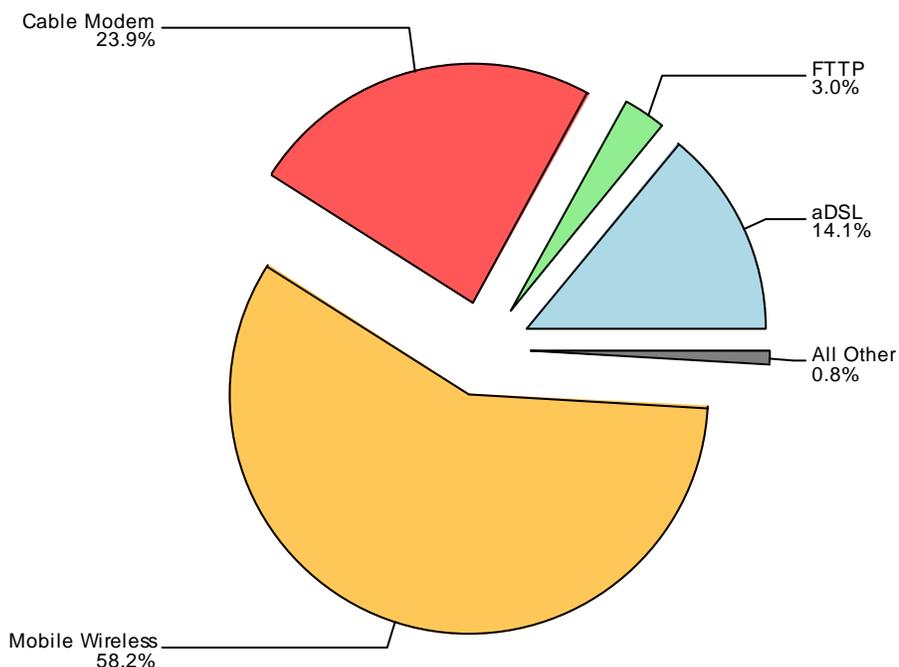
<sup>2</sup> Fiber to the premises.

<sup>3</sup> Reporting instructions for mobile wireless changed between the June 2008 and December 2008 data.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Chart 7**  
**Residential Connections by Technology as of June 30, 2012**



**Table 7**  
**Connections at Least 3 Mbps Downstream and 768 kbps Upstream by Technology 2008-2012**  
(In thousands)

Technology	2008		2009		2010		2011		2012
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	
Total	31,120	33,332	40,669	45,552	55,110	64,819	82,013	100,271	
Total Fixed	30,987	33,108	38,963	41,364	44,694	48,577	51,095	57,247	
aDSL	5,403	5,614	6,389	6,275	7,302	8,909	10,355	12,879	
sDSL	5	9	19	13	14	16	26	32	
Other Wireline <sup>1</sup>	122	129	150	177	211	204	228	239	
Cable Modem	22,708	23,958	28,583	30,616	32,338	34,113	34,693	37,798	
FTTP <sup>2</sup>	2,694	3,333	3,739	4,192	4,725	5,188	5,606	6,000	
Satellite	#	#	#	#	#	#	#	87	
Fixed Wireless	54	64	82	92	105	145	186	212	
Mobile Wireless	133	224	1,706	4,188	10,416	16,242	30,918	43,025	

# = Rounds to Zero.

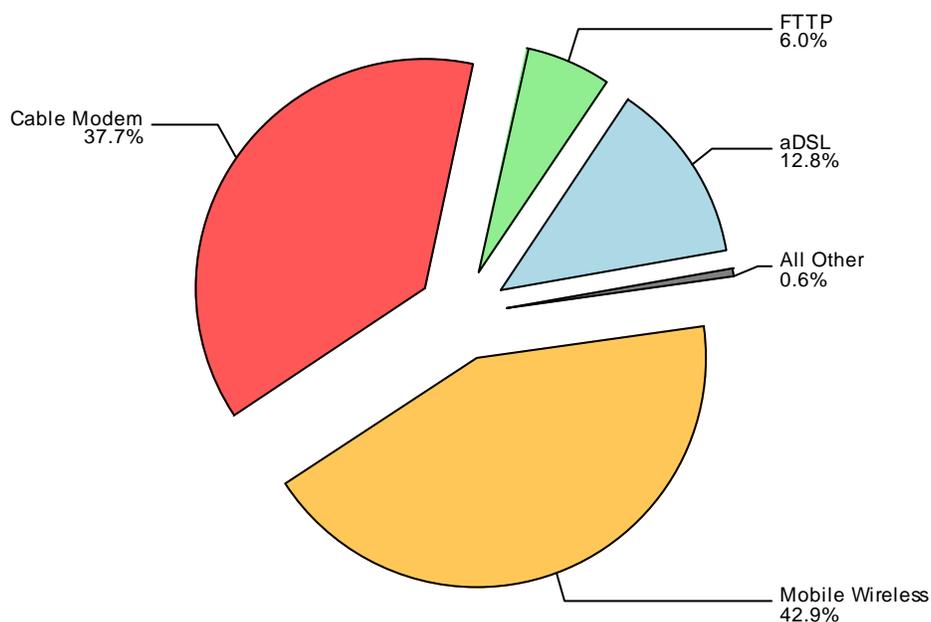
<sup>1</sup> Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

<sup>2</sup> Fiber to the premises.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Chart 8**  
**Connections at Least 3 Mbps Downstream and 768 kbps Upstream**  
**by Technology as of June 30, 2012**



**Table 8**  
**Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream by Technology 2008-2012**  
(In thousands)

Technology	2008		2009		2010		2011		2012
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun	
Total	29,127	31,356	38,426	42,243	47,632	51,783	63,734	78,616	
Total Fixed	29,013	31,161	36,844	39,037	41,769	45,263	47,425	53,077	
aDSL	4,613	4,895	5,633	5,557	6,421	7,909	9,278	11,571	
sDSL	1	2	10	2	2	4	12	12	
Other Wireline <sup>1</sup>	11	12	19	20	36	15	16	7	
Cable Modem	21,776	23,025	27,548	29,398	30,742	32,321	32,687	35,583	
FTTP <sup>2</sup>	2,571	3,177	3,566	3,982	4,482	4,894	5,271	5,632	
Satellite	0	0	0	0	0	0	#	86	
Fixed Wireless	42	50	68	77	86	121	161	184	
Mobile Wireless	114	196	1,582	3,206	5,863	6,520	16,309	25,539	

# = Rounds to Zero.

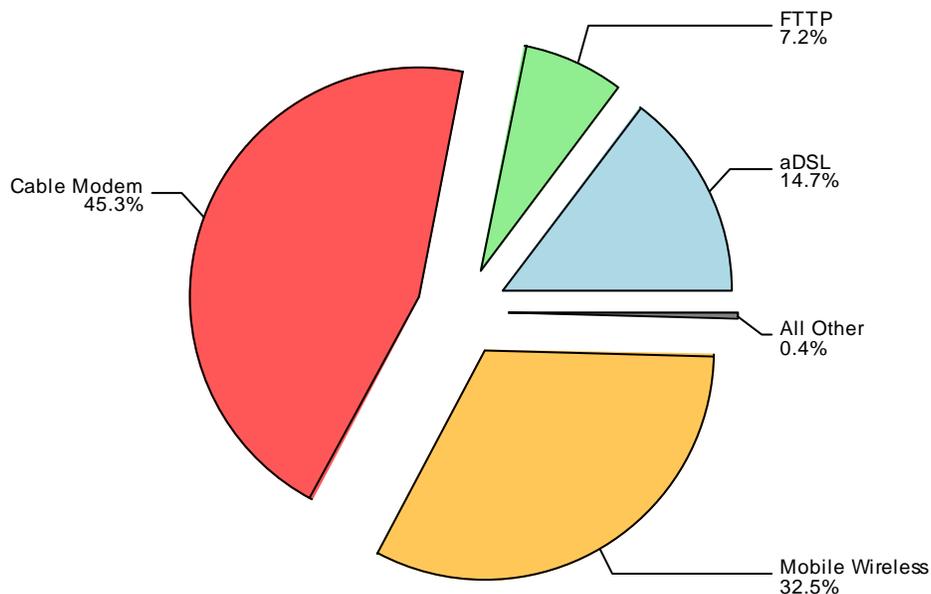
<sup>1</sup> Power Line and Other are summarized with Other Wireline to maintain firm confidentiality. See Technical Notes at the end of the report for a description of Form 477 technology categories and other reporting requirements.

<sup>2</sup> Fiber to the premises.

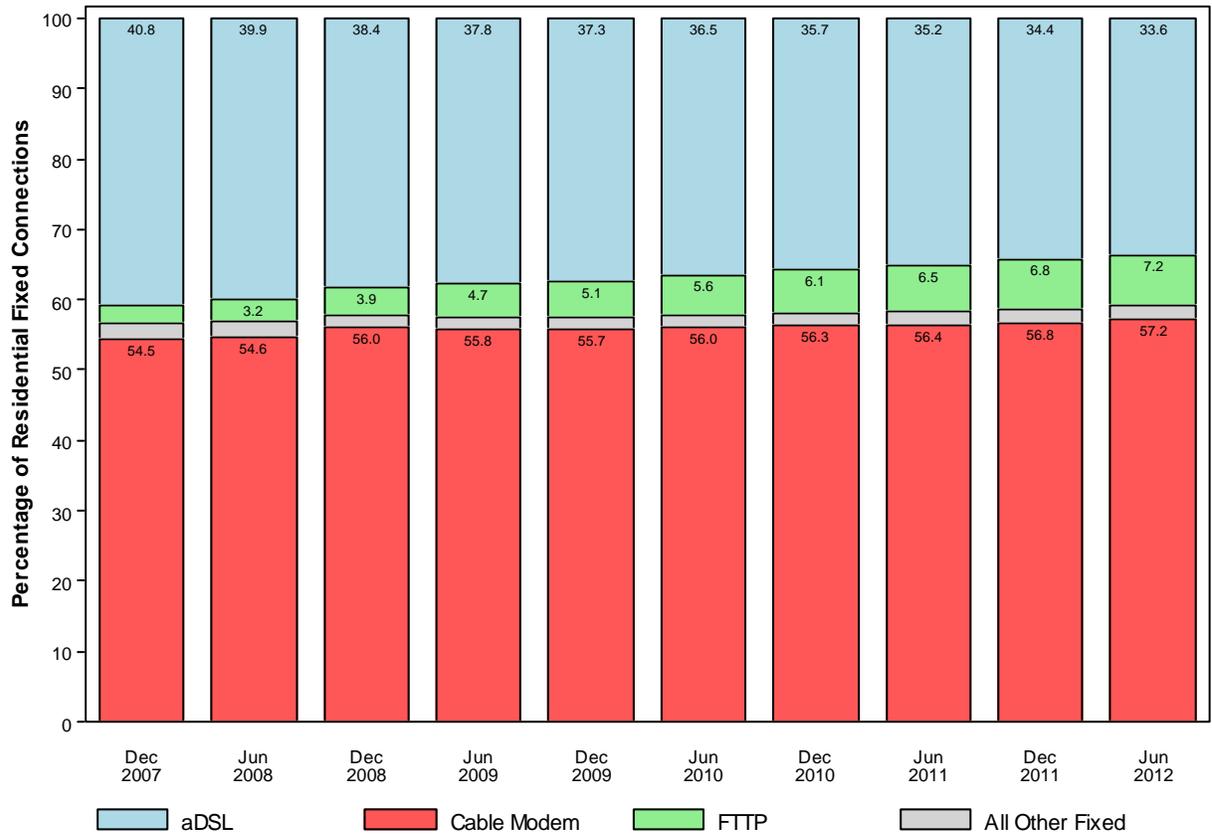
Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

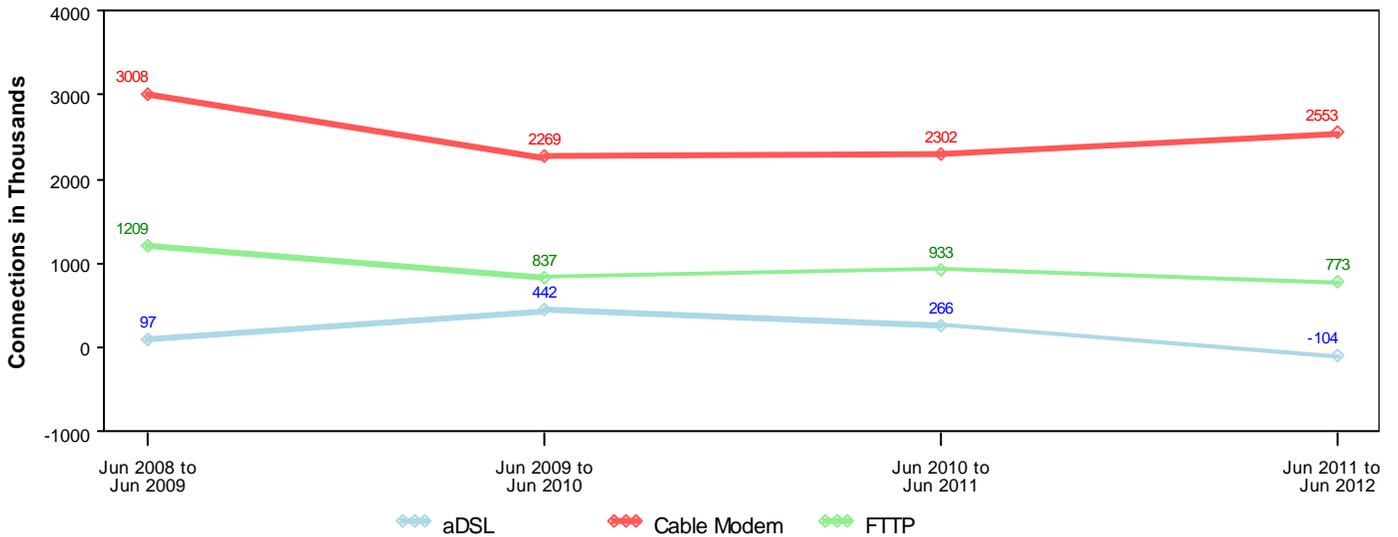
**Chart 9**  
**Residential Connections at Least 3 Mbps Downstream and 768 kbps Upstream**  
**by Technology as of June 30, 2012**



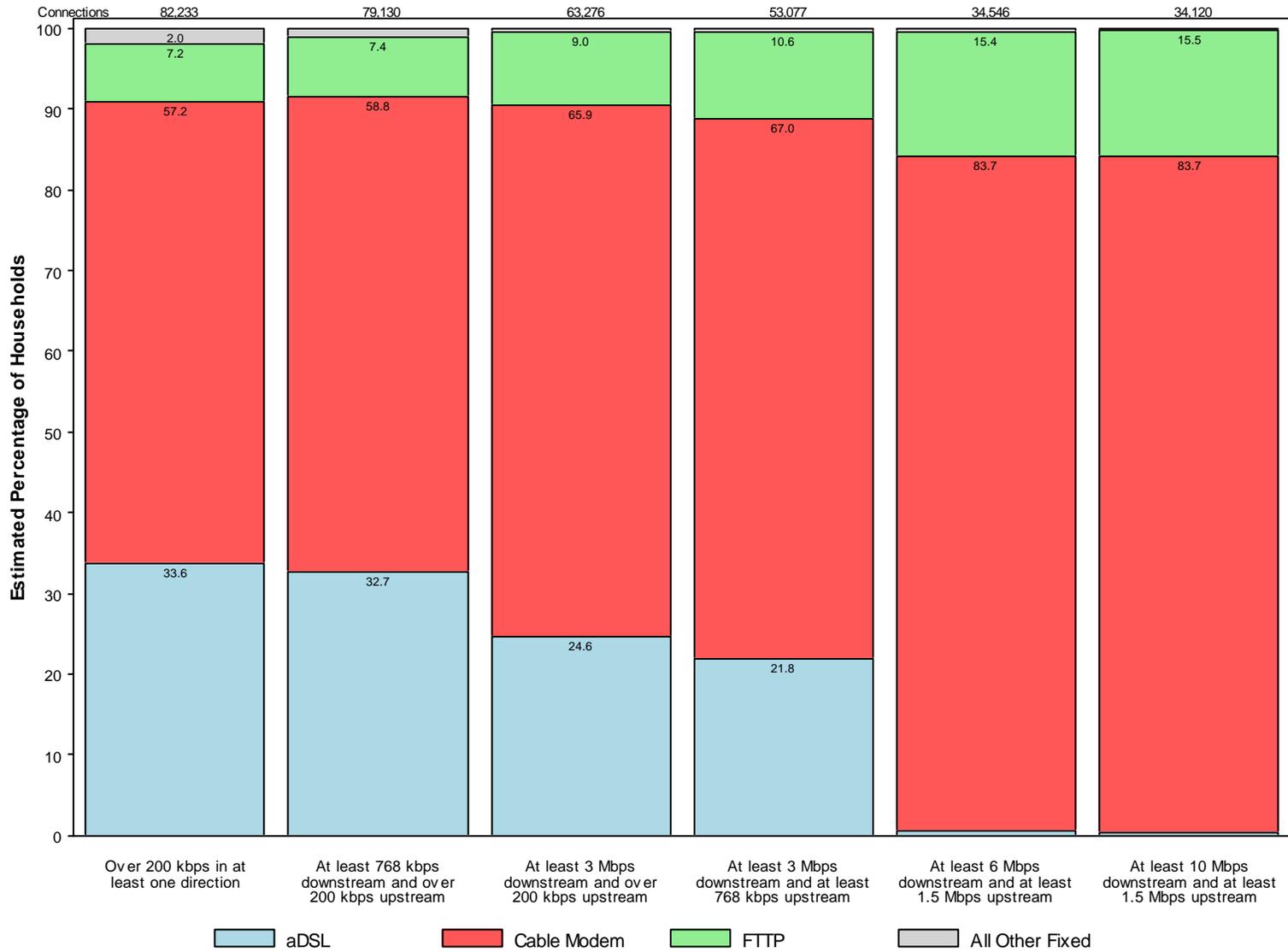
**Chart 10**  
**Residential Fixed Connections over 200 kbps in at Least One Direction 2007-2012**  
 (Shares of selected technologies)



**Chart 11**  
**Residential Fixed Connections over 200 kbps in at Least One Direction 2008-2012**  
 (Net adds for selected technologies)



**Chart 12**  
**Residential Fixed Connections by Technology as of June 30, 2012**  
 (Shares of selected technologies for selected speeds, connections in thousands)

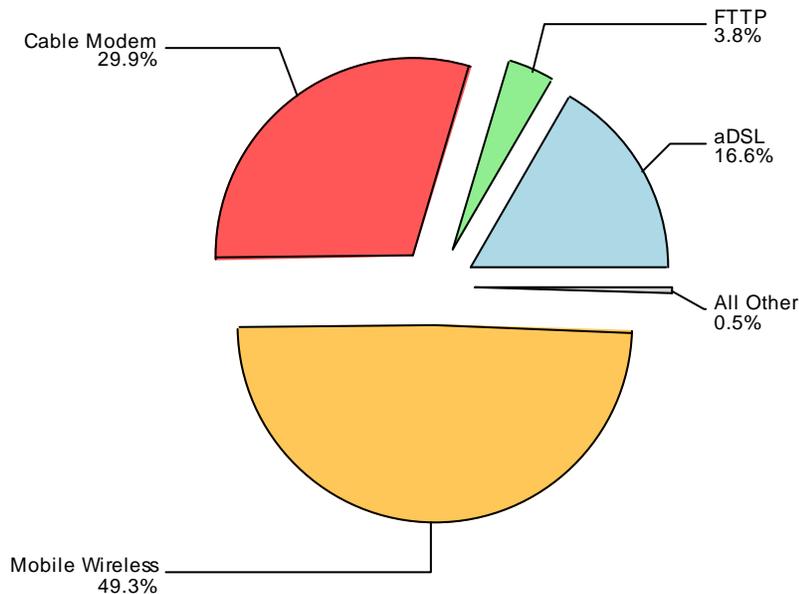


**Table 9**  
**Residential Connections by Technology and Speed (BTOP/BIP Definition)**  
**as of June 30, 2012**  
(In thousands)

<i>Technology</i>	<i>At Most 200 kbps Upstream or less than 768 kbps Downstream</i>	<i>Over 200 kbps Upstream and at least 768 kbps Downstream</i>	<i>Total</i>
aDSL	1,803	25,847	27,650
sDSL	13	36	49
Other Wireline	#	13	13
Cable Modem	472	46,560	47,032
FTTP	14	5,878	5,892
Satellite	709	289	998
Fixed Wireless	90	507	598
Mobile Wireless	37,649	76,823	114,472
<b>Total</b>	<b>40,751</b>	<b>155,953</b>	<b>196,704</b>

# = Rounds to Zero. Power Line and Other are combined with Other Wireline to maintain firm confidentiality.  
Note: Figures may not sum to totals due to rounding.  
Source: FCC Form 477, Parts I and VI.

**Chart 13**  
**Residential Connections (BTOP/BIP Definition) by Technology**  
as of June 30, 2012



Note: The BTOP/BIP definition is advertised speeds of at least 768 kbps downstream and 200 kbps upstream to end users.  
Source: FCC Form 477, Parts I and VI.

