Broadband in Nebraska: Adoption/Subscription

FCC report finds 78% of Nebraska households subscribe to fixed Internet service

Household Adoption/Subscription. In 2016, 82% of U.S. households and 78% of Nebraska households subscribed to fixed internet service of at least 200 kbps according to the FCC's newly released Internet Access Services Report. At higher speed tiers, the gap in subscription rates between Nebraska and the U.S. average widens. In 2016, 50% of U.S. households, but only 38% of Nebraska households subscribed to broadband of at least 25 Mbps down and 3 Mbps up. Nebraska ranked in the middle of our neighboring state on this measure—behind Colorado (60%), South Dakota (47%) and Wyoming (45%) but tightly clustered with lowa (38%), Missouri (37%), and Kansas (36%). (See Table 1).

Table 1
% of Households with Fixed Connections at Various Speeds by State as of Dec. 2016

State	At least 200 kbps in at least one	At least 10 Mbps Down and I Mbps	At least 25 Mbps Down and 3 Mbps	At least 100 Mbps Down and 10 Mbps	
	direction	Up	Up	Up	
U.S. Total	82%	66%	50%	15%	
Colorado	89%	66%	60%	*	
Iowa	74%	47%	38%	7%	
Kansas	79%	59%	36%	16%	
Missouri	75%	55%	37%	10%	
Nebraska	78%	55%	38%	7%	
South Dakota	76%	64%	47%	4%	
Wyoming	77%	54%	45%	0%	

^{*}Data withheld to maintain firm confidentiality

Source: FCC Internet Access Services: Status as of Dec. 31, 2016

Adoption of higher speed internet service is growing. Between December 2015 and December 2016, the percent of Nebraska households subscribing to internet service of at least 25 Mbps down and 3 Mbps up increased from 33% to 38%. During the same time period, the percent of Nebraska households subscribing to broadband internet service of at least 100 Mbps down and 10 Mbps up increased from 5% to 7%. (See Tables 2 and 3).

Table 2 % of Households with Fixed Connections at 25 Mbps/3 Mbps by State (Dec. 2015- Dec. 2016)

State	Dec. 31, 2015	June 30, 2016	Dec. 31, 2016
U.S. Total	44%	47%	50%
Colorado	55%	57%	60%
Iowa	10%	24%	38%
Kansas	32%	34%	36%
Missouri	30%	33%	37%
Nebraska	33%	35%	38%
South Dakota	43%	47%	47%
Wyoming	42%	43%	45%

Source: FCC Internet Access Services: Status as of Dec. 31, 2016

Table 3 % of Households with Fixed Connections at least 100 Mbps/10 Mbps Up (Dec. 2015- Dec. 2016)

State	Dec. 31, 2015	June 30, 2016	Dec. 31, 2016
U.S. Total	11%	13%	15%
Colorado	*	*	*
Iowa	1%	5%	7%
Kansas	12%	14%	16%
Missouri	7%	9%	10%
Nebraska	5%	6%	7%
South Dakota	4%	5%	4%
Wyoming	0	0%	0%

^{*}Data withheld to maintain firm confidentiality

Source: FCC Internet Access Services: Status as of Dec. 31, 2016

Internet Connections. The total number of internet connections (residential and business) in the United States increased from 369.4 million in 2015 to 376.2 million in 2016, an increase of about 6% according to the FCC's newly released <u>Internet Access Services Report</u>. Mobile internet connections accounted for 72% of all internet connections in the United States in 2016. Mobile internet connections increased from 265.4 million in 2015 to 270.5 million in 2016, an increase of 7%. The number of fixed connections grew from 104.1 million to 105.7 million, an increase of 3%.

In December 2016, 60% of fixed connections had a downstream speed of at least 25 Mbps, with 27% of fixed connections having a downstream speed of at least 100 Mbps. In Nebraska, 48% of fixed connections had a downstream speed of at least 25 Mbps down. Only 9.5% of fixed internet connections in Nebraska had a downstream speed of at least 100 Mbps down. Nebraska lagged behind four of our neighboring states on this measure: Colorado (41.9%), Missouri (35.0%), Kansas (19.9%), and Iowa (11.0%). (See Table 4.)