**Table 10**  
**Connections by Downstream Speed Tier and Technology as of June 30, 2012**  
(In thousands)

Technology	Downstream Speed								Total
	Greater than 200 kbps and less than 768 kbps	At least 768 kbps and less than 1.5 Mbps	At least 1.5 Mbps and less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps and less than 10 Mbps	At least 10 Mbps and less than 25 Mbps	At least 25 Mbps and less than 100 Mbps	At least 100 Mbps	
aDSL	1,666	4,391	7,452	10,192	4,855	2,525	105	#	31,188
sDSL	37	43	28	*	*	16	*	#	140
Other Wireline	43	40	448	102	24	44	41	27	769
Cable Modem	145	1,321	3,983	4,200	5,158	27,819	6,968	69	49,663
FTTP	17	78	112	234	160	4,377	1,262	59	6,299
Satellite	328	537	258	*	*	*	0	0	1,217
Fixed Wireless	85	167	195	174	42	18	2	1	683
Mobile Wireless	43,714	7,568	54,826	18,917	24,767	*	*	0	153,438
<b>Total</b>	<b>46,034</b>	<b>14,145</b>	<b>67,302</b>	<b>33,848</b>	<b>35,010</b>	<b>34,911</b>	<b>11,990</b>	<b>156</b>	<b>243,397</b>
Percentages									
aDSL	0.7	1.8	3.1	4.2	2.0	1.0	0.0	0.0	12.8
sDSL	0.0	0.0	0.0	*	*	0.0	*	0.0	0.1
Other Wireline	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.3
Cable Modem	0.1	0.5	1.6	1.7	2.1	11.4	2.9	0.0	20.4
FTTP	0.0	0.0	0.0	0.1	0.1	1.8	0.5	0.0	2.6
Satellite	0.1	0.2	0.1	*	*	*	0.0	0.0	0.5
Fixed Wireless	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.3
Mobile Wireless	18.0	3.1	22.5	7.8	10.2	*	*	0.0	63.0
<b>Total</b>	<b>18.9</b>	<b>5.8</b>	<b>27.7</b>	<b>13.9</b>	<b>14.4</b>	<b>14.3</b>	<b>4.9</b>	<b>0.1</b>	<b>100.0</b>

# = Rounds to Zero. Power Line and Other are combined with Other Wireline to maintain firm confidentiality.  
\* = Data withheld to maintain firm confidentiality.  
Note: Figures may not sum to totals due to rounding.  
Source: FCC Form 477, Part I.

**Table 11**  
**Residential Connections by Downstream Speed Tier and Technology as of June 30, 2012**  
(In thousands)

Technology	Downstream Speed								Total
	Greater than 200 kbps and less than 768 kbps	At least 768 kbps and less than 1.5 Mbps	At least 1.5 Mbps and less than 3 Mbps	At least 3 Mbps and less than 6 Mbps	At least 6 Mbps and less than 10 Mbps	At least 10 Mbps and less than 25 Mbps	At least 25 Mbps and less than 100 Mbps	At least 100 Mbps	
aDSL	1,546	4,027	6,536	8,639	4,486	2,319	98	#	27,650
sDSL	13	20	4	*	*	9	*	0	49
Other Wireline	#	4	2	1	1	3	0	1	13
Cable Modem	130	1,299	3,900	3,822	4,815	26,285	6,730	52	47,032
FTTP	13	70	90	206	147	4,170	1,176	20	5,892
Satellite	194	494	220	*	*	*	0	0	998
Fixed Wireless	75	145	172	154	37	14	1	#	598
Mobile Wireless	35,216	6,839	43,109	12,223	13,737	*	*	0	114,472
<b>Total</b>	<b>37,188</b>	<b>12,897</b>	<b>54,033</b>	<b>25,058</b>	<b>23,224</b>	<b>32,907</b>	<b>11,324</b>	<b>74</b>	<b>196,704</b>
Percentages									
aDSL	0.8	2.0	3.3	4.4	2.3	1.2	0.0	0.0	14.1
sDSL	0.0	0.0	0.0	*	*	0.0	*	0.0	0.0
Other Wireline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	0.1	0.7	2.0	1.9	2.4	13.4	3.4	0.0	23.9
FTTP	0.0	0.0	0.0	0.1	0.1	2.1	0.6	0.0	3.0
Satellite	0.1	0.3	0.1	*	*	*	0.0	0.0	0.5
Fixed Wireless	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.3
Mobile Wireless	17.9	3.5	21.9	6.2	7.0	*	*	0.0	58.2
<b>Total</b>	<b>18.9</b>	<b>6.6</b>	<b>27.5</b>	<b>12.7</b>	<b>11.8</b>	<b>16.7</b>	<b>5.8</b>	<b>0.0</b>	<b>100.0</b>

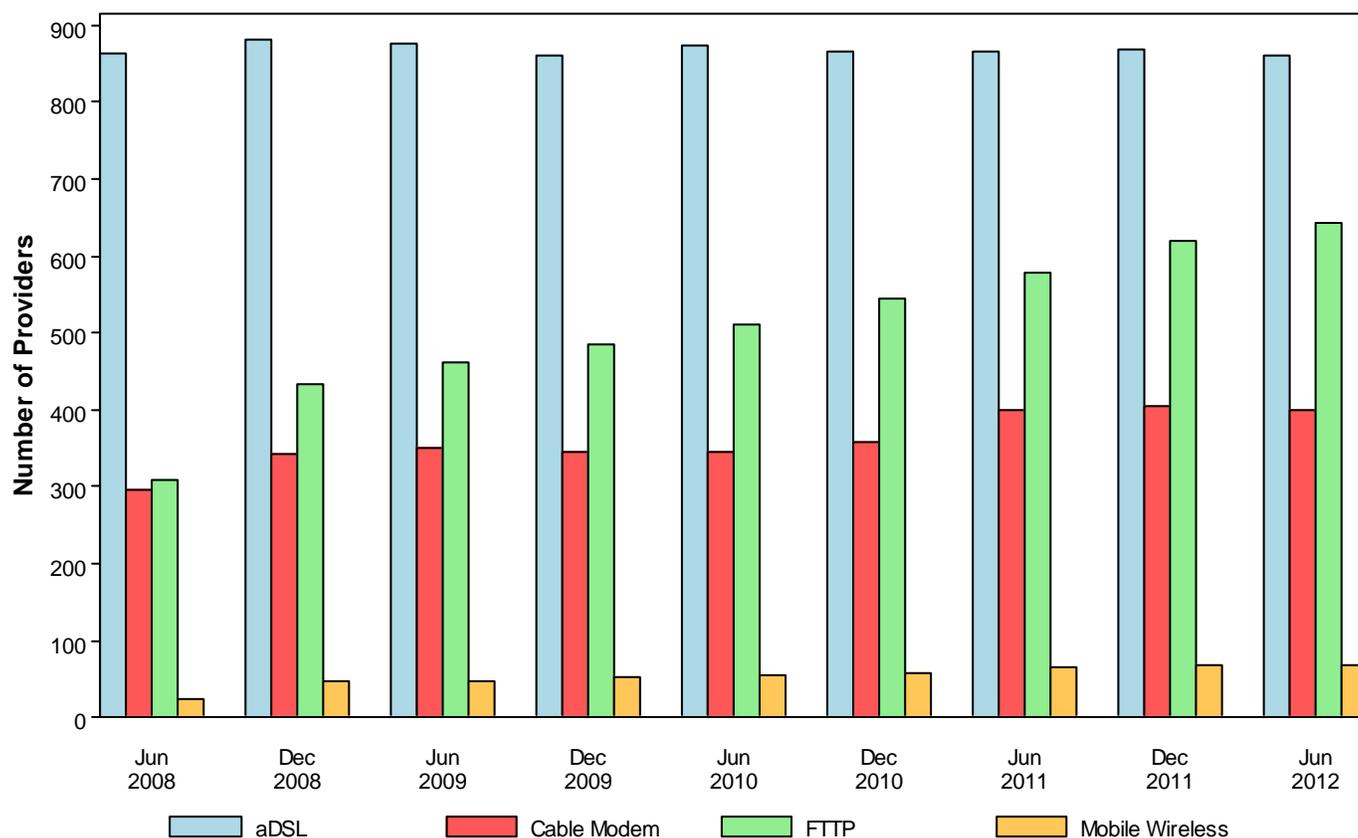
# = Rounds to Zero. Power Line and Other are combined with Other Wireline to maintain firm confidentiality.  
\* = Data withheld to maintain firm confidentiality.  
Note: Figures may not sum to totals due to rounding.  
Source: FCC Form 477, Part I.

**Table 12**  
**Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction**  
**by Technology 2008-2012**

Technology	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
aDSL	863	881	876	862	875	865	867	868	860
sDSL	238	264	257	261	251	247	252	255	249
Other Wireline	259	292	283	274	267	270	265	274	258
Cable Modem	296	342	351	345	345	357	400	404	399
FTTP	308	432	462	485	510	545	579	621	642
Satellite	4	5	4	4	4	4	5	6	5
Fixed Wireless	505	620	621	607	625	646	672	711	707
Mobile Wireless	24	47	48	51	55	57	64	69	68
Power Line and Other	6	5	6	6	5	7	4	5	*
<b>Total</b>	<b>1,395</b>	<b>1,562</b>	<b>1,551</b>	<b>1,526</b>	<b>1,536</b>	<b>1,566</b>	<b>1,624</b>	<b>1,683</b>	<b>1,662</b>

Note: Some historical data have been revised. Multiple Form 477 filers within a holding company structure count as one provider. \* = 1-3 providers.  
Source: FCC Form 477, Part I.

**Chart 14**  
**Nationwide Number of Providers of Connections over 200 kbps in at Least One Direction**  
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## Detailed Summary Statistics: The States

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**Table 13**  
**Residential Fixed Connections (Approximating the National Broadband Availability Target)**  
**and Households by State as of June 30, 2012**  
**(Connections with advertised speeds at least 3 Mbps down and 768 up and households, in thousands)**

<i>State</i>	<i>Connections</i>	<i>Households</i>	<i>Subscribership Ratio</i>
Alabama	564	1,902	0.30
Alaska	88	260	0.34
American Samoa	0	11	0.00
Arizona	1,330	2,440	0.54
Arkansas	294	1,159	0.25
California	5,609	12,712	0.44
Colorado	1,217	2,005	0.61
Connecticut	799	1,372	0.58
Delaware	240	347	0.69
District of Columbia	175	268	0.65
Florida	3,830	7,463	0.51
Georgia	1,542	3,648	0.42
Guam	*	51	*
Hawaii	*	456	*
Idaho	180	593	0.30
Illinois	2,150	4,861	0.44
Indiana	1,042	2,516	0.41
Iowa	302	1,231	0.25
Kansas	366	1,121	0.33
Kentucky	658	1,732	0.38
Louisiana	535	1,756	0.30
Maine	147	556	0.26
Maryland	1,503	2,156	0.70
Massachusetts	1,914	2,549	0.75
Michigan	1,775	3,848	0.46
Minnesota	1,017	2,097	0.48
Mississippi	237	1,120	0.21
Missouri	693	2,390	0.29
Montana	157	415	0.38
Nebraska	328	727	0.45
Nevada	511	1,027	0.50
New Hampshire	339	519	0.65
New Jersey	2,436	3,215	0.76
New Mexico	302	806	0.37
New York	3,939	7,345	0.54
North Carolina	668	3,818	0.17
North Dakota	117	283	0.41
Northern Mariana Isl	*	21	*
Ohio	1,154	4,597	0.25
Oklahoma	416	1,476	0.28
Oregon	854	1,539	0.55
Pennsylvania	2,896	5,025	0.58
Puerto Rico	114	1,230	0.09
Rhode Island	*	410	*
South Carolina	534	1,831	0.29
South Dakota	153	326	0.47
Tennessee	996	2,522	0.39
Texas	3,024	9,113	0.33
Utah	508	903	0.56
Vermont	156	256	0.61
Virgin Islands	*	56	*
Virginia	1,855	3,079	0.60
Washington	1,608	2,657	0.61
West Virginia	373	766	0.49
Wisconsin	682	2,289	0.30
Wyoming	102	231	0.44
<b>Total</b>	<b>53,077</b>	<b>119,103</b>	<b>0.45</b>

# = Rounds to Zero; \* = Data withheld to maintain firm confidentiality.

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

Sources: FCC Form 477, Part VI (Connections); Geolytics 2011 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing Units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

**Table 14**  
**Residential Fixed Connections and Households by State as of June 30, 2012**  
 (Connections over 200 kbps in at least one direction and households, in thousands)

<i>State</i>	<i>Connections</i>	<i>Households</i>	<i>Subscribership Ratio</i>
Alabama	1,091	1,902	0.57
Alaska	185	260	0.71
American Samoa	*	11	*
Arizona	1,692	2,440	0.69
Arkansas	625	1,159	0.54
California	9,634	12,712	0.76
Colorado	1,517	2,005	0.76
Connecticut	1,078	1,372	0.79
Delaware	271	347	0.78
District of Columbia	194	268	0.72
Florida	5,492	7,463	0.74
Georgia	2,385	3,648	0.65
Guam	*	51	*
Hawaii	*	456	*
Idaho	364	593	0.61
Illinois	3,268	4,861	0.67
Indiana	1,601	2,516	0.64
Iowa	808	1,231	0.66
Kansas	751	1,121	0.67
Kentucky	1,079	1,732	0.62
Louisiana	1,045	1,756	0.60
Maine	417	556	0.75
Maryland	1,638	2,156	0.76
Massachusetts	2,056	2,549	0.81
Michigan	2,503	3,848	0.65
Minnesota	1,452	2,097	0.69
Mississippi	558	1,120	0.50
Missouri	1,472	2,390	0.62
Montana	264	415	0.64
Nebraska	493	727	0.68
Nevada	681	1,027	0.66
New Hampshire	421	519	0.81
New Jersey	2,623	3,215	0.82
New Mexico	473	806	0.59
New York	5,553	7,345	0.76
North Carolina	2,637	3,818	0.69
North Dakota	197	283	0.70
Northern Mariana Isl	*	21	*
Ohio	3,118	4,597	0.68
Oklahoma	853	1,476	0.58
Oregon	1,064	1,539	0.69
Pennsylvania	3,591	5,025	0.71
Puerto Rico	521	1,230	0.42
Rhode Island	311	410	0.76
South Carolina	1,164	1,831	0.64
South Dakota	219	326	0.67
Tennessee	1,465	2,522	0.58
Texas	5,916	9,113	0.65
Utah	658	903	0.73
Vermont	196	256	0.77
Virgin Islands	16	56	0.29
Virginia	2,156	3,079	0.70
Washington	1,919	2,657	0.72
West Virginia	459	766	0.60
Wisconsin	1,534	2,289	0.67
Wyoming	152	231	0.66
<b>Total</b>	<b>82,233</b>	<b>119,103</b>	<b>0.69</b>

# = Rounds to Zero; \* = Data withheld to maintain firm confidentiality.

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

Sources: FCC Form 477, Part VI (Connections); Geolytics 2011 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing Units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

**Table 15**  
**Connections by Type of End User by State as of June 30, 2012**  
**(Connections over 200 kbps in at least one direction, in thousands)**

State	Connections		Percentages		Total
	Residential	Business	Residential	Business	
Alabama	2,706	407	86.9	13.1	3,113
Alaska	506	78	86.7	13.3	584
American Samoa	*	*	*	*	*
Arizona	3,881	713	84.5	15.5	4,594
Arkansas	1,703	253	87.0	13.0	1,956
California	25,044	5,730	81.4	18.6	30,773
Colorado	3,498	853	80.4	19.6	4,352
Connecticut	2,455	557	81.5	18.5	3,012
Delaware	603	134	81.9	18.1	737
District of Columbia	557	655	46.0	54.0	1,211
Florida	12,638	3,213	79.7	20.3	15,851
Georgia	6,082	1,488	80.3	19.7	7,571
Guam	58	14	80.0	20.0	72
Hawaii	964	175	84.7	15.3	1,139
Idaho	870	198	81.5	18.5	1,068
Illinois	7,983	2,101	79.2	20.8	10,085
Indiana	3,660	667	84.6	15.4	4,326
Iowa	1,588	307	83.8	16.2	1,895
Kansas	1,660	628	72.5	27.5	2,289
Kentucky	2,475	494	83.4	16.6	2,969
Louisiana	2,902	510	85.1	14.9	3,412
Maine	748	111	87.1	12.9	859
Maryland	3,986	902	81.6	18.4	4,887
Massachusetts	4,503	1,010	81.7	18.3	5,512
Michigan	5,478	1,813	75.1	24.9	7,291
Minnesota	3,200	911	77.8	22.2	4,111
Mississippi	1,696	219	88.6	11.4	1,915
Missouri	3,431	969	78.0	22.0	4,400
Montana	594	88	87.1	12.9	682
Nebraska	1,038	251	80.5	19.5	1,289
Nevada	1,821	404	81.8	18.2	2,225
New Hampshire	834	149	84.8	15.2	983
New Jersey	6,244	1,379	81.9	18.1	7,623
New Mexico	1,134	188	85.8	14.2	1,322
New York	13,128	3,054	81.1	18.9	16,182
North Carolina	5,709	1,375	80.6	19.4	7,085
North Dakota	453	83	84.6	15.4	536
Northern Mariana Isl	*	*	*	*	*
Ohio	6,881	1,737	79.8	20.2	8,618
Oklahoma	2,253	381	85.5	14.5	2,634
Oregon	2,447	528	82.3	17.7	2,975
Pennsylvania	7,930	1,652	82.8	17.2	9,581
Puerto Rico	1,628	201	89.0	11.0	1,829
Rhode Island	659	151	81.4	18.6	809
South Carolina	2,393	445	84.3	15.7	2,838
South Dakota	494	67	88.0	12.0	561
Tennessee	3,666	860	81.0	19.0	4,526
Texas	16,676	4,612	78.3	21.7	21,288
Utah	1,571	421	78.8	21.2	1,992
Vermont	371	67	84.8	15.2	438
Virgin Islands	59	18	76.2	23.8	78
Virginia	5,136	1,357	79.1	20.9	6,493
Washington	4,404	1,166	79.1	20.9	5,570
West Virginia	968	142	87.2	12.8	1,110
Wisconsin	2,975	749	79.9	20.1	3,724
Wyoming	354	55	86.6	13.4	408
Total	196,704	46,693	80.8	19.2	243,397

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I and VI.

**Table 16**  
**Connections by Technology by State as of June 30, 2012**  
(Connections over 200 kbps in at least one direction, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Alabama	546	4	*	592	9	*	4	1,911	3,113
Alaska	78	2	0	*	1	*	4	369	584
American Samoa	*	*	0	*	*	0	*	0	*
Arizona	600	1	*	1,156	4	*	25	2,772	4,594
Arkansas	344	#	*	308	6	*	2	1,265	1,956
California	4,370	13	*	5,222	710	*	29	20,228	30,773
Colorado	*	2	0	870	6	*	45	2,690	4,352
Connecticut	*	1	0	744	4	*	*	1,836	3,012
Delaware	*	#	0	*	*	*	0	445	737
District of Columbia	*	2	0	*	14	*	*	988	1,211
Florida	1,955	1	*	3,557	395	*	5	9,846	15,851
Georgia	1,291	1	*	1,245	28	*	1	4,938	7,571
Guam	*	*	*	*	*	0	*	*	72
Hawaii	*	*	0	*	2	*	*	742	1,139
Idaho	201	#	*	160	3	*	23	667	1,068
Illinois	1,519	7	*	1,936	16	*	36	6,504	10,085
Indiana	760	2	*	835	69	*	31	2,591	4,326
Iowa	393	2	*	403	41	*	24	1,009	1,895
Kansas	275	1	*	455	47	*	27	1,463	2,289
Kentucky	502	3	*	614	17	*	7	1,793	2,969
Louisiana	444	2	*	625	39	*	5	2,256	3,412
Maine	139	4	0	300	5	*	*	400	859
Maryland	*	2	0	842	*	*	1	3,122	4,887
Massachusetts	*	2	0	1,454	*	*	2	3,282	5,512
Michigan	909	6	*	1,687	9	*	29	4,572	7,291
Minnesota	627	19	*	846	39	*	20	2,525	4,111
Mississippi	309	1	*	270	2	*	#	1,294	1,915
Missouri	864	1	*	653	15	*	22	2,782	4,400
Montana	123	1	0	*	7	*	12	*	682
Nebraska	175	#	*	331	10	*	16	746	1,289

**Table 16 - Continued**  
**Connections by Technology by State as of June 30, 2012**  
(Connections over 200 kbps in at least one direction, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Nevada	255	#	0	*	3	*	3	1,483	2,225
New Hampshire	89	1	*	354	13	*	#	516	983
New Jersey	387	1	0	1,830	*	*	*	4,731	7,623
New Mexico	285	#	*	198	4	*	16	804	1,322
New York	841	7	0	4,253	*	*	2	10,064	16,182
North Carolina	1,059	1	*	1,729	28	*	2	4,216	7,085
North Dakota	72	1	*	111	31	*	6	311	536
Northern Mariana Isl	*	0	*	*	*	0	*	*	*
Ohio	1,175	4	*	2,057	47	*	27	5,255	8,618
Oklahoma	391	#	*	490	14	*	13	1,688	2,634
Oregon	372	4	*	683	64	*	15	1,812	2,975
Pennsylvania	1,063	4	0	2,200	*	*	1	5,687	9,581
Puerto Rico	*	0	0	*	*	*	*	1,264	1,829
Rhode Island	*	#	0	*	*	*	*	470	809
South Carolina	477	*	0	730	34	*	*	1,566	2,838
South Dakota	65	*	0	141	22	*	12	*	561
Tennessee	603	#	*	881	72	*	4	2,911	4,526
Texas	2,967	5	*	2,804	430	*	82	14,803	21,288
Utah	314	1	*	325	22	*	44	1,275	1,992
Vermont	97	*	0	109	5	*	1	216	438
Virgin Islands	*	0	*	*	0	*	*	*	78
Virginia	471	1	0	1,187	*	*	5	4,154	6,493
Washington	597	3	*	1,362	65	*	10	3,483	5,570
West Virginia	*	*	0	297	1	*	2	614	1,110
Wisconsin	651	19	*	914	22	*	32	2,053	3,724
Wyoming	62	2	*	89	2	*	11	236	408
<b>Total</b>	<b>31,188</b>	<b>140</b>	<b>769</b>	<b>49,663</b>	<b>6,299</b>	<b>1,217</b>	<b>683</b>	<b>153,438</b>	<b>243,397</b>

# = Rounds to Zero. Power Line and Other are summarized with Other Wireline to maintain firm confidentiality.

\* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Table 17**  
**Connections by Technology by State as of June 30, 2012**  
(Connections at least 3 Mbps downstream and 768 kbps upstream, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Alabama	140	#	3	454	5	*	#	*	924
Alaska	28	*	1	*	1	*	*	*	125
American Samoa	0	*	0	0	*	0	*	0	*
Arizona	378	*	6	0	3	*	7	*	1,907
Arkansas	99	*	2	210	4	*	*	*	409
California	1,576	2	25	3,667	691	*	15	*	10,530
Colorado	*	*	8	858	3	*	28	687	1,994
Connecticut	*	*	2	729	4	*	0	*	1,222
Delaware	*	0	1	*	*	*	0	*	367
District of Columbia	*	*	3	*	*	*	*	*	635
Florida	710	#	18	2,979	*	*	2	2,595	6,689
Georgia	450	#	*	1,158	20	*	#	2,063	3,702
Guam	*	*	*	*	*	0	*	*	7
Hawaii	*	*	#	*	2	*	*	*	583
Idaho	121	*	1	73	2	*	5	*	387
Illinois	526	3	*	1,751	13	*	6	2,971	5,283
Indiana	331	#	2	715	62	*	7	*	1,632
Iowa	176	#	1	131	26	*	7	*	483
Kansas	78	#	*	280	27	*	2	537	928
Kentucky	208	*	1	476	9	*	3	374	1,073
Louisiana	79	*	2	452	27	*	1	*	722
Maine	81	1	#	87	5	*	*	*	219
Maryland	*	#	6	821	*	*	#	*	2,390
Massachusetts	*	#	9	1,428	*	*	1	722	2,783
Michigan	336	2	4	1,514	8	*	7	*	3,266
Minnesota	306	12	*	744	26	*	2	831	1,929
Mississippi	50	*	1	203	1	*	*	*	327
Missouri	283	#	*	438	8	*	2	1,345	2,087
Montana	39	#	1	*	5	*	1	0	174
Nebraska	103	*	1	241	6	*	1	*	460

**Table 17 - Continued**  
**Connections by Technology by State as of June 30, 2012**  
(Connections at least 3 Mbps downstream and 768 kbps upstream, in thousands)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Total</i>
Nevada	102	*	2	*	3	*	3	696	1,231
New Hampshire	48	#	1	309	13	*	*	*	463
New Jersey	227	*	11	1,796	*	*	*	*	3,614
New Mexico	140	#	2	180	3	*	1	*	468
New York	567	1	21	2,876	*	*	1	*	6,938
North Carolina	404	#	*	321	22	*	#	1,184	1,940
North Dakota	26	#	1	89	15	*	2	*	180
Northern Mariana Isl	*	0	0	0	*	0	*	0	*
Ohio	583	*	5	651	43	*	4	1,486	2,773
Oklahoma	101	#	*	326	9	*	5	210	654
Oregon	186	1	2	662	61	*	8	*	1,374
Pennsylvania	621	*	9	1,932	*	*	#	*	4,487
Puerto Rico	*	0	*	*	*	*	*	*	242
Rhode Island	*	*	1	*	*	*	*	*	446
South Carolina	159	*	4	389	27	*	*	334	915
South Dakota	27	0	#	126	14	*	2	*	216
Tennessee	161	#	5	842	55	*	#	*	1,767
Texas	1,074	#	*	1,723	390	*	42	7,492	10,751
Utah	173	#	3	313	22	*	34	*	924
Vermont	64	*	#	104	5	*	*	*	190
Virgin Islands	0	0	*	*	0	0	*	0	*
Virginia	261	#	8	1,119	*	*	2	*	3,020
Washington	329	*	8	1,322	60	*	3	*	2,635
West Virginia	*	0	#	245	1	*	2	*	428
Wisconsin	232	2	*	484	15	*	2	484	1,225
Wyoming	23	*	#	*	2	*	1	*	153
<b>Total</b>	<b>12,879</b>	<b>32</b>	<b>239</b>	<b>37,798</b>	<b>6,000</b>	<b>87</b>	<b>212</b>	<b>43,025</b>	<b>100,271</b>

# = Rounds to Zero. Power Line and Other are summarized with Other Wireline to maintain firm confidentiality.

\* = Data withheld to maintain firm confidentiality.

Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Table 18**  
**Percentage of Connections by Downstream Speed by State as of June 30, 2012**  
 (Connections over 200 kbps in at least one direction)

State	Over 200 kbps Upstream and				
	% over 200 kbps Downstream	% at least 768 kbps Downstream	% at least 3 Mbps Downstream	% at least 6 Mbps Downstream	% at least 10 Mbps Downstream
Alabama	94.3	77.2	38.2	30.8	18.1
Alaska	94.4	90.6	26.2	20.6	12.7
American Samoa	*	*	*	*	*
Arizona	95.2	75.8	43.2	36.4	23.4
Arkansas	95.7	82.6	27.0	18.8	11.7
California	95.1	77.9	36.5	27.2	14.6
Colorado	95.6	79.4	46.8	40.2	24.9
Connecticut	95.9	77.8	42.8	35.3	23.9
Delaware	95.0	76.2	51.9	45.3	33.1
District of Columbia	93.7	75.7	52.5	47.1	14.0
Florida	96.1	80.8	48.2	38.2	23.0
Georgia	94.7	76.2	62.7	31.5	17.3
Guam	*	*	*	*	*
Hawaii	97.4	85.8	52.0	41.4	19.5
Idaho	92.9	71.4	43.2	28.6	11.6
Illinois	96.2	83.5	63.4	34.1	19.7
Indiana	95.0	78.5	42.2	32.2	18.4
Iowa	95.0	76.0	41.4	30.9	19.3
Kansas	93.8	80.8	48.9	36.5	13.6
Kentucky	94.4	85.2	43.6	28.7	15.8
Louisiana	94.0	84.2	29.3	20.4	14.2
Maine	93.2	80.4	46.7	37.8	11.5
Maryland	94.6	77.5	49.0	40.7	29.5
Massachusetts	95.5	76.8	50.7	43.7	33.8
Michigan	94.6	75.2	47.3	35.6	19.7
Minnesota	95.2	79.1	50.7	41.7	24.1
Mississippi	95.0	65.3	25.5	16.0	11.6
Missouri	95.2	86.6	66.1	28.9	12.8
Montana	88.5	52.3	27.7	22.6	15.5
Nebraska	91.9	66.4	38.4	27.7	16.1

**Table 18 - Continued**  
**Percentage of Connections by Downstream Speed by State as of June 30, 2012**  
 (Connections over 200 kbps in at least one direction)

State	Over 200 kbps Upstream and				
	% over 200 kbps Downstream	% at least 768 kbps Downstream	% at least 3 Mbps Downstream	% at least 6 Mbps Downstream	% at least 10 Mbps Downstream
Nevada	96.6	84.8	66.4	33.6	20.6
New Hampshire	93.3	69.9	51.2	42.8	31.9
New Jersey	94.9	73.6	47.6	42.1	33.3
New Mexico	93.9	74.2	38.0	32.5	12.1
New York	95.0	76.0	45.3	37.1	25.7
North Carolina	93.9	76.3	50.0	39.0	10.1
North Dakota	93.6	69.1	41.8	32.7	20.7
Northern Mariana Isl	*	*	*	*	*
Ohio	92.4	72.3	46.6	34.8	8.3
Oklahoma	95.9	91.2	32.3	20.1	14.0
Oregon	96.3	82.0	48.0	39.5	25.8
Pennsylvania	95.0	78.2	48.8	38.5	26.3
Puerto Rico	94.5	87.4	20.8	12.2	8.3
Rhode Island	95.7	79.9	55.2	46.2	35.1
South Carolina	93.2	72.2	47.4	35.7	16.7
South Dakota	93.2	71.2	41.1	38.6	26.0
Tennessee	94.0	74.5	43.6	34.6	20.0
Texas	96.3	85.4	63.3	26.7	11.7
Utah	96.5	81.7	48.8	40.1	22.5
Vermont	93.1	76.7	44.6	33.4	18.7
Virgin Islands	96.2	81.6	*	*	*
Virginia	94.2	75.6	47.5	37.6	25.0
Washington	96.1	82.0	49.0	40.9	26.6
West Virginia	96.3	90.0	39.9	37.3	19.1
Wisconsin	96.0	83.7	45.1	34.3	15.0
Wyoming	93.4	65.3	39.5	34.2	16.0
Total	95.1	78.8	47.6	33.7	19.3

\* = Data withheld to maintain firm confidentiality.  
 Source: FCC Form 477, Part I.

**Table 19**  
**ADSL Connections by State 2008-2012**  
(Connections over 200 kbps in at least one direction, in thousands)

State	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Alabama	431	457	473	496	498	523	536	538	546
Alaska	72	75	77	77	77	78	79	77	78
American Samoa	*	*	*	*	*	*	*	*	*
Arizona	454	466	487	518	527	552	557	590	600
Arkansas	267	273	298	308	314	330	337	343	344
California	4,755	4,617	4,587	4,568	4,456	4,538	4,471	4,416	4,370
Colorado	575	624	641	651	658	663	*	*	*
Connecticut	*	*	*	*	*	*	*	*	*
Delaware	*	*	*	*	*	*	*	*	*
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	2,045	2,005	1,962	1,988	2,006	2,070	2,104	1,998	1,955
Georgia	1,361	1,240	1,251	1,256	1,129	1,413	1,435	1,282	1,291
Guam	*	*	*	*	*	*	*	*	*
Hawaii	*	*	*	*	*	*	*	*	*
Idaho	154	160	169	174	177	181	185	191	201
Illinois	1,419	1,503	1,538	1,556	1,537	1,577	1,576	1,549	1,519
Indiana	651	672	699	721	725	754	763	765	760
Iowa	322	336	351	362	373	376	381	389	393
Kansas	241	243	250	260	264	271	273	275	275
Kentucky	385	421	431	454	459	473	481	501	502
Louisiana	354	385	390	404	397	396	407	437	444
Maine	120	114	123	125	126	125	134	136	139
Maryland	495	471	440	405	*	350	*	*	*
Massachusetts	*	*	*	*	*	*	*	*	*
Michigan	749	780	835	857	860	902	922	906	909
Minnesota	529	544	573	590	611	618	629	623	627
Mississippi	220	229	240	255	240	263	267	299	309
Missouri	712	727	767	805	811	846	862	870	864
Montana	108	108	111	115	119	119	123	122	123
Nebraska	143	151	158	164	167	169	173	175	175

**Table 19 - Continued**  
**ADSL Connections by State 2008-2012**  
(Connections over 200 kbps in at least one direction, in thousands)

State	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Nevada	225	222	225	229	232	242	245	250	255
New Hampshire	97	91	91	86	84	85	87	88	89
New Jersey	700	666	624	568	530	486	449	415	387
New Mexico	217	231	242	250	259	266	271	278	285
New York	1,169	1,122	1,100	1,046	1,010	957	928	875	841
North Carolina	870	891	918	969	985	995	1,026	1,050	1,059
North Dakota	60	65	64	67	67	69	71	71	72
Northern Mariana Isl	*	*	*	*	*	*	*	*	*
Ohio	1,034	1,069	1,109	1,127	1,145	1,177	1,190	1,184	1,175
Oklahoma	334	338	349	359	361	379	384	387	391
Oregon	361	371	367	367	362	359	360	364	372
Pennsylvania	1,209	1,231	1,246	1,232	1,202	1,159	1,131	1,098	1,063
Puerto Rico	*	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	386	400	412	428	437	434	452	471	477
South Dakota	53	56	58	58	60	58	60	63	65
Tennessee	535	541	549	559	570	557	576	593	603
Texas	2,475	2,608	2,706	2,784	2,797	2,898	2,943	2,952	2,967
Utah	284	299	280	309	312	311	309	310	314
Vermont	73	61	79	81	84	85	87	94	97
Virgin Islands	*	*	*	*	*	*	*	*	*
Virginia	561	553	547	536	527	507	498	486	471
Washington	600	599	596	593	589	582	583	591	597
West Virginia	147	152	160	161	162	*	*	*	*
Wisconsin	556	556	586	612	615	646	658	657	651
Wyoming	55	57	58	58	59	59	59	62	62
<b>Total</b>	<b>29,964</b>	<b>30,198</b>	<b>30,631</b>	<b>30,987</b>	<b>30,759</b>	<b>31,470</b>	<b>31,611</b>	<b>31,341</b>	<b>31,188</b>

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Table 20**  
**Cable Modem Connections by State 2008-2012**  
(Connections over 200 kbps in at least one direction, in thousands)

State	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Alabama	417	460	478	497	513	539	556	576	592
Alaska	*	*	*	*	*	*	*	*	*
American Samoa	0	0	0	0	0	*	*	*	*
Arizona	992	1,044	1,039	1,104	1,096	1,161	1,104	1,169	1,156
Arkansas	236	227	252	262	267	278	288	301	308
California	3,799	3,990	4,144	4,224	4,418	4,639	4,853	5,034	5,222
Colorado	626	659	693	709	744	787	817	848	870
Connecticut	576	615	626	640	672	673	713	723	744
Delaware	*	*	*	*	158	156	164	*	*
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	2,631	2,825	2,859	2,992	3,076	3,292	3,313	3,549	3,557
Georgia	904	974	1,020	1,022	1,052	1,114	1,151	1,190	1,245
Guam	*	*	*	*	*	*	*	*	*
Hawaii	*	*	*	*	*	*	*	*	*
Idaho	127	121	130	133	137	145	150	158	160
Illinois	1,625	1,591	1,575	1,577	1,630	1,696	1,768	1,857	1,936
Indiana	456	626	641	669	697	728	766	801	835
Iowa	309	330	344	360	376	389	395	397	403
Kansas	380	415	419	435	434	441	447	456	455
Kentucky	482	452	483	497	512	530	565	597	614
Louisiana	481	518	544	559	562	586	593	612	625
Maine	197	202	224	237	259	269	286	282	300
Maryland	871	801	757	768	778	773	797	826	842
Massachusetts	1,159	1,291	1,253	1,250	1,339	1,343	1,401	1,415	1,454
Michigan	1,307	1,394	1,431	1,451	1,517	1,537	1,603	1,643	1,687
Minnesota	622	666	685	701	739	776	800	820	846
Mississippi	188	216	227	232	241	246	258	263	270
Missouri	517	560	561	586	599	604	617	623	653
Montana	90	92	102	108	113	119	127	*	*
Nebraska	262	278	286	295	293	309	316	324	331

**Table 20 - Continued**  
**Cable Modem Connections by State 2008-2012**  
(Connections over 200 kbps in at least one direction, in thousands)

State	2008		2009		2010		2011		2012
	Jun	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Nevada	*	*	*	*	*	*	*	*	*
New Hampshire	250	285	295	303	329	325	340	342	354
New Jersey	1,586	1,637	1,604	1,623	1,698	1,702	1,759	1,775	1,830
New Mexico	137	146	155	158	168	176	190	193	198
New York	3,548	3,749	3,850	3,886	3,982	4,013	4,091	4,116	4,253
North Carolina	1,266	1,344	1,392	1,444	1,513	1,554	1,566	1,653	1,729
North Dakota	83	85	88	93	90	101	96	108	111
Northern Mariana Isl	*	*	*	*	*	*	*	*	*
Ohio	1,627	1,705	1,757	1,813	1,862	1,895	1,943	2,025	2,057
Oklahoma	382	408	429	432	436	468	474	487	490
Oregon	554	517	528	542	576	608	640	662	683
Pennsylvania	1,492	1,800	1,777	1,835	1,915	1,983	2,057	2,135	2,200
Puerto Rico	*	*	*	*	*	*	*	*	*
Rhode Island	*	*	*	*	*	*	*	*	*
South Carolina	517	555	582	598	627	660	664	691	730
South Dakota	115	122	122	127	118	134	124	138	141
Tennessee	715	718	739	751	784	795	824	853	881
Texas	2,214	1,971	2,280	2,383	2,456	2,459	2,577	2,686	2,804
Utah	212	*	243	253	268	283	303	310	325
Vermont	*	71	80	83	93	97	104	106	109
Virgin Islands	0	0	0	0	0	0	0	*	*
Virginia	941	1,096	1,097	1,105	1,114	1,124	1,141	1,154	1,187
Washington	944	998	1,102	1,106	1,186	1,239	1,296	1,329	1,362
West Virginia	167	205	215	226	220	255	274	285	297
Wisconsin	711	759	779	802	823	846	870	897	914
Wyoming	*	64	70	74	76	80	82	85	89
<b>Total</b>	<b>38,190</b>	<b>40,251</b>	<b>41,434</b>	<b>42,439</b>	<b>43,923</b>	<b>45,334</b>	<b>46,698</b>	<b>48,257</b>	<b>49,663</b>

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Note: Some historical data have been revised. Figures may not sum to totals due to rounding.

Source: FCC Form 477, Part I.

**Table 21**  
**Providers of Connections by Technology by State as of June 30, 2012**  
(Connections over 200 kbps in at least one direction)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Power Line and Other</i>	<i>Total</i>
Alabama	24	9	22	20	25	*	15	7	0	74
Alaska	13	4	9	4	6	4	9	7	0	27
American Samoa	*	*	0	*	*	0	*	0	0	*
Arizona	24	6	27	11	24	4	22	6	0	74
Arkansas	21	7	13	16	15	*	7	6	0	54
California	36	18	50	23	27	*	36	10	0	122
Colorado	37	8	34	16	26	*	31	11	0	96
Connecticut	8	8	22	8	12	*	*	5	0	39
Delaware	6	4	17	*	5	*	0	6	0	28
District of Columbia	11	8	25	*	9	*	*	5	0	37
Florida	26	16	47	17	34	*	16	7	0	94
Georgia	35	16	41	31	38	*	9	8	0	105
Guam	*	*	*	*	*	0	*	*	0	5
Hawaii	5	4	7	*	6	*	*	5	0	22
Idaho	25	4	20	14	20	*	14	8	0	59
Illinois	57	20	49	20	31	*	47	11	0	145
Indiana	36	9	34	13	37	*	41	7	0	99
Iowa	126	30	27	41	80	*	70	11	0	206
Kansas	39	13	26	29	36	*	31	11	0	97
Kentucky	26	9	23	27	23	*	17	9	0	88
Louisiana	17	7	22	15	19	*	8	7	0	59
Maine	12	10	16	5	11	*	*	5	0	32
Maryland	16	11	31	12	14	*	7	7	0	61
Massachusetts	17	8	33	10	11	*	8	6	0	58
Michigan	39	20	36	19	21	*	27	9	0	100
Minnesota	51	20	32	17	46	*	32	6	0	107
Mississippi	19	5	21	10	11	*	4	6	0	49
Missouri	37	14	33	19	32	*	42	8	0	109
Montana	24	8	16	6	13	*	16	*	0	47
Nebraska	35	7	14	21	30	*	26	8	0	75

**Table 21 - Continued**  
**Providers of Connections by Technology by State as of June 30, 2012**  
(Connections over 200 kbps in at least one direction)

<i>State</i>	<i>ADSL</i>	<i>SDSL</i>	<i>Other Wireline</i>	<i>Cable Modem</i>	<i>Fiber</i>	<i>Satellite</i>	<i>Fixed Wireless</i>	<i>Mobile Wireless</i>	<i>Power Line and Other</i>	<i>Total</i>
Nevada	18	8	24	6	14	*	7	7	0	55
New Hampshire	14	8	17	5	11	*	5	6	0	39
New Jersey	21	12	40	6	15	*	*	6	0	57
New Mexico	22	10	19	7	12	*	17	10	0	54
New York	44	16	39	19	26	*	15	6	0	93
North Carolina	27	7	29	21	28	*	8	10	0	78
North Dakota	31	9	18	7	17	*	13	4	0	49
Northern Mariana Isl	*	0	*	*	*	0	*	*	0	*
Ohio	39	11	32	27	33	*	23	8	*	104
Oklahoma	41	9	24	17	21	*	17	10	0	84
Oregon	40	12	31	14	34	*	22	6	0	85
Pennsylvania	34	11	41	25	25	*	9	7	0	90
Puerto Rico	*	0	5	*	*	*	*	5	0	14
Rhode Island	7	4	12	4	6	*	*	5	0	25
South Carolina	21	*	20	15	15	*	*	9	0	48
South Dakota	31	*	13	7	21	*	20	4	0	57
Tennessee	22	12	24	17	23	*	16	7	0	79
Texas	71	21	59	33	48	*	60	11	0	172
Utah	20	9	19	8	17	*	12	7	0	53
Vermont	10	*	17	5	9	*	4	4	0	37
Virgin Islands	*	0	*	*	0	*	*	*	0	7
Virginia	26	14	33	15	22	*	17	8	0	75
Washington	33	7	38	17	26	*	21	7	0	86
West Virginia	7	*	18	12	9	*	6	8	0	47
Wisconsin	47	18	26	18	32	*	30	8	0	97
Wyoming	14	6	9	4	5	*	13	7	0	37
<b>Total</b>	<b>860</b>	<b>249</b>	<b>258</b>	<b>399</b>	<b>642</b>	<b>5</b>	<b>707</b>	<b>68</b>	<b>*</b>	<b>1,662</b>

\* Indicates one to three providers.  
Source: FCC Form 477, Part I.

**Table 22**  
**Percentage of Residential End-User Premises with Access to Services**  
**over 200 kbps in at Least One Direction by State as of June 30, 2012**

<i>State</i>	<i>xDSL Availability Where ILECs Offer Local Telephone Service</i>	<i>Cable Modem Availability Where Cable Systems Offer Cable TV Service</i>
Alabama	83	93
Alaska	81	*
American Samoa	*	*
Arizona	92	99
Arkansas	83	84
California	87	99
Colorado	*	99
Connecticut	*	100
Delaware	*	*
District of Columbia	*	*
Florida	87	97
Georgia	94	93
Guam	*	*
Hawaii	*	*
Idaho	88	98
Illinois	89	97
Indiana	87	97
Iowa	87	93
Kansas	86	96
Kentucky	88	94
Louisiana	85	95
Maine	86	96
Maryland	*	99
Massachusetts	*	99
Michigan	81	98
Minnesota	92	97
Mississippi	81	91
Missouri	85	96
Montana	86	*
Nebraska	88	94
Nevada	92	*
New Hampshire	89	98
New Jersey	78	100
New Mexico	89	95
New York	74	99
North Carolina	95	95
North Dakota	90	92
Northern Mariana Isl	*	*
Ohio	90	98
Oklahoma	83	94
Oregon	92	98
Pennsylvania	81	97
Puerto Rico	*	*
Rhode Island	*	*
South Carolina	92	95
South Dakota	83	87
Tennessee	86	99
Texas	83	98
Utah	96	96
Vermont	92	71
Virgin Islands	*	*
Virginia	67	98
Washington	91	96
West Virginia	*	93
Wisconsin	88	98
Wyoming	84	95
Total	85	97

\* = Data withheld to maintain firm confidentiality.