Table 4
% of Fixed Connections (Residential and Business) at Various Speeds By State as of Dec. 2016

State	At least 200 kbps	At least 3	At least 10	At least 25	At least 100
	Down	Mbps Down	Mbps Down	Mbps Down	Mbps Down
U.S. Total	99.6%	96.3%	82.2%	60.0%	23.2%
Colorado	99.7%	95.1%	86.0%	65.5%	41.9%
Iowa	99.6%	92.6%	72.4%	49.5%	11.0%
Kansas	99.7%	95.4%	75.4%	44.1%	19.9%
Missouri	99.4%	94.0%	76.8%	48.8%	35.0%
Nebraska	99.6%	95.7%	74.7%	48.5%	9.5%
South Dakota	99.6%	96.6%	84.9%	61.2%	6.3%
Wyoming	99.6%	91.8%	76%	57.1%	1.2%

Source: FCC Internet Access Services: Status as of Dec. 31, 2016

Nebraska also has a smaller percent of fiber connections than the U.S. and five out our six neighboring states. In 2016, 8 percent of internet connections in Nebraska were fiber, compared to 11% in the United States. Iowa (16%), Kansas (18%), and South Dakota (19%) had a higher percent of fiber connections than the U.S. Nebraska and all of our neighboring states have a higher percent of fixed wireless connections that the U.S. (See Table 5.)

Nebraska and our neighboring states also have a higher percentage of fixed wireless connections than the U.S. In Nebraska, 3.7% of fixed internet connections were fixed wireless, compared to 1.2% in the U.S. (See Table 5.)

Table 5
Connections by Technology by State as of Dec. 31, 2016 (in thousands) and by % of Non-Mobile Connections

State	# ADSL	% ADSL	# Cable	% Cable	# Fiber	% Fiber	# Fixed Wireless	% Fixed Wireless	# Mobile Connections	Total Connections	Total Non-Mobile Connections
Total U.S.	26,526	25%	63,352	60%	12,041	11%	1,230	1.2%	270,494	376,221	105,727
Colorado	*	*	1,155	59%	203	10%	63	3.2%	4,574	6,540	1,966
Iowa	305	30%	469	47%	165	16%	31	3.1%	2,493	3,496	1,003
Kansas	257	27%	470	49%	170	18%	39	4.1%	3,208	4,170	962
Missouri	741	38%	898	46%	177	9%	39	2.0%	4,896	6,834	1,938
Nebraska	162	26%	381	60%	53	8%	23	3.7%	1,433	2,063	630
South Dakota	48	17%	159	57%	53	19%	12	4.3%	623	901	278
Wyoming	52	26%	108	55%	11	6%	19	9.6%	468	666	198

^{*}Data withheld to maintain firm confidentiality.

Data on connections for SDSL, other wireline, and satellite were not included because data on these technologies for many states was withheld to maintain firm confidentiality or so such a small number of connections were reported that it rounded to 0.

Source: FCC Internet Access Services: Status as of Dec. 31, 2016

The number of fiber connections in the United States, Nebraska, and neighboring states significantly increased between December 2015 and December 2016. Nebraska saw a 26.2% increase in fiber connections during this time period. In comparison, the U.S. saw a 14.8% increase in fiber connections and our neighboring states saw increases ranging from 15.2% to 54.5%).

Table 6
Fiber Connections by State Dec. 31, 2015- Dec. 31, 2016 (in thousands) and % Increase

	Dec. 31, 2015	June 30, 2016	Dec. 31, 2016	Increase Dec. 2015-Dec. 2016	% increase Dec. 2015- Dec. 2016
Total U.S.	10,492	11,129	12,041	1,549	14.8%
Colorado	150	177	203	53	35.3%
Iowa	130	145	165	35	26.9%
Kansas	110	130	170	60	54.5%
Missouri	124	151	177	53	42.7%
Nebraska	42	46	53	11	26.2%
South Dakota	46	50	53	7	15.2%
Wyoming	8	9	11	3	37.5%

Source