Note: This table summarizes responses to Form 477 questions about service availability, as opposed to subscribership. xDSL includes both asymmetric and symmetric DSL. Each state-specific estimate is a weighted average of the availability percentages that ILECs or cable system operators report for the areas they serve. Reported xDSL availability is weighted by ILEC end-user switched access lines and VoIP lines. Reported cable modem availability is weighted by cable TV subscribers. The weighted averages include ILECs or cable system operators that report no availability. Figures are presented to the nearest percent.

Source: FCC Form 477, Parts I and II; Warren Communications News, Inc., Television & Cable Factbook: Online (Cable General Information, February 2010).

## Detailed Summary Statistics: Counties and Census Tracts

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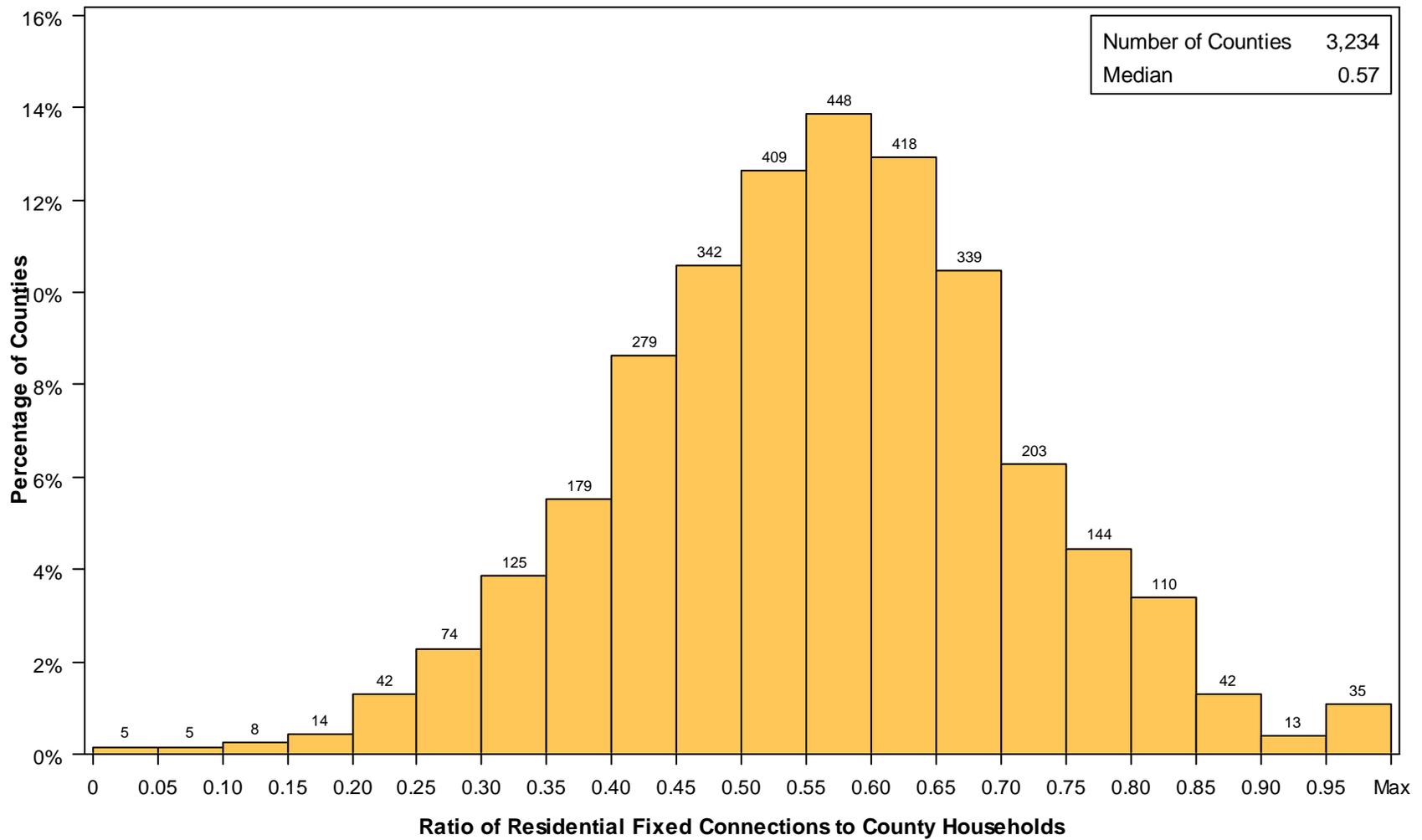
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**Chart 15**  
**Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households as of June 30, 2012**



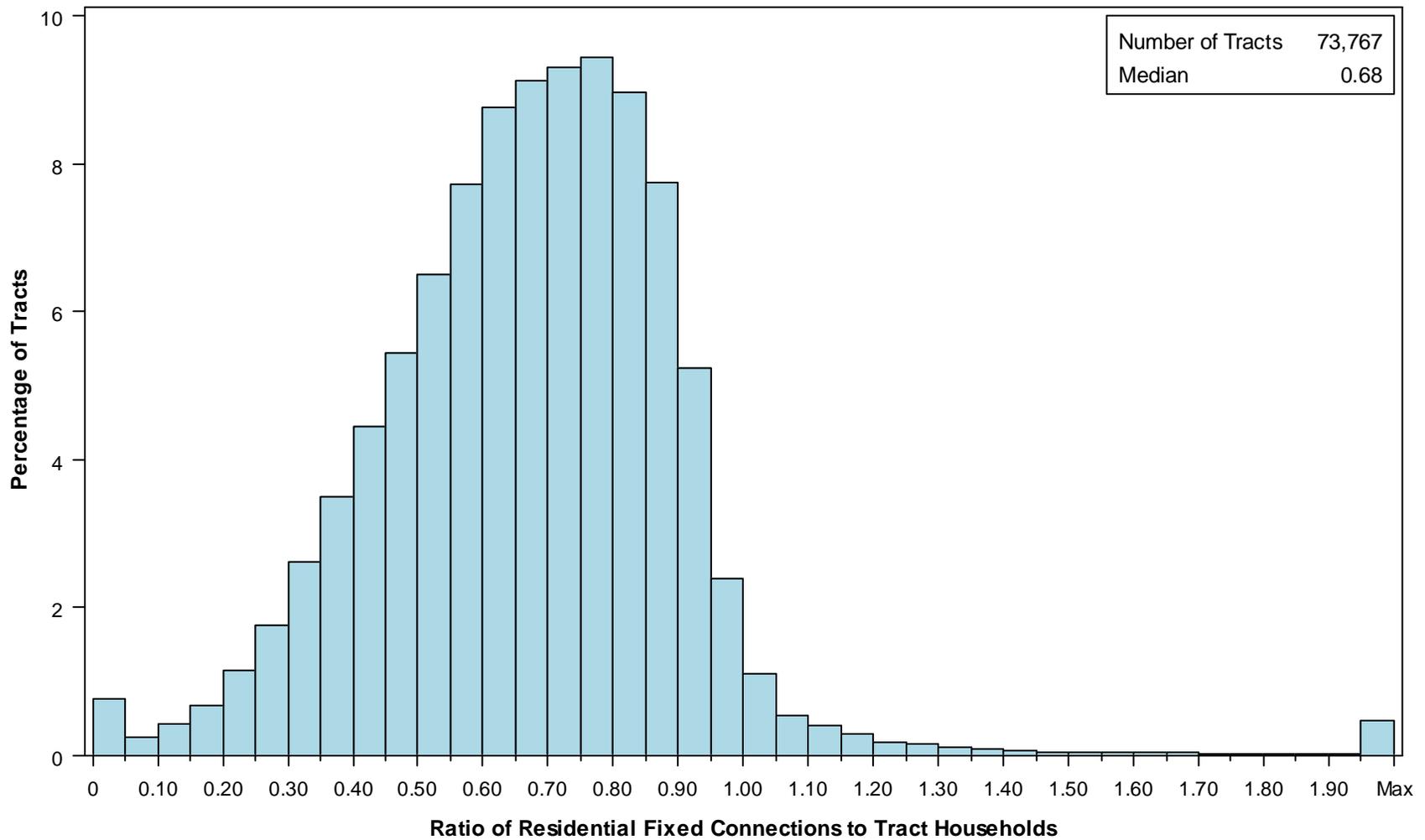
Note: Ratios over 1 were set to 1. See Technical Notes at the end of the report.  
 Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates; and Census 2010. 2010 housing units proxv households in island area counties.

**Table 23**  
**Distribution of Counties by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households by Technology as of June 30, 2012**

<i>Technology</i>	<i>Ratio of Residential Fixed Connections to County Households</i>										
	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	<i>100% or more</i>
aDSL	0.5	1.8	4.9	26.1	31.4	21.2	9.4	3.4	0.9	0.3	0.1
sDSL	83.9	15.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other Wireline	97.7	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	13.5	9.1	9.4	18.0	17.2	14.6	10.9	5.0	1.9	0.2	0.2
FTTP	57.8	29.2	4.4	3.7	2.4	1.2	0.6	0.4	0.3	0.0	0.0
Satellite	0.5	83.2	13.0	3.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Fixed Wireless	43.8	44.2	7.6	3.6	0.6	0.2	0.1	0.0	0.0	0.0	0.0
Power Line	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.1	0.1	0.2	0.7	3.6	9.4	19.2	26.5	34.1	5.5	0.7

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.  
Sources: FCC Form 477, Part VI; Geolytics 2011 Block-Level Estimates; and Census 2010. 2010 housing units proxy households in island area counties.

**Chart 16**  
**Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households as of June 30, 2012**



Note: Ratios over 2 were set to 2. See Technical Notes at the end of the report.  
 Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates; and Census 2000.

**Table 24**  
**Distribution of Census Tracts by Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households by Technology as of June 30, 2012**

<i>Technology</i>	<i>Ratio of Residential Fixed Connections to Tract Households</i>										
	<i>Zero</i>	<i>Greater than 0 and no more than 5%</i>	<i>Greater than 5 and no more than 10%</i>	<i>Greater than 10 and no more than 20%</i>	<i>Greater than 20 and no more than 30%</i>	<i>Greater than 30 and no more than 40%</i>	<i>Greater than 40 and no more than 50%</i>	<i>Greater than 50 and no more than 60%</i>	<i>Greater than 60 and no more than 80%</i>	<i>Greater than 80 and no more than 100%</i>	<i>100% or more</i>
aDSL	1.3	8.3	11.1	28.4	23.6	14.8	7.5	3.0	1.4	0.3	0.3
sDSL	96.5	3.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Wireline	99.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	5.8	3.5	2.6	8.8	15.3	18.8	17.1	13.6	11.9	1.8	0.9
FTTP	73.2	10.7	2.0	3.0	3.4	3.4	2.3	1.2	0.6	0.1	0.0
Satellite	46.7	47.7	3.7	1.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Fixed Wireless	84.4	12.3	1.7	1.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0
Power Line	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.6	0.2	0.3	1.1	2.9	6.1	9.9	14.2	36.6	24.4	3.7

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.  
Sources: FCC Form 477, Part VI; Geolytics 2011 Block-Level Estimates; and Census 2000.

**Table 25**  
**Percentage of Census Tracts with Residential Fixed Connections by Technology as of June 30, 2012**  
 (Connections over 200 kbps in at least one direction)

<i>Technology</i>	<i>Number of Providers</i>							
	<i>Zero</i>	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four</i>	<i>Five</i>	<i>Six</i>	<i>Seven or More</i>
aDSL	1.3	48.0	35.9	12.5	1.9	0.3	0.0	0.0
sDSL	96.5	3.3	0.2	0.0	0.0	0.0	0.0	0.0
Other Wireline	99.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cable Modem	5.8	81.4	12.3	0.5	0.0	0.0	0.0	0.0
FTTP	73.2	26.1	0.6	0.0	0.0	0.0	0.0	0.0
Satellite	46.7	24.0	26.9	2.5	0.0	0.0	0.0	0.0
Fixed Wireless	84.4	12.0	2.9	0.6	0.1	0.0	0.0	0.0
Power Line	99.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0
aDSL and/or Cable Modem and/or FTTP	0.8	2.9	40.9	35.5	15.8	3.4	0.6	0.1
Any Technology	0.6	0.6	18.4	27.6	25.9	15.6	7.1	4.2

Note: Figures may not sum to totals due to rounding.  
 Sources: FCC Form 477, Part VI and Census 2010.

**Table 26**  
**Distribution of Counties by Ratio of Residential Fixed Connections to County Households by State as of June 30, 2012**  
**(Connections over 200 kbps in at least one direction)**

State	Counties	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households										
		Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Alabama	67	0	0	0	2	4	9	30	9	13	0	0
Alaska	29	0	0	1	2	1	3	7	0	14	0	1
American Samoa	5	2	1	0	1	1	0	0	0	0	0	0
Arizona	15	0	0	0	0	0	2	0	7	6	0	0
Arkansas	75	0	0	0	0	3	23	31	10	8	0	0
California	58	0	0	0	1	0	1	3	8	34	10	1
Colorado	64	0	0	0	0	1	1	8	17	22	9	6
Connecticut	8	0	0	0	0	0	0	0	0	4	4	0
Delaware	3	0	0	0	0	0	0	0	0	2	1	0
District of Columbia	1	0	0	0	0	0	0	0	0	1	0	0
Florida	67	0	0	0	0	2	1	13	9	31	9	2
Georgia	159	0	0	1	2	10	18	37	35	47	9	0
Guam	1	0	0	0	0	0	0	0	1	0	0	0
Hawaii	5	0	1	0	0	0	0	0	0	1	3	0
Idaho	44	0	0	0	0	2	4	14	11	12	0	1
Illinois	102	0	0	1	1	2	7	20	38	29	3	1
Indiana	92	0	0	0	0	1	5	23	37	24	2	0
Iowa	99	0	0	0	0	0	0	8	46	43	2	0
Kansas	105	0	0	0	0	0	2	15	37	48	3	0
Kentucky	120	0	0	0	0	4	10	31	36	36	3	0
Louisiana	64	0	0	0	0	4	10	18	14	18	0	0
Maine	16	0	0	0	0	0	0	0	2	10	4	0
Maryland	24	0	0	0	0	0	0	4	1	14	5	0
Massachusetts	14	0	0	0	0	0	0	0	0	7	4	3
Michigan	83	0	0	0	0	2	7	15	29	27	3	0
Minnesota	87	0	0	0	0	0	1	6	28	50	2	0
Mississippi	82	0	0	0	2	15	30	17	11	6	1	0
Missouri	115	0	0	1	1	3	16	33	39	20	2	0
Montana	56	0	0	0	0	0	0	10	24	22	0	0
Nebraska	93	0	0	0	0	0	7	17	35	33	1	0

**Table 26 - Continued**  
**Distribution of Counties by Ratio of Residential Fixed Connections to County Households by State as of June 30, 2012**  
**(Connections over 200 kbps in at least one direction)**

State	Counties	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to County Households										
		Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Nevada	17	0	0	0	0	0	4	3	3	7	0	0
New Hampshire	10	0	0	0	0	0	0	0	1	4	5	0
New Jersey	21	0	0	0	0	0	0	0	0	8	12	1
New Mexico	33	0	0	0	0	2	7	7	8	7	2	0
New York	62	0	0	0	0	0	1	0	9	41	10	1
North Carolina	100	0	0	0	0	0	3	23	25	37	11	1
North Dakota	53	0	0	0	0	0	1	4	9	35	4	0
Northern Mariana Isl	4	1	0	0	3	0	0	0	0	0	0	0
Ohio	88	0	0	0	0	0	3	11	27	45	2	0
Oklahoma	77	0	0	0	0	8	17	20	22	10	0	0
Oregon	36	0	0	0	0	0	1	3	13	19	0	0
Pennsylvania	67	0	0	0	0	0	3	1	12	38	11	2
Puerto Rico	78	0	0	0	0	18	21	29	9	1	0	0
Rhode Island	5	0	0	0	0	0	0	0	0	3	2	0
South Carolina	46	0	0	0	0	2	9	8	14	11	2	0
South Dakota	66	0	0	0	0	1	4	5	21	32	3	0
Tennessee	95	0	0	0	1	4	15	36	23	15	1	0
Texas	254	0	0	0	0	11	33	73	71	60	5	1
Utah	29	0	0	0	0	1	2	0	9	15	1	1
Vermont	14	0	0	0	0	0	0	0	1	8	5	0
Virgin Islands	3	0	0	0	0	1	2	0	0	0	0	0
Virginia	134	0	0	1	6	11	12	21	38	29	16	0
Washington	39	0	0	0	0	1	3	1	9	24	1	0
West Virginia	55	0	0	0	0	1	5	9	24	15	1	0
Wisconsin	72	0	0	0	0	0	0	4	19	46	2	1
Wyoming	23	0	0	0	0	0	1	3	6	12	1	0
<b>Total</b>	<b>3,234</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>22</b>	<b>116</b>	<b>304</b>	<b>621</b>	<b>857</b>	<b>1104</b>	<b>177</b>	<b>23</b>

Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.

Sources: FCC Form 477, Part VI (Connections); Geolytics 2011 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2010 (Housing units for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

**Table 27**  
**Distribution of Census Tracts by Ratio of Residential Fixed Connections to Tract Households by State as of June 30, 2012**  
**(Connections over 200 kbps in at least one direction)**

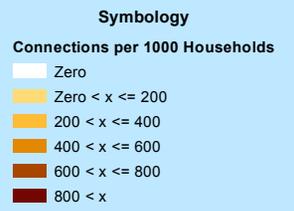
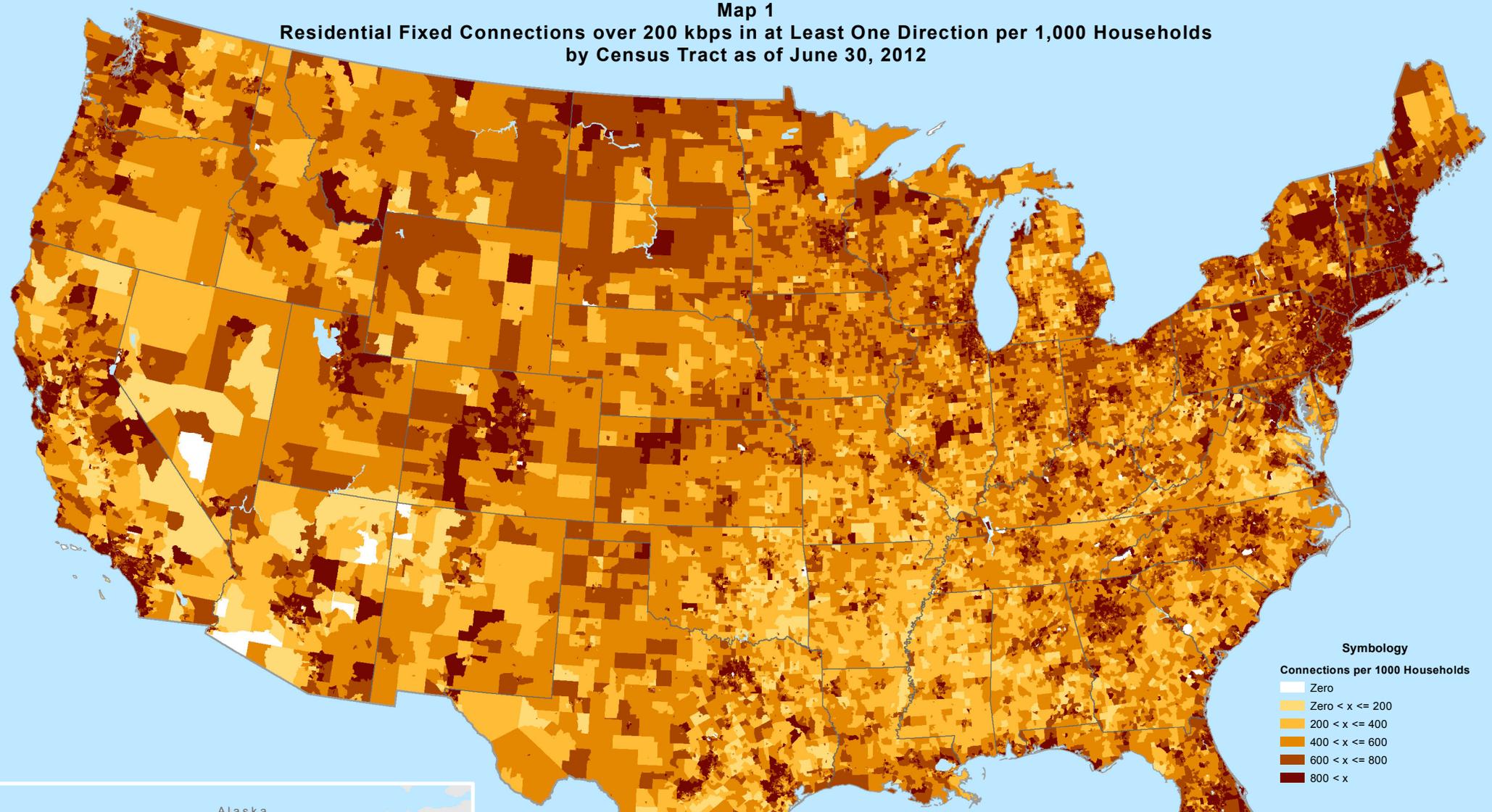
State	Tracts	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households										
		Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Alabama	1,179	4	2	1	30	92	176	233	207	318	97	19
Alaska	167	2	2	1	5	6	7	11	20	79	23	11
American Samoa	18	3	6	1	2	2	0	2	1	0	1	0
Arizona	1,526	18	14	7	18	40	81	134	200	525	418	71
Arkansas	686	0	2	1	22	66	125	146	109	162	41	12
California	8,036	40	14	13	56	79	207	483	841	2,938	3,055	310
Colorado	1,249	12	0	2	3	9	27	79	158	456	427	76
Connecticut	829	3	0	0	0	3	14	45	60	273	408	23
Delaware	215	1	0	0	1	0	2	16	26	78	70	21
District of Columbia	179	1	0	0	0	0	3	22	26	75	46	6
Florida	4,199	30	3	4	11	51	137	332	559	1,690	1,131	251
Georgia	1,964	10	5	1	23	78	187	290	316	650	352	52
Guam	56	6	2	0	4	2	2	0	1	3	3	33
Hawaii	326	7	1	1	3	0	2	11	23	128	108	42
Idaho	298	1	0	1	0	7	19	46	87	113	20	4
Illinois	3,121	7	5	3	26	80	249	376	485	1,166	674	50
Indiana	1,508	3	2	3	5	35	100	262	357	542	177	22
Iowa	825	2	1	1	1	8	20	82	212	420	69	9
Kansas	770	7	1	0	4	14	48	92	175	275	130	24
Kentucky	1,115	8	0	2	14	43	87	192	227	382	130	30
Louisiana	1,136	10	0	2	16	60	154	214	216	350	100	14
Maine	351	0	0	0	0	2	5	22	40	178	77	27
Maryland	1,394	7	0	1	1	16	67	90	128	467	560	57
Massachusetts	1,471	9	0	0	1	5	6	33	107	572	658	80
Michigan	2,767	24	1	4	40	172	251	290	362	1,001	586	36
Minnesota	1,335	4	0	2	6	6	31	106	257	621	289	13
Mississippi	661	3	1	6	18	87	153	120	93	134	32	14
Missouri	1,393	3	4	4	16	93	138	201	272	433	205	24
Montana	271	2	0	2	2	3	15	32	74	110	23	8
Nebraska	532	2	0	1	0	2	25	58	114	216	91	23

**Table 27 - Continued**  
**Distribution of Census Tracts by Ratio of Residential Fixed Connections to Tract Households by State as of June 30, 2012**  
**(Connections over 200 kbps in at least one direction)**

State	Tracts	Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Tract Households										
		Zero	Greater than 0 and no more than 5%	Greater than 5 and no more than 10%	Greater than 10 and no more than 20%	Greater than 20 and no more than 30%	Greater than 30 and no more than 40%	Greater than 40 and no more than 50%	Greater than 50 and no more than 60%	Greater than 60 and no more than 80%	Greater than 80 and no more than 100%	100% or more
Nevada	683	5	0	3	9	25	45	73	92	252	151	28
New Hampshire	294	2	0	1	0	0	0	6	17	114	139	15
New Jersey	2,004	8	1	2	1	0	10	32	112	754	984	100
New Mexico	499	5	11	4	9	27	53	86	87	155	47	15
New York	4,900	65	2	9	20	37	119	158	452	2,295	1,541	202
North Carolina	2,183	14	1	1	9	52	134	282	370	719	421	180
North Dakota	205	0	0	0	0	3	6	17	34	106	28	11
Northern Mariana Isl	22	3	2	0	1	3	0	0	2	1	1	9
Ohio	2,946	6	0	2	12	76	214	319	495	1,226	541	55
Oklahoma	1,046	1	9	12	34	76	136	177	171	265	138	27
Oregon	827	2	0	0	1	1	13	53	166	419	165	7
Pennsylvania	3,217	13	2	3	20	34	78	220	497	1,455	749	146
Puerto Rico	903	15	2	27	167	171	176	116	79	54	31	65
Rhode Island	241	0	0	0	0	0	0	3	23	129	76	10
South Carolina	1,097	9	0	0	12	60	121	187	186	322	136	64
South Dakota	222	1	0	0	1	3	8	20	44	113	28	4
Tennessee	1,497	14	2	3	22	92	181	299	284	424	149	27
Texas	5,253	29	11	33	104	269	621	769	739	1,433	1,030	215
Utah	588	5	1	3	2	5	6	33	80	281	143	29
Vermont	184	1	0	0	0	0	1	2	18	101	48	13
Virgin Islands	29	0	0	1	4	6	4	3	4	4	0	3
Virginia	1,895	18	3	12	34	68	98	182	226	472	693	89
Washington	1,446	1	0	2	7	19	42	80	163	646	456	30
West Virginia	484	0	4	6	17	13	39	73	95	177	41	19
Wisconsin	1,393	2	3	1	6	30	73	116	251	677	212	22
Wyoming	132	1	0	0	3	3	6	10	20	71	17	1
<b>Total</b>	<b>73,767</b>	<b>449</b>	<b>120</b>	<b>189</b>	<b>823</b>	<b>2,134</b>	<b>4,522</b>	<b>7,336</b>	<b>10,460</b>	<b>27,020</b>	<b>17,966</b>	<b>2,748</b>

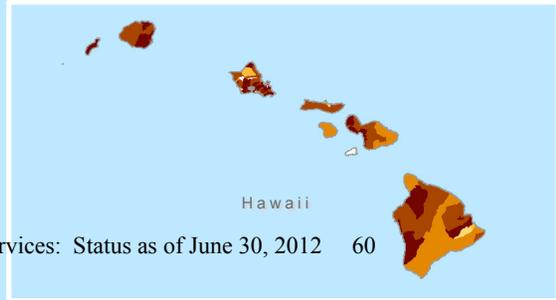
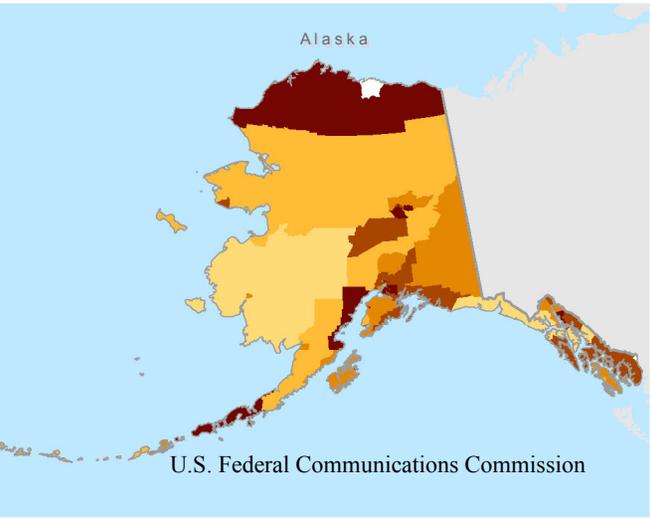
Note: Figures may not sum to totals due to rounding. See Technical Notes at the end of the report.  
Sources: FCC Form 477, Part VI (Connections); Geolytics 2011 Block-Level Estimates (Households for U.S. and District of Columbia); Census 2000 (Households for Puerto Rico, American Samoa, Guam, Northern Mariana Islands and U.S. Virgin Islands).

**Map 1**  
**Residential Fixed Connections over 200 kbps in at Least One Direction per 1,000 Households**  
**by Census Tract as of June 30, 2012**

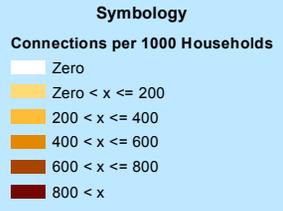
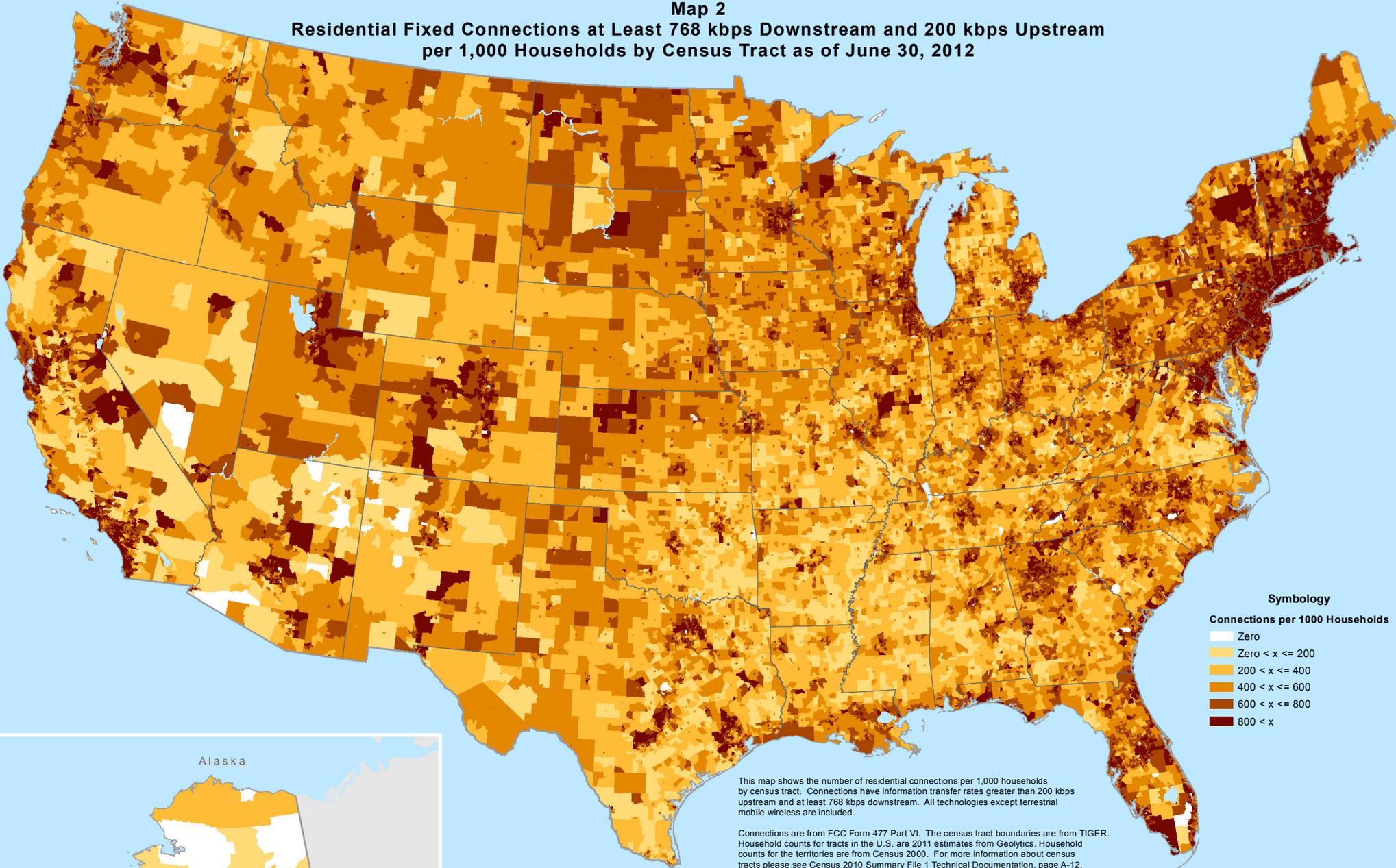


This map shows the number of residential connections per 1,000 households by census tract. Connections have information transfer rates greater than 200 kbps in at least one direction and include all technologies except terrestrial mobile wireless.

Connections data are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. Household counts for tracts in the U.S. are 2011 estimates from Geolytics. Household counts for the territories are from Census 2000. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.

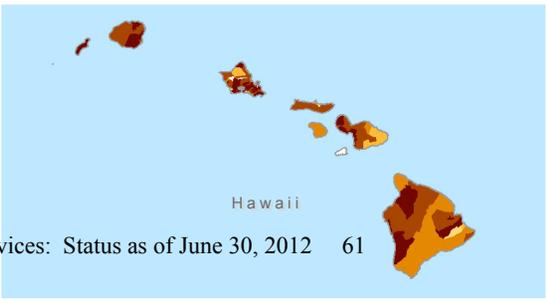
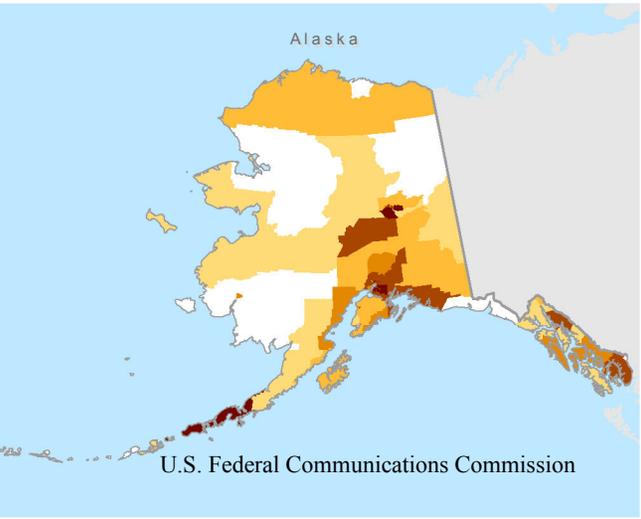


**Map 2**  
**Residential Fixed Connections at Least 768 kbps Downstream and 200 kbps Upstream**  
**per 1,000 Households by Census Tract as of June 30, 2012**

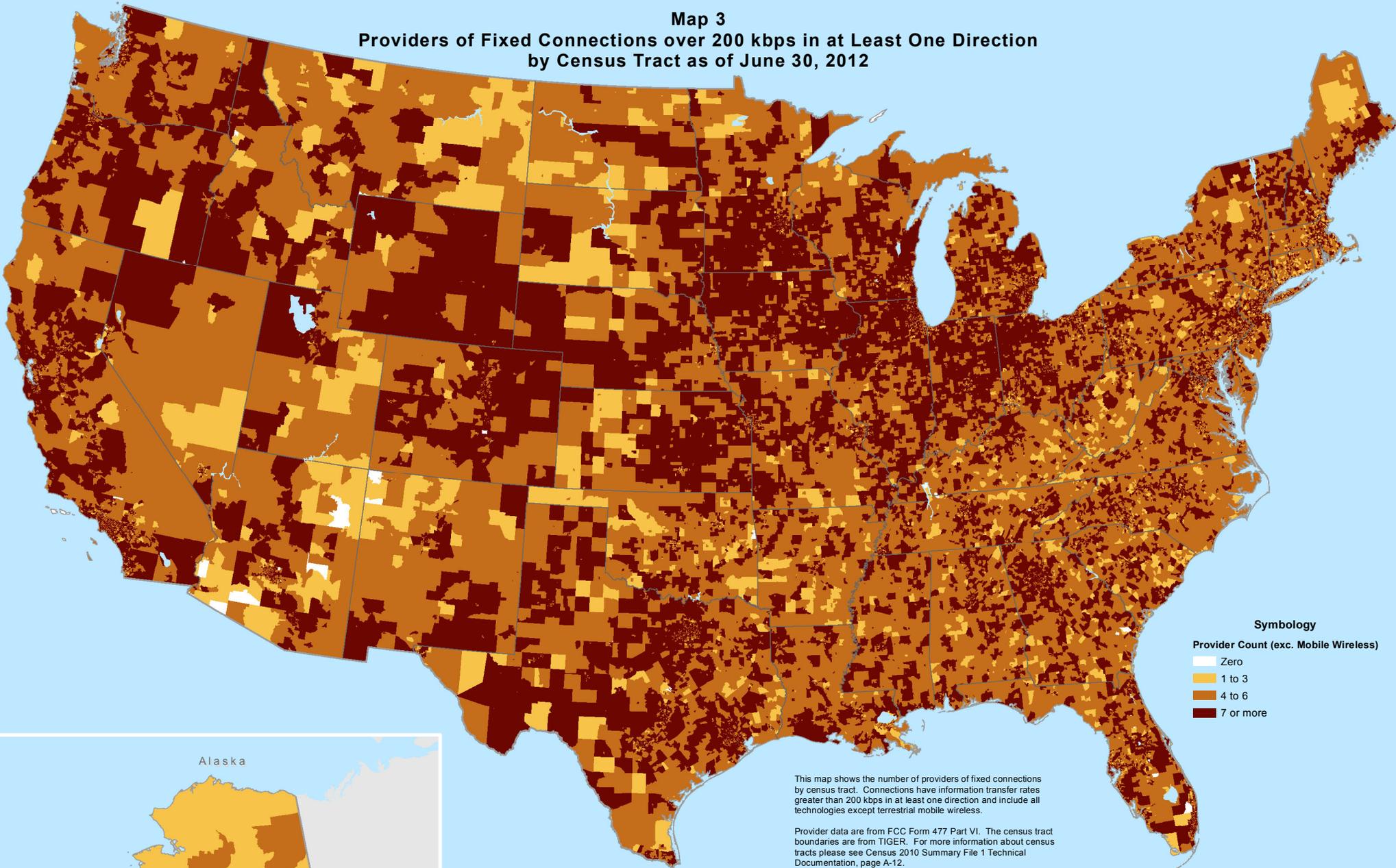


This map shows the number of residential connections per 1,000 households by census tract. Connections have information transfer rates greater than 200 kbps upstream and at least 768 kbps downstream. All technologies except terrestrial mobile wireless are included.

Connections are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. Household counts for tracts in the U.S. are 2011 estimates from Geolytics. Household counts for the territories are from Census 2000. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.



**Map 3**  
**Providers of Fixed Connections over 200 kbps in at Least One Direction**  
**by Census Tract as of June 30, 2012**



**Symbology**

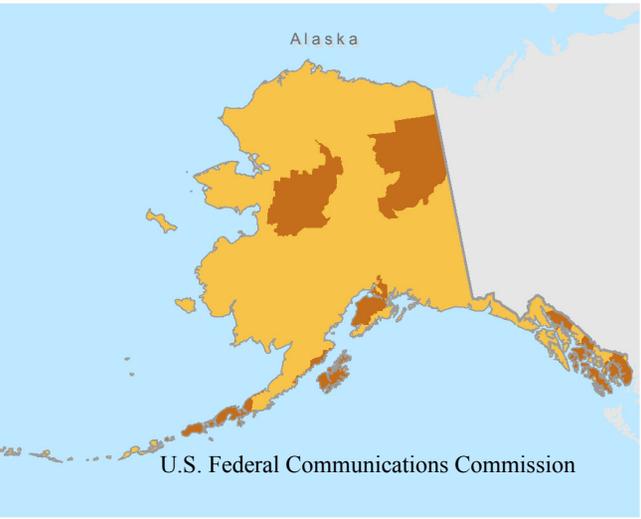
Provider Count (exc. Mobile Wireless)

- Zero
- 1 to 3
- 4 to 6
- 7 or more

This map shows the number of providers of fixed connections by census tract. Connections have information transfer rates greater than 200 kbps in at least one direction and include all technologies except terrestrial mobile wireless.

Provider data are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.

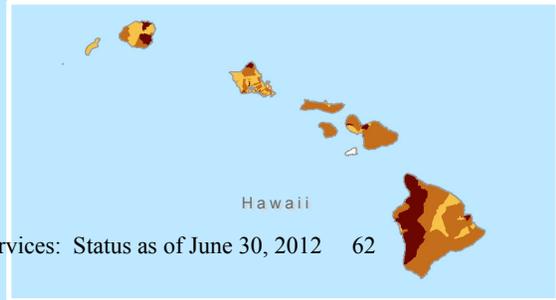
Alaska



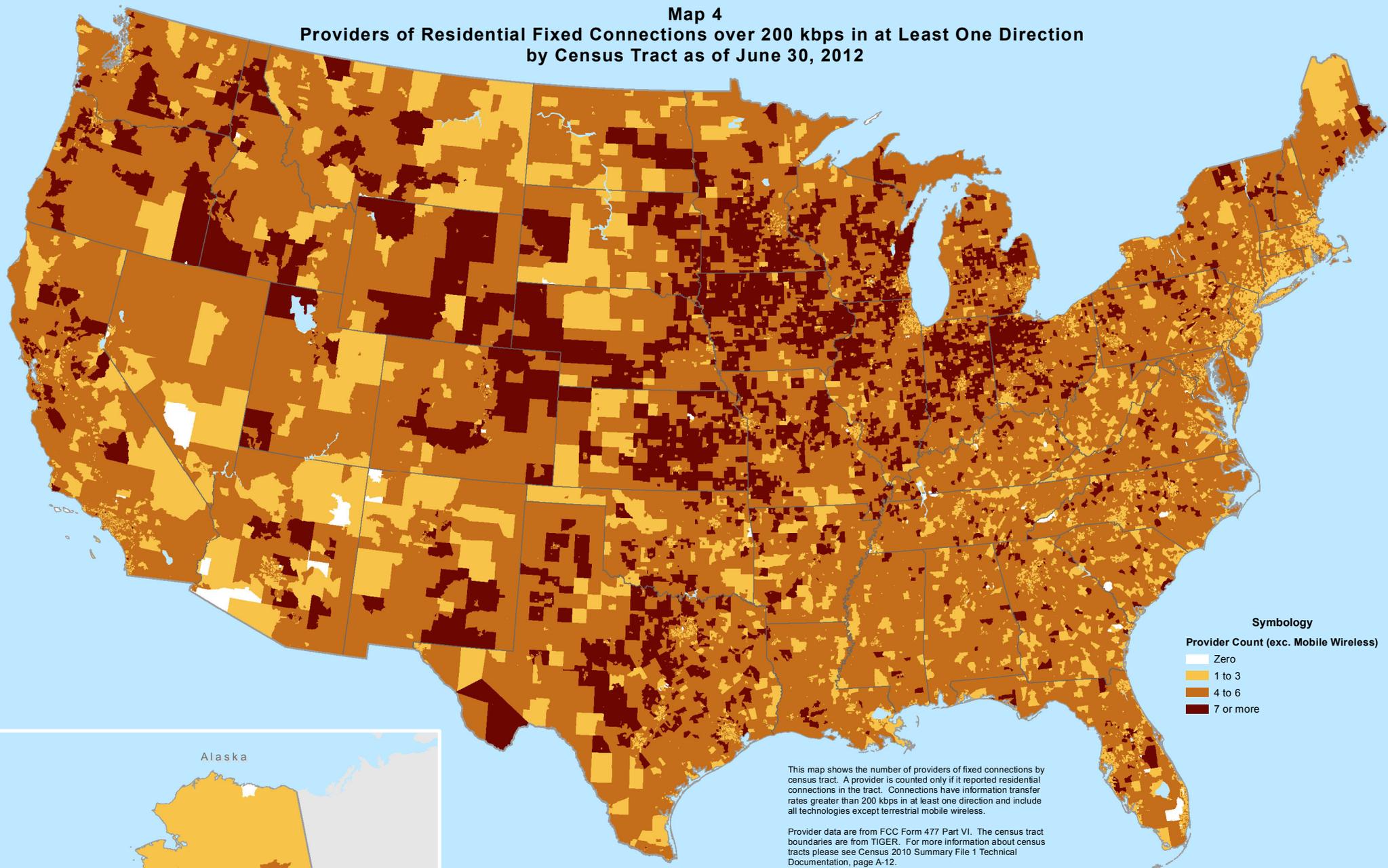
Puerto Rico



Hawaii



**Map 4**  
**Providers of Residential Fixed Connections over 200 kbps in at Least One Direction**  
**by Census Tract as of June 30, 2012**



**Symbology**  
**Provider Count (exc. Mobile Wireless)**

- Zero
- 1 to 3
- 4 to 6
- 7 or more

This map shows the number of providers of fixed connections by census tract. A provider is counted only if it reported residential connections in the tract. Connections have information transfer rates greater than 200 kbps in at least one direction and include all technologies except terrestrial mobile wireless.

Provider data are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.

Alaska

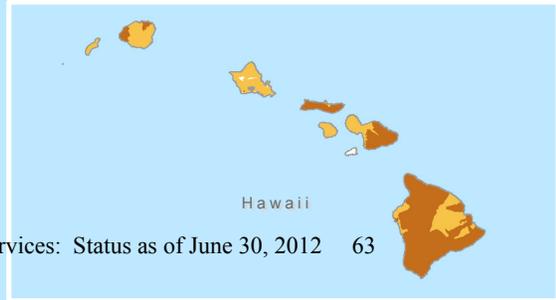


U.S. Federal Communications Commission

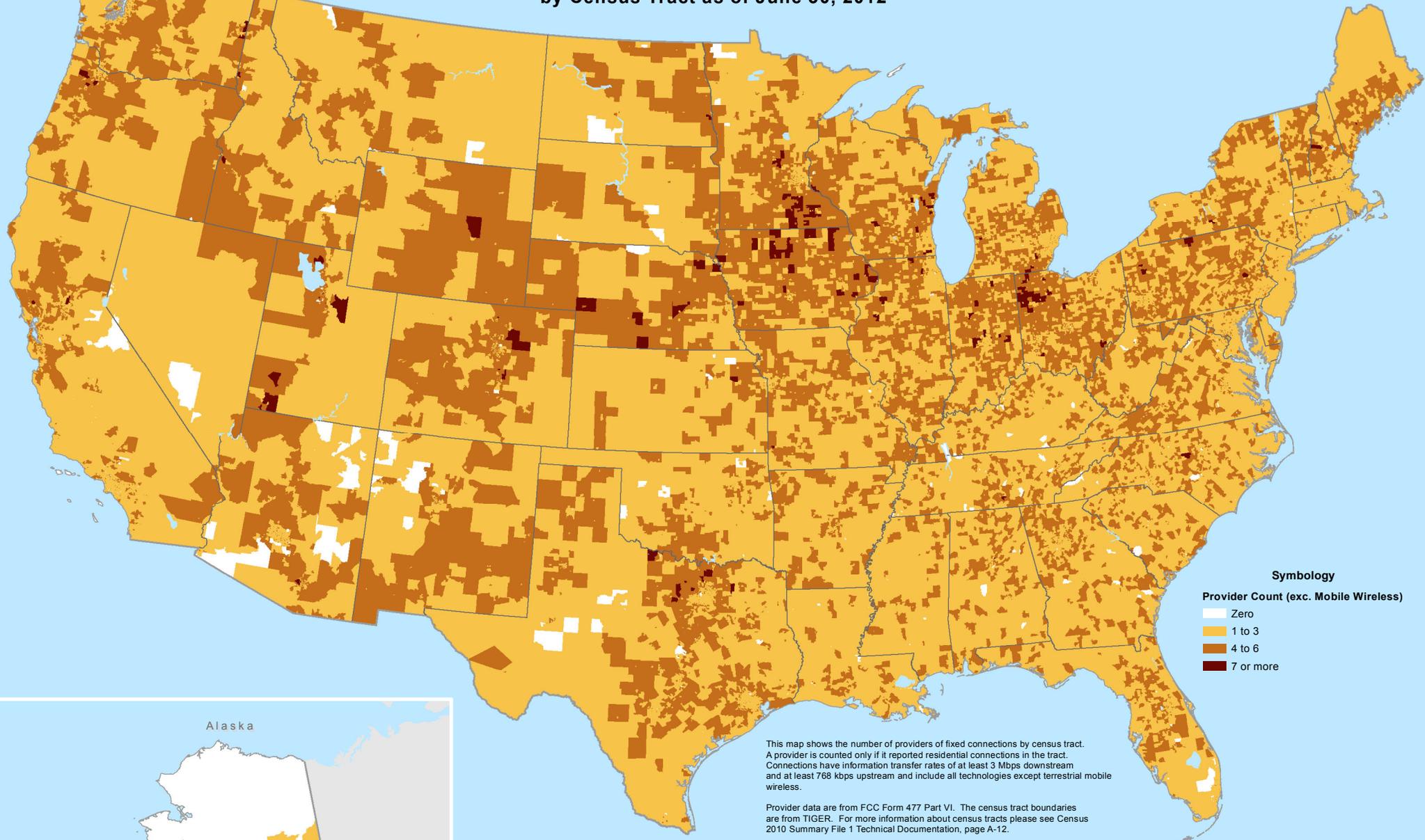
Puerto Rico



Hawaii



**Map 5**  
**Providers of Residential Fixed Connections at Least 3 Mbps Downstream and 768 kbps Upstream**  
**by Census Tract as of June 30, 2012**

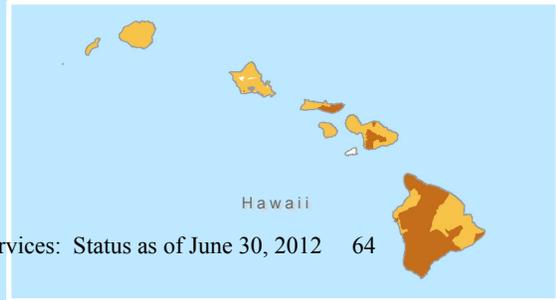
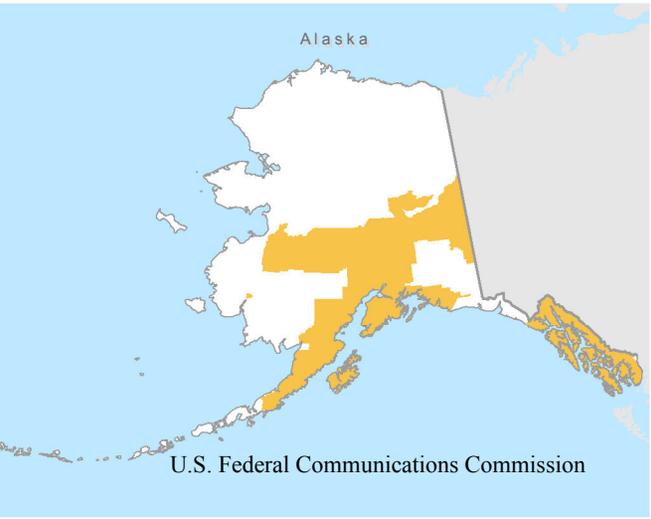


**Symbology**  
**Provider Count (exc. Mobile Wireless)**

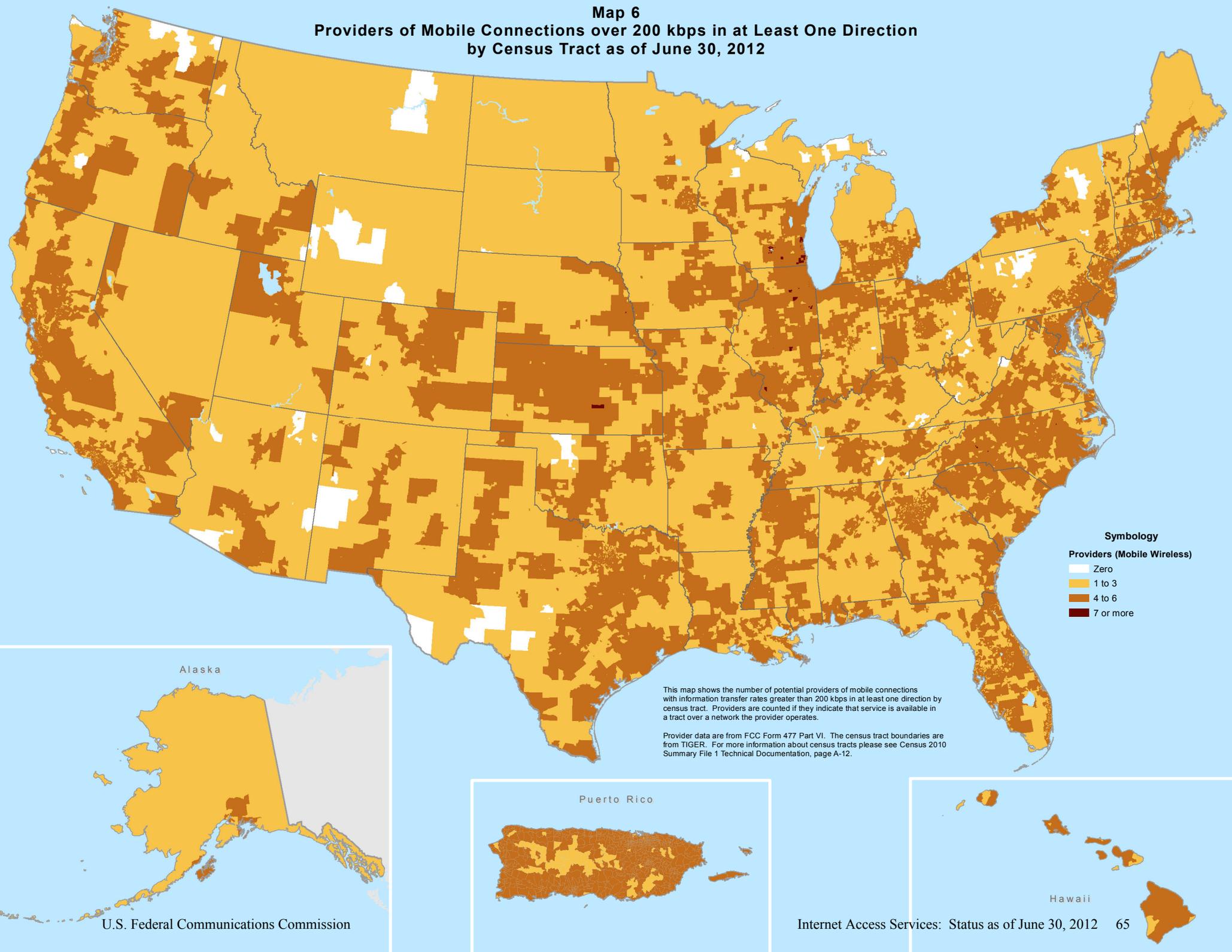
- Zero
- 1 to 3
- 4 to 6
- 7 or more

This map shows the number of providers of fixed connections by census tract. A provider is counted only if it reported residential connections in the tract. Connections have information transfer rates of at least 3 Mbps downstream and at least 768 kbps upstream and include all technologies except terrestrial mobile wireless.

Provider data are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.



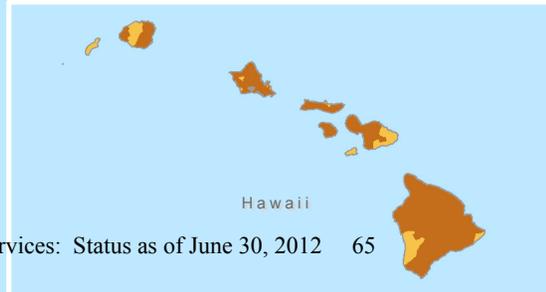
**Map 6**  
**Providers of Mobile Connections over 200 kbps in at Least One Direction**  
**by Census Tract as of June 30, 2012**



**Symbology**  
**Providers (Mobile Wireless)**  
 Zero  
 1 to 3  
 4 to 6  
 7 or more

This map shows the number of potential providers of mobile connections with information transfer rates greater than 200 kbps in at least one direction by census tract. Providers are counted if they indicate that service is available in a tract over a network the provider operates.

Provider data are from FCC Form 477 Part VI. The census tract boundaries are from TIGER. For more information about census tracts please see Census 2010 Summary File 1 Technical Documentation, page A-12.



## Detailed Correlation Results: Demographic Measures

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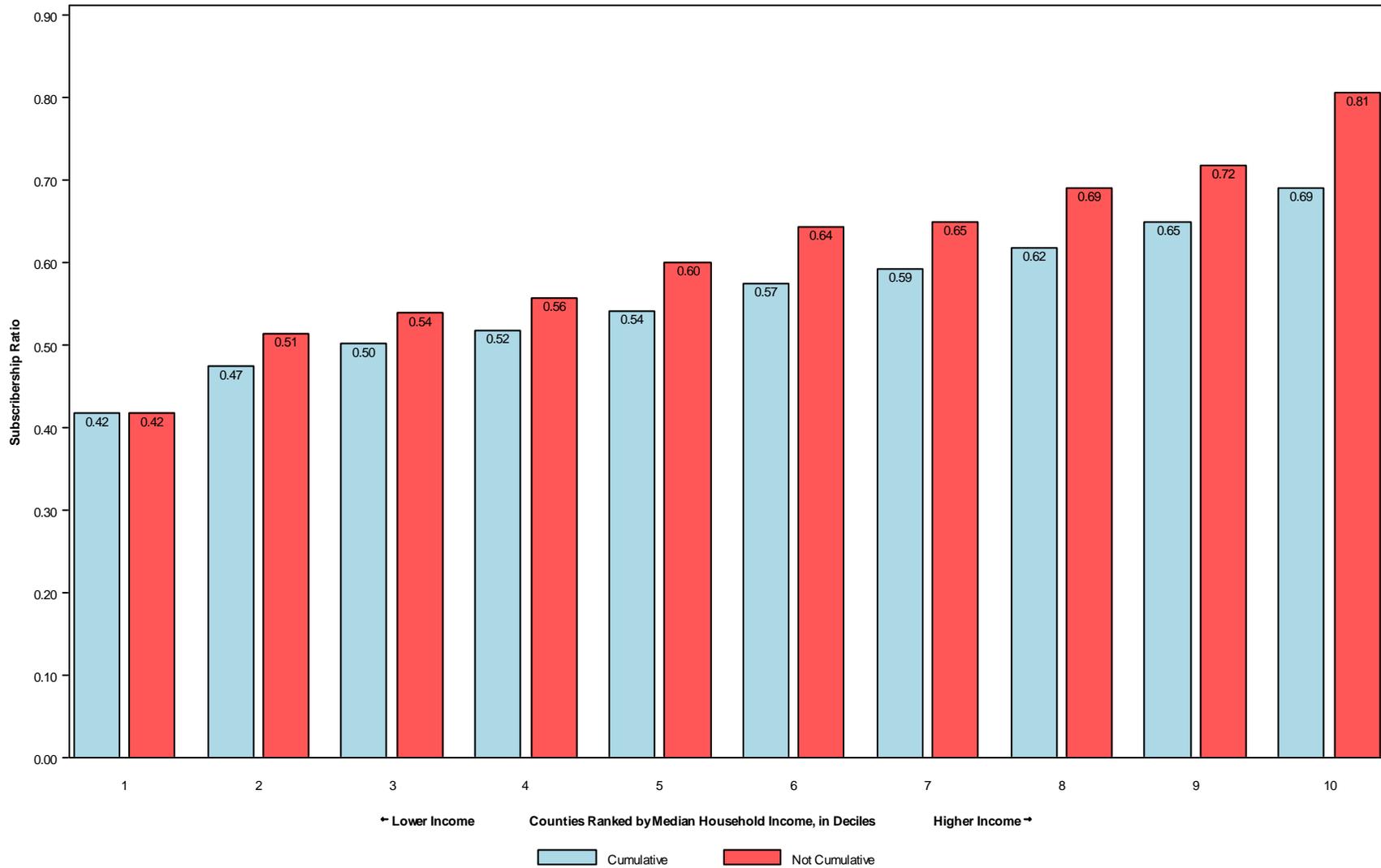
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**Chart 17**  
**Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households**  
**by Income Deciles as of June 30, 2012**  
**(County Data)**

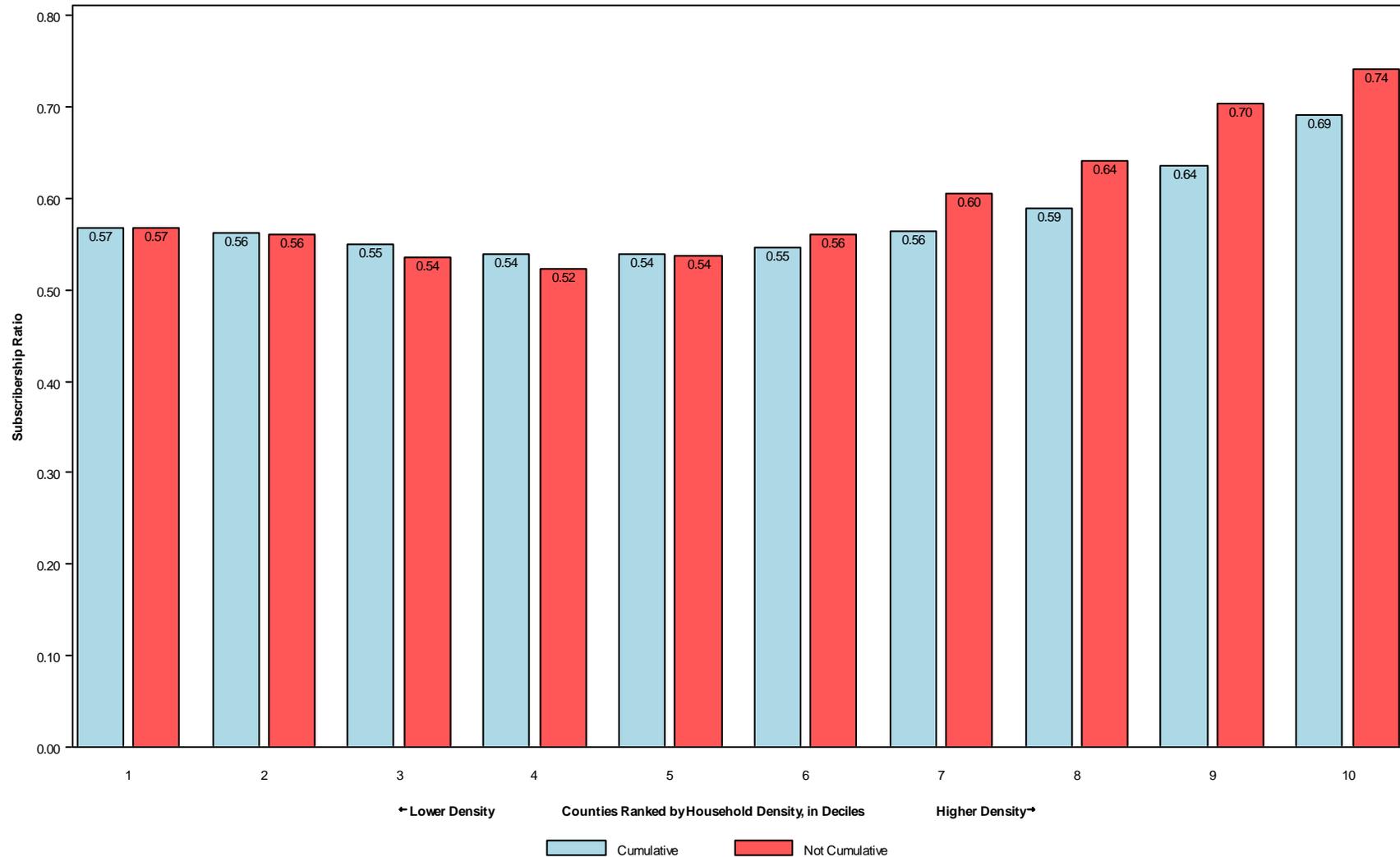


This chart shows cumulative and non-cumulative subscribership ratios by income deciles. Counties were grouped into income deciles based on county median household income in 2009, as reported by the Census Bureau. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (Median household income).



**Chart 19**  
**Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households**  
**by Density Deciles as of June 30, 2012**  
**(County Data)**

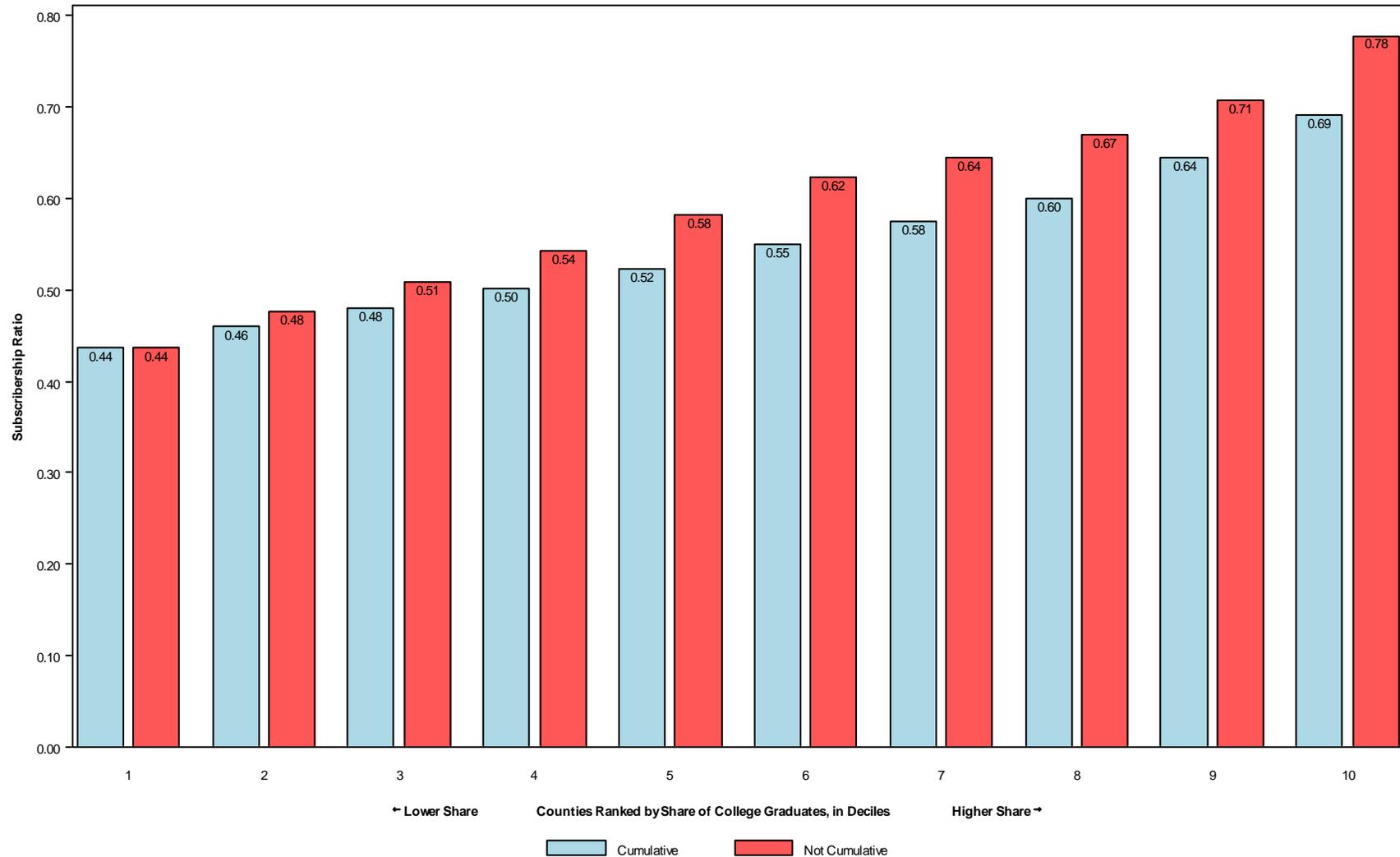


This chart shows cumulative and non-cumulative subscribership ratios by density deciles. Counties were grouped into density deciles based on households per square mile, calculated as the ratio of estimated county households in 2010 to county land area from the Census Bureau. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N to the number of households in all the counties in decile N and deciles less than N.

Sources: FCC Form 477, Part VI: Geolitics 2011 Block-Level Estimates (Households in 2011); and Census 2010 (County land area).



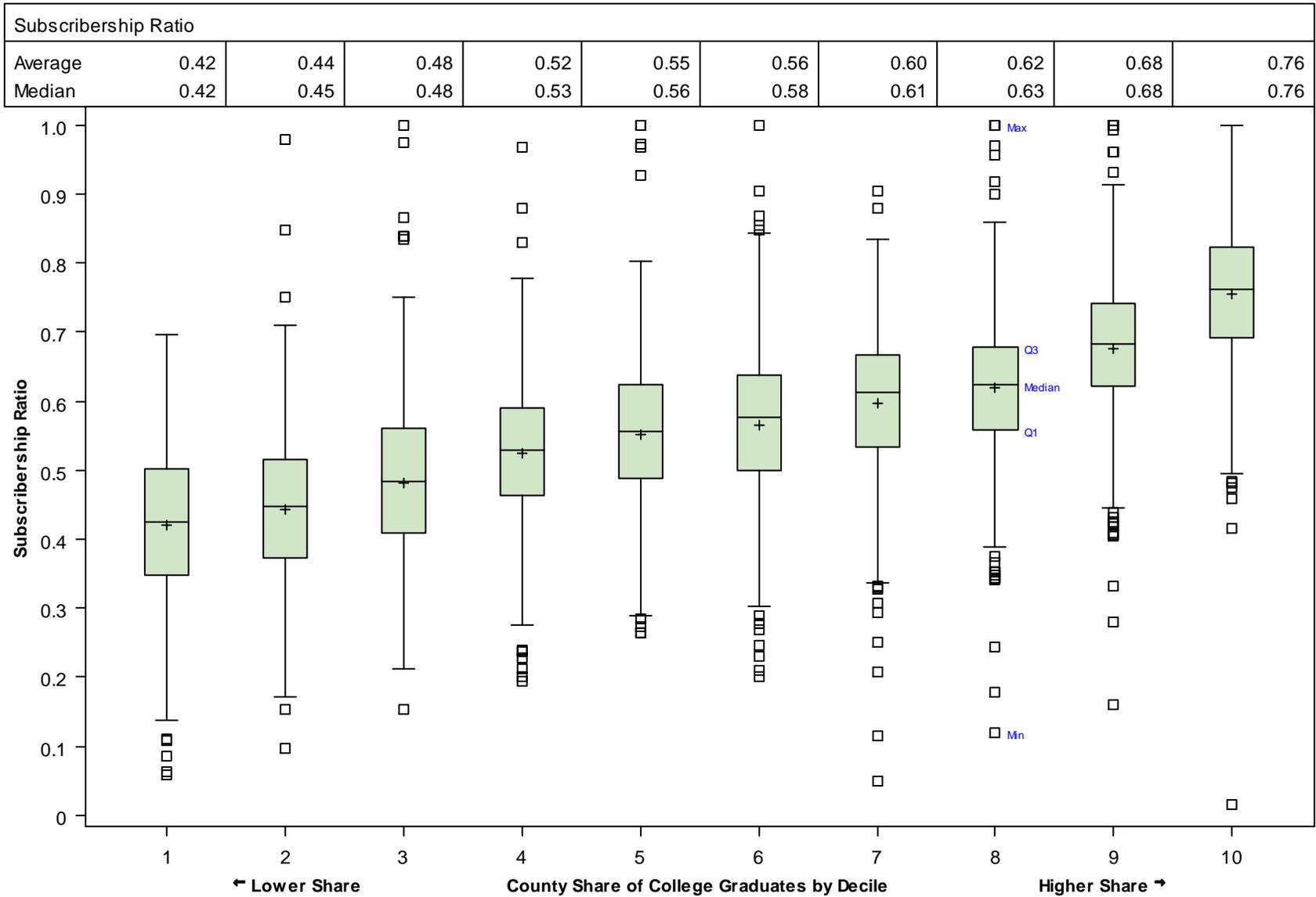
**Chart 21**  
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**(County Data)**



This chart shows cumulative and non-cumulative subscribership ratios by county share of college graduates in deciles. Counties were grouped into deciles based on the share of the county population at least 25 years of age with a college degree or higher educational attainment. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N.

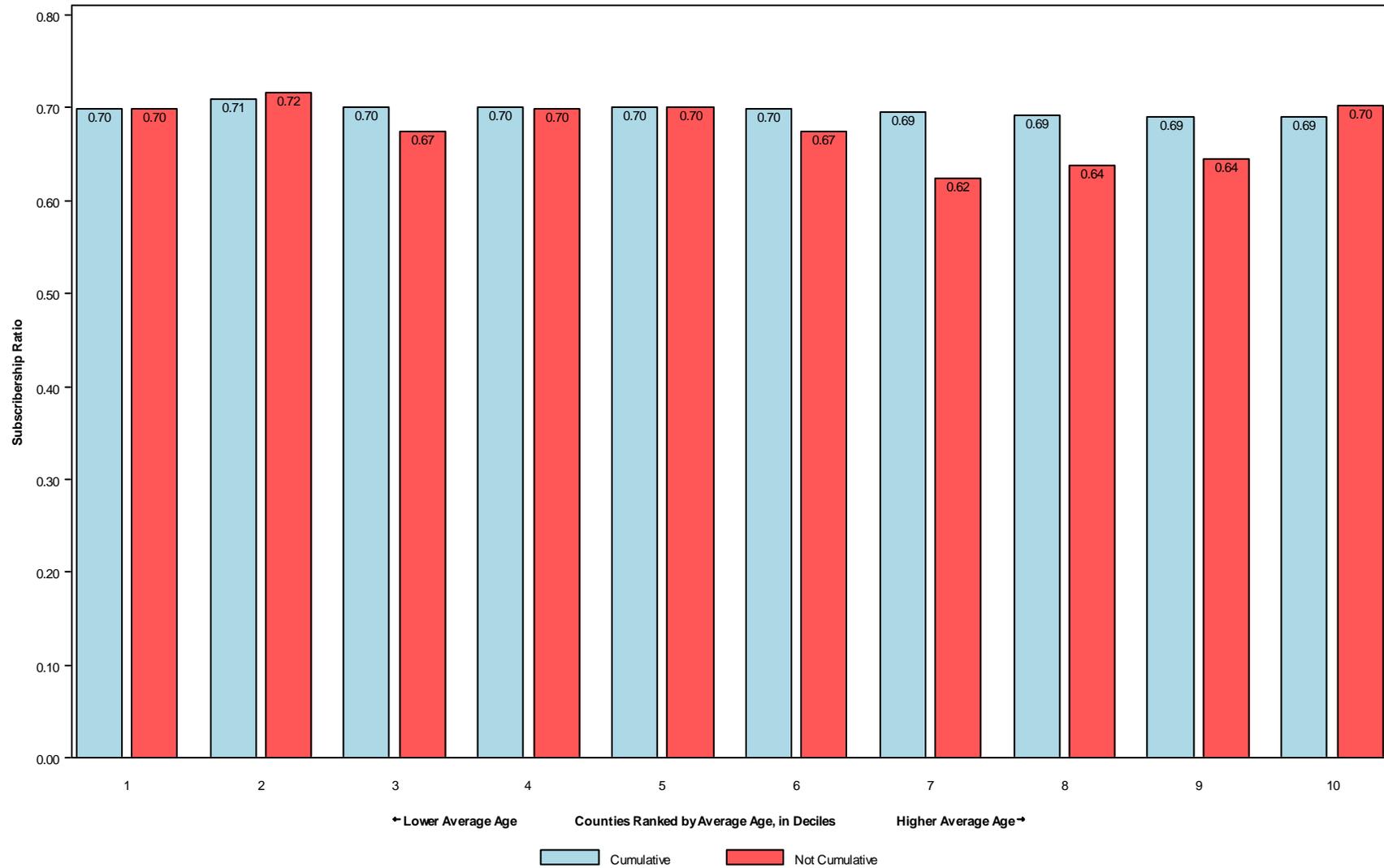
Sources: FCC Form 477, Part VI: Geolitics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (County educational attainment).

**Chart 22**  
**Subscribership Ratio Distributions by Share of Population with a College Degree (in Deciles) as of June 30, 2012**



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the share decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; L is the minimum observation above  $Q1-1.5(Q3-Q1)$ ; T is the maximum observation below  $Q3+1.5(Q3-Q1)$ ; and □ is a data point beyond  $Q1-1.5(Q3-Q1)$  or  $Q3+1.5(Q3-Q1)$ . Ratios greater than 1 were set to 1.  
 Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (County educational attainment).

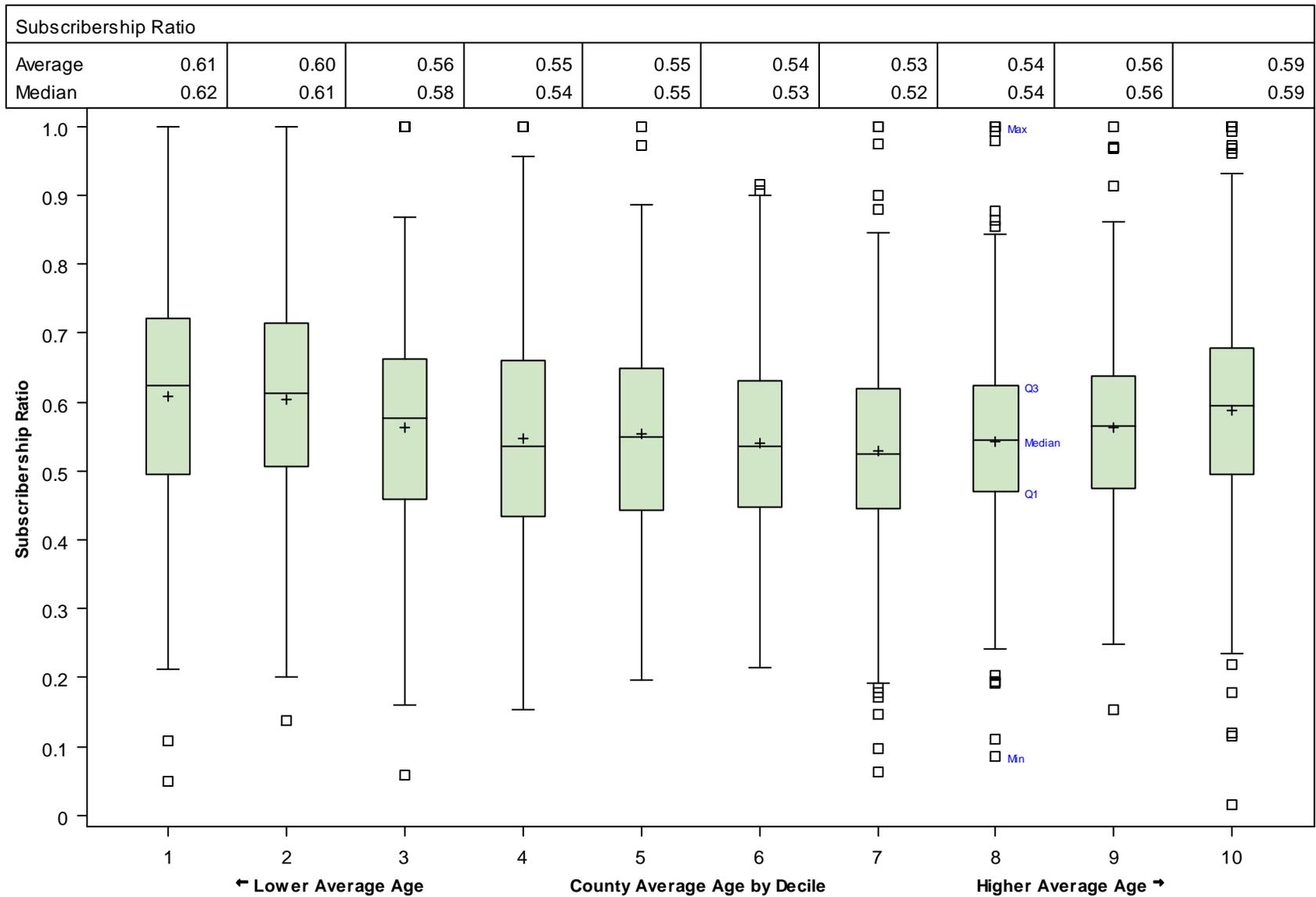
**Chart 23**  
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**(County Data)**



This chart shows cumulative and non-cumulative subscribership ratios by county average age in deciles. Counties were grouped into deciles based on the average age of the county population. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N.

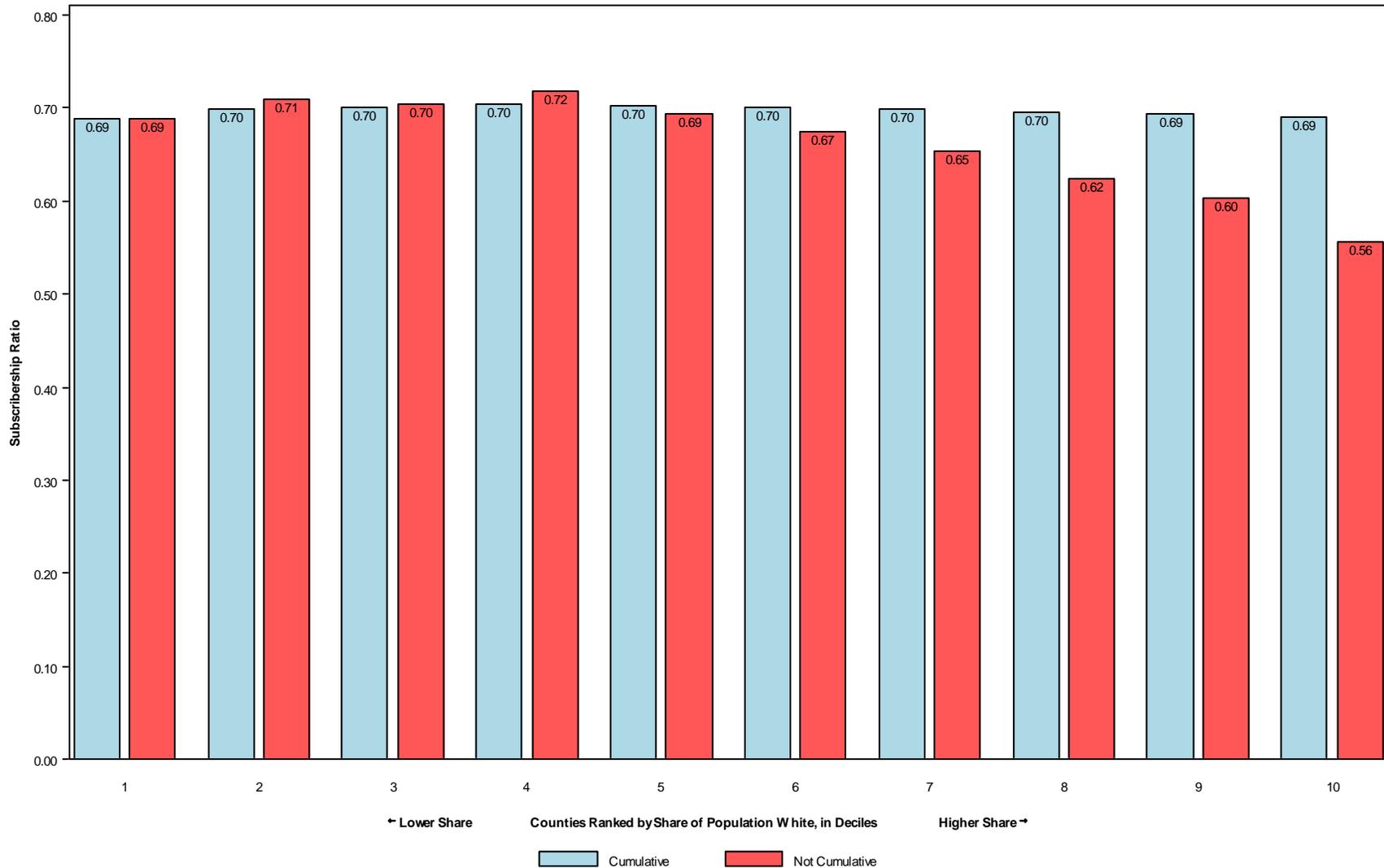
Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (County average age).

**Chart 24**  
**Subscribership Ratio Distributions by Average Age of County Population (in Deciles) as of June 30, 2012**



Note: Each box plot shows the distribution of residential subscribership to connections over 200 kbps in at least one direction for counties in the average age decile. Some of the features are labeled, but note also that + denotes the position of the average residential subscribership ratio taken across all counties in the decile; L is the minimum observation above  $Q1-1.5(Q3-Q1)$ ; T is the maximum observation below  $Q3+1.5(Q3-Q1)$ ; and □ is a data point beyond  $Q1-1.5(Q3-Q1)$  or  $Q3+1.5(Q3-Q1)$ . Ratios greater than 1 were set to 1.  
 Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (County average age).

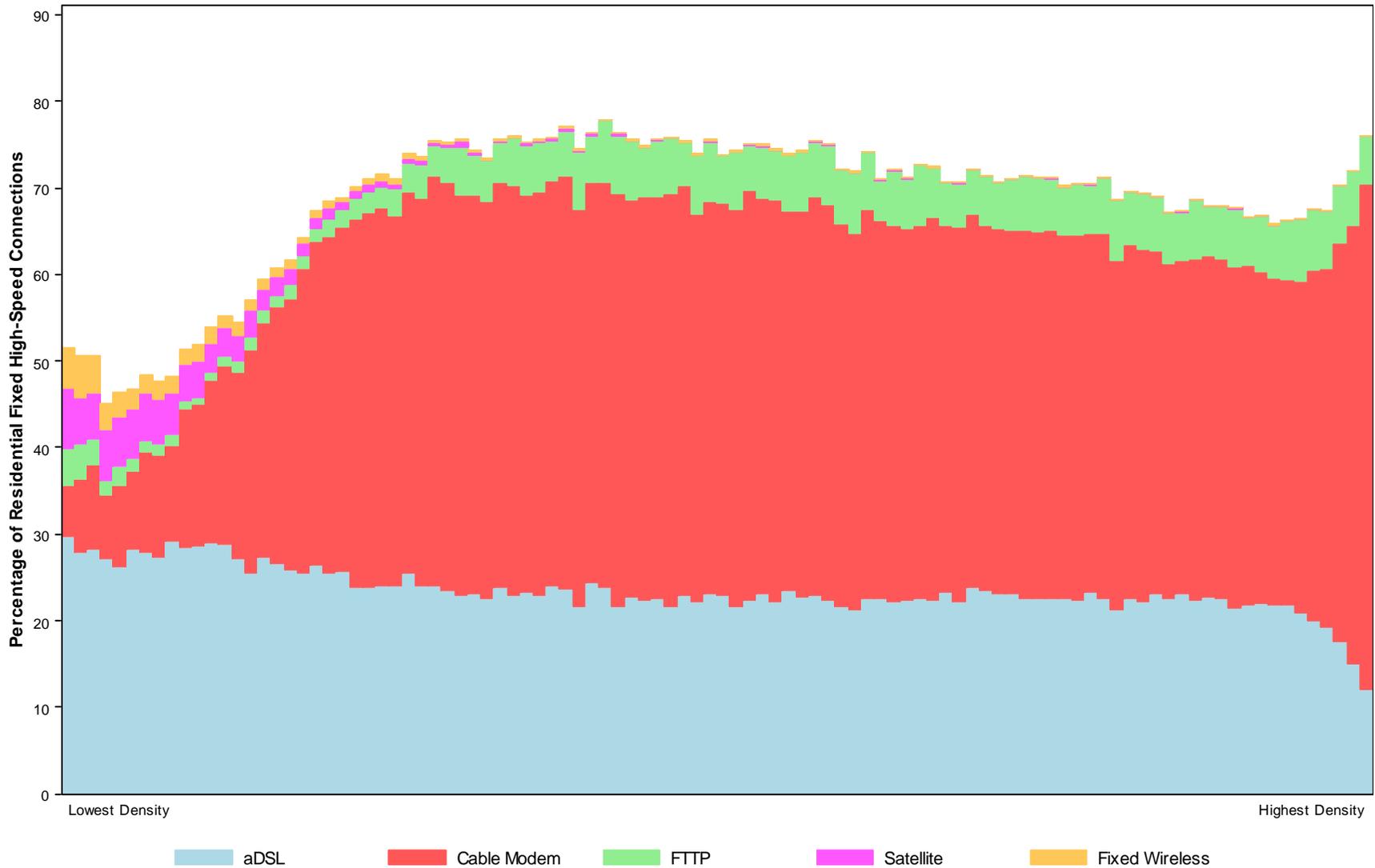
**Chart 25**  
**Ratio of Residential Fixed Connections over 200 kbps in at Least One Direction to Households**  
**by Share White Alone in Deciles as of June 30, 2012**  
**(County Data)**



This chart shows cumulative and non-cumulative subscribership ratios by the share of county population white alone in deciles. Counties were grouped into deciles based on the share of the county population that reported their race as white alone. For each decile, the height of any red, non-cumulative bar represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across counties in the decile to the sum of households across counties in the decile. The height of the blue, cumulative bar for decile N represents the ratio of the sum of residential fixed connections over 200 kbps in at least one direction across all counties in decile N and all deciles less than N, to the number of households in all the counties in decile N and deciles less than N. Sources: FCC Form 477, Part VI: Geolytics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (Race).



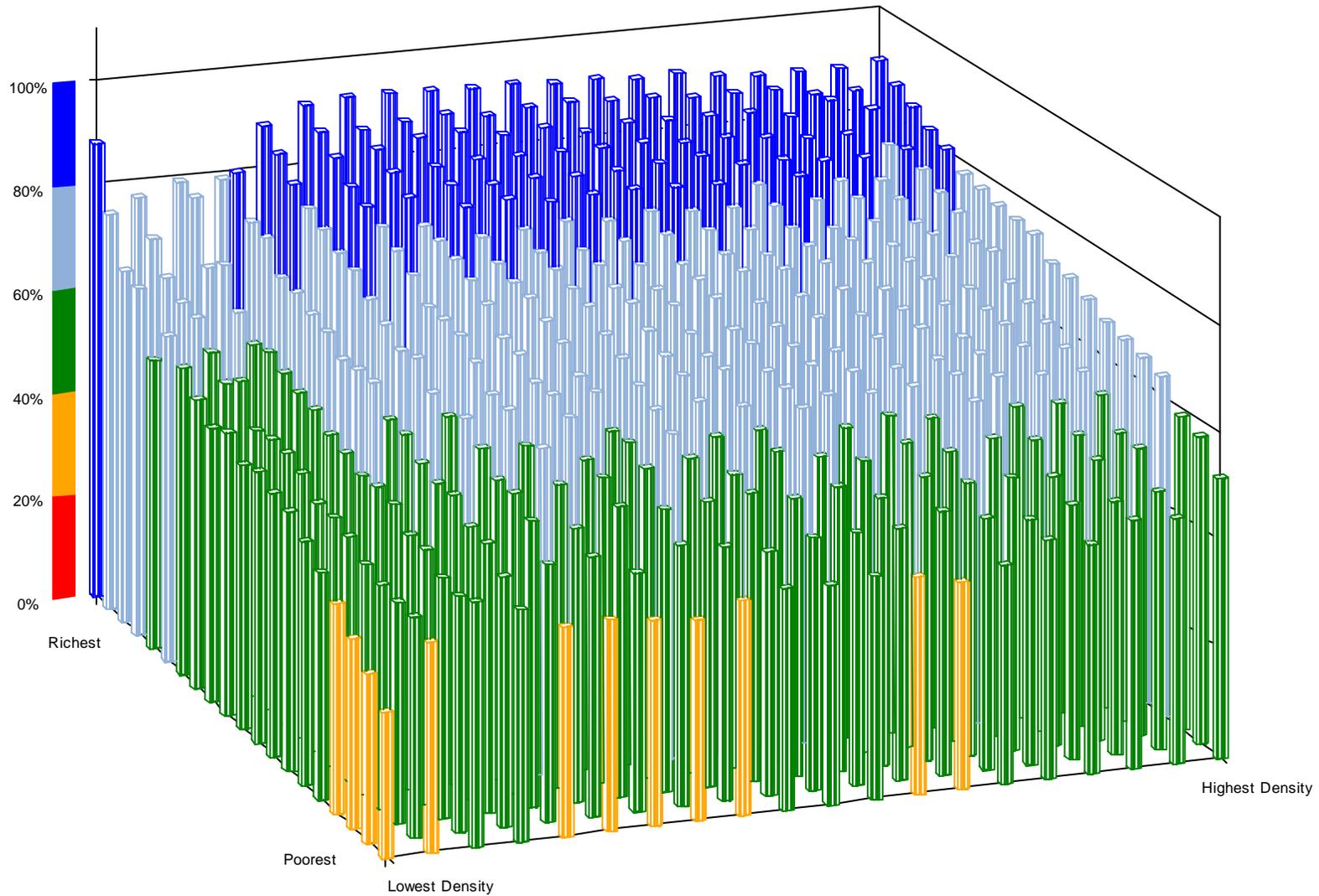
**Chart 27**  
**Subscribership Ratios by Technology and Tract Household Density as of June 30, 2012**  
 (Residential fixed connections over 200 kbps in at least one direction)



This chart shows subscribership ratios by technology and household density. Tracts were grouped into 100 density percentiles based on households per square mile, calculated as the ratio of estimated tract households in 2011 to tract land area from the Census Bureau. For each percentile, the height of the bar represents the household-weighted average ratio of residential fixed connections to households across tracts in the percentile.

Sources: FCC Form 477, Part VI: Geolitics 2011 Block-Level Estimates (Households in 2011); and Census 2010 (Tract land area).

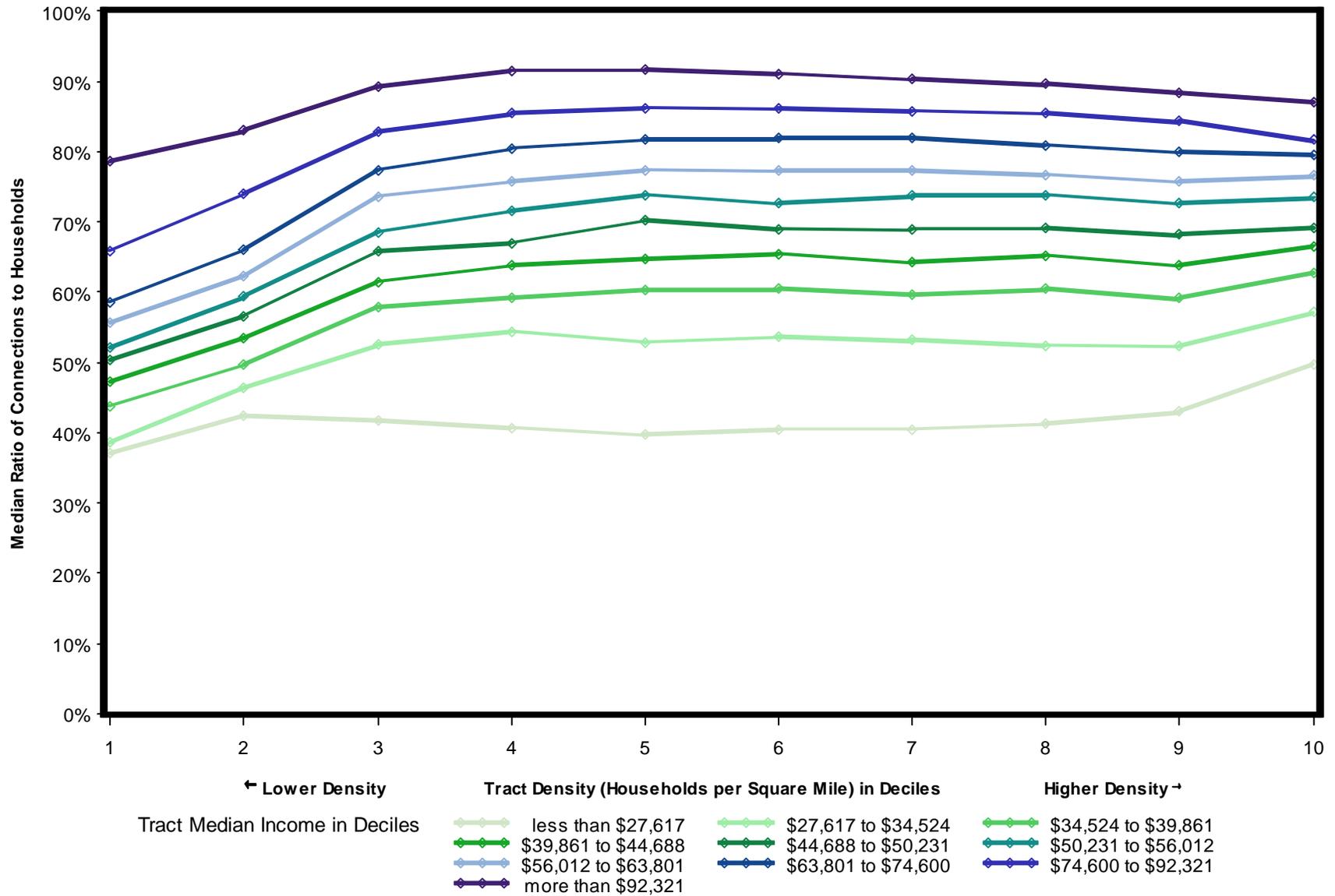
**Chart 28**  
**Average Subscriberhip Ratios by Income and Household Density as of June 30, 2012**  
**(Residential fixed connections over 200 kbps in at least one direction by Tract)**



This chart shows subscriberhip ratios by household density and income quantiles. Tracts were grouped into 400 density/income quantiles based on households per square mile, calculated as the ratio of estimated tract households in 2011 to tract land area from the Census Bureau, and median household income. For each quantile, the height of the bar represents the household-weighted average ratio of residential fixed connections to households across tracts in the decile.

Sources: FCC Form 477, Part VI: Geolitics 2011 Block-Level Estimates (Households in 2011); Census 2010 (Tract land area); 2007-2011 ACS 5-year Estimates (Median household income).

**Chart 29**  
**Median Ratios of Residential Fixed Connections over 200 kbps in at Least One Direction to Households by Income and Density**  
**Tract Data as of June 30, 2012**



Sources: FCC Form 477, Part VI: Geolitics 2011 Block-Level Estimates (Households in 2011); and 2007-2011 ACS 5-year Estimates (Median household income).

## Technical Notes

### General

Detailed information about FCC Form 477 reporting requirements is available at [www.fcc.gov/form477](http://www.fcc.gov/form477).

Wherever a number of providers is cited in this report, multiple Form 477 filers within a holding company structure count as one provider.

Form 477 collects information about Internet access connections in service to end-user locations that are advertised to deliver information to and/or from the end user – that is, in at least one direction – at transfer rates (“speeds”) above 200 kilobits per second (kbps). Information is collected about connections in 72 speed tiers (nine upstream tiers and eight downstream) defined by ranges of upstream speeds and downstream speeds. Connections are further categorized by the technology employed by the part of the connection that terminates at the end-user location.

“End users” are residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities. Facilities-based providers report information about connections they provide directly to their own end-user customers and also connections that they provide to Internet Service Providers for resale to end users. For Form 477 purposes, the facilities-based provider of a connection is the entity that owns the portion of the physical facility that terminates at the end-user location, obtains an unbundled network element (UNE), special access line, or other leased facility that terminates at the end-user location and provisions/equips it as a connection that transfers information at rates over 200 kbps in at least one direction, or provisions/equips a wireless channel that transfers information at rates over 200 kbps in at least one direction to the end-user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.

The mutually exclusive Form 477 technology categories are: asymmetric Digital Subscriber Line (“aDSL” in this report), symmetric Digital Subscriber Line (“sDSL”), other wireline, cable modem, optical fiber to the end-user premises (“FTTP”), satellite, fixed wireless (using licensed or unlicensed spectrum), mobile wireless (using licensed or unlicensed spectrum), electric power line, and all other (which is included to capture deployment of additional technologies over time). In the Form 477 data collection, aDSL-based services delivered over fiber-to-the-node architecture are reported in the aDSL category. The other wireline category comprises T1/DS1, T3/DS3, and other copper-based connections, not elsewhere categorized, that deliver *Internet access* service at the end-user location. Ethernet connections delivering Internet access service are reported in the other wireline category if the connection terminates over copper and in the FTTP category if the connection terminates over fiber. Connections deployed over hybrid fiber-coax (HFC) architecture are reported in the cable modem category. Wireless ISPs (“WISPs”) report in the fixed wireless category if providing service to dispersed, fixed end-user locations and report in the mobile wireless category if providing a commercial service that can be received at any location within a service footprint. Wireless local area networks (such as Wi-Fi hotspots) that only enable local distribution and sharing of a premises connection are not included, although the shared premises connection is included.

Numbers of connections presented in this report are not adjusted for the number of persons at a single end-user location who have access to, or who use, the Internet access services delivered over the connection to that location.

Numbers of residential connections are estimated based on the total connections and percentage-residential connections information reported on Form 477.

### **Census tracts**

Starting with data as of December 31, 2008, facilities-based providers of reportable fixed-location Internet access connections must report connection counts and percentage residential information at the census tract level of detail. Because of the inherent mobility of their service, facilities-based mobile wireless providers do not report subscriber counts by census tract. Instead, they report the census tracts in the state that best represent the areas where service is available over the provider's own network, for each of the speed tiers in which the provider offers service.

The census tract-level data summarized in this report were collected for tracts in the 2010 decennial census. For the purposes of this report, there are 73,767 census tracts because we exclude census tracts delineated specifically to cover large bodies of water.

About 110 of the census tracts have population but no households because the population resides in group living quarters. For the purpose of estimating residential subscribership rates by census tract, we assume these census tracts have no reportable *residential* Internet access service because persons residing in group quarters would have Internet access over a business connection provided to the operator of the group quarters. Therefore, these census tracts are included in the "zero" column.

### **Decline in reported mobile wireless connections between June 2008 and December 2008**

Changed reporting instructions starting in December 2008 caused a one-time decrease in the reported number of mobile wireless Internet access service connections, from about 60 million in June 2008 to about 25 million in December 2008. For reporting periods through June 30, 2008, Form 477 had instructed mobile wireless providers to report the number of subscribers whose mobile device (such as a wireless modem laptop card, smartphone, or handset) was capable of sending or receiving data at speeds above 200 kbps. The Commission found these instructions insufficiently precise to enable it to determine, from the reported data, the number of subscribers making regular use of Internet access service above 200 kbps as part of their mobile service package. Starting with the December 31, 2008 data, therefore, Form 477 requires mobile wireless providers to report the number of subscribers that have a capable device (as discussed above) for which the subscription includes a data plan for transferring, on a monthly basis, either a specified or an unlimited amount of data to and from Internet sites of the subscriber's choice, and *excluding* subscribers whose choice of content is restricted to only customized-for-mobile content (for example, text and multimedia messaging, or the capacity to download ringtones and games).

Starting with the December 31, 2008, data, providers also must report, explicitly and separately, total subscribers with a device capable of sending or receiving data at speeds above 200 kbps, irrespective of the service plan purchased. The number of such devices reported for December 2008 was about 86 million. That figure is not directly comparable to mobile wireless connections reported for June 2008 or earlier reporting periods, however, because individual providers – to a varying and largely unknown degree – included or excluded subscribers with service plans for less than full Internet access in the earlier data.

Finally, the Form 477 modifications adopted for the December 31, 2008, and later, data specify how mobile wireless providers should distinguish between residential subscribers and other subscribers, and

some of these providers consequently reported a larger share of residential subscribers than they had reported for earlier dates.

### **Ratios of residential fixed-location connections to households that exceed 100%**

Starting with data as of December 31, 2008, information about connections over fixed-location technologies must be reported for individual census tracts. This allows us to estimate the share of households with fixed-location connections in individual census tracts by taking the ratio of the reported number of fixed-location residential service connections to the estimated number of households. We continue to find “outlier” estimates at or above 100% and to find that the number of outliers is substantially reduced when estimates are made for individual counties rather than for individual census tracts.

Possible explanations of ratios at or above 100% include (1) geocoding misallocations of service locations to census tracts; (2) proper allocation of connections to the county level by some filers, but improper allocation of all connections to a single tract in the county; (3) possible overestimation of residential connections in service plans for which the customer base is primarily residential; and (4) connections at seasonally or occasionally occupied housing units, such as vacation homes, while the household is counted elsewhere. Most of the numbers of households in census tracts that were used to generate the estimated ratios are themselves estimates (from GeoLytics, Inc.), which could have an independent effect.

### **Maps showing number of providers by census tract**

Readers of previous reports in this series may note certain differences in the provider-count maps in this report as compared to maps for June 30, 2008 and earlier dates, which showed the number of providers by 5-digit geographical ZIP Code. The ZIP Code-based maps counted (at the holding company level) each provider with any fixed-location connections (wired, terrestrial fixed wireless, or satellite) reported for the ZIP Code and also any mobile wireless service provider who listed the ZIP Code as part of its service area. By contrast, in this report we provide separate maps for providers (counted at the holding company level) of fixed-location connections and for mobile wireless providers. Also, we present maps showing the number of providers that reported any *residential* fixed-location connections, thereby excluding any providers of exclusively business fixed-location connections in the census tract.

### **Maps showing residential subscribership rates by census tract**

The two maps based on estimated Internet access connections over 200 kbps in at least one direction per 1,000 households (that is, estimated household subscribership rates) are not comparable to ZIP Code-based maps developed from FCC Form 477 data for June 30, 2008 and earlier dates because *numbers* of connections were never reported for individual ZIP Codes. Readers should note that these two maps (1) exclude all connections identified as business connections and (2) necessarily exclude residential mobile wireless connections (which are reported for the state but not for individual census tracts).

## Glossary

<b>Term</b>	<b>Definition</b>
aDSL	Asymmetric Digital Subscriber Line: A digital local loop typically using copper facilities and providing greater bandwidth in one direction than the other.
Cable modem service	A service which offers customers access to the Internet over a cable system.
Downstream speed	Speed of transmission from the Internet to the end user.
End users	Residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities.
Facilities-based provider	Entity that owns the portion of the physical facility that terminates at the end-user location, obtains an unbundled network element (UNE), special access line, or other leased facility that terminates at the end-user location and provisions/equips it as a connection that transfers information at rates over 200 kbps in at least one direction, or provisions/equips a wireless channel that transfers information at rates over 200 kbps in at least one direction to the end-user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.
Fixed wireless	A radio communication service between specified fixed points.
Fixed-location technologies	All technologies other than terrestrial mobile wireless.
FTTH or FTTP	Fiber to the Home (Premises): A network access architecture in which optical fiber is deployed all the way to the customer's home (premises).
Internet access service	Service that provides end users access to the Internet.
ISPs	Internet Service Providers: Companies or organizations that provide Internet access service (see above).
iVoIP	Interconnected Voice Over Internet Protocol: A service that enables real-time, two-way voice communications; requires a broadband connection from the user's location; requires Internet-protocol compatible customer premises equipment; and permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.
Mobile wireless service	A radio communication service between mobile and fixed stations, or between mobile stations.
Mobile wireless provider	Provider of mobile wireless service (see above).
Other wireline	All copper-wire based technologies other than DSL technologies; Ethernet over copper and T-1 are examples.
Power line	Internet access service delivered over electric power transmission lines.
Satellite communications	A telecommunications service provided via one or more satellite relays and their associated uplinks and downlinks.
sDSL	Symmetric Digital Subscriber Line: DSL technology that provides equal bandwidth for both uploads and downloads.

Speed tiers	Sub-groupings defined by ranges of upstream speeds and downstream speeds.
Upstream speed	Speed of transmission from the end user to the Internet.
Wi-Fi hotspot	Wireless Fidelity: Generic term referring to any type of IEEE 802.11 wireless network. A hotspot is a small geographic area in which users can gain access to a Wi-Fi network which in turn connects to the Internet.
Wireless service	Telephone, Internet, data, and other services provided to customers through the transmission of signals over networks of radio towers.
Wireless service provider	Provider of wireless service (see above).
Wireless telecommunications	Any means of electronic data transfer using electromagnetic means, most commonly radio waves.
WISP	Wireless ISP: A company that provides end users with wireless access to the Internet, most commonly by using radio spectrum designated for unlicensed use.
WLAN	Wireless local area network: A WLAN uses radio waves to connect user devices to a local area network (LAN), thereby extending an existing wired LAN.

# Customer Response

Publication: *Internet Access Services: Status as of June 30, 2012*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis and Technology Division of the FCC's Wireline Competition Bureau.

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- potential telecommunications carrier
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2. Please rate the report:      Excellent      Good      Satisfactory      Poor      No opinion

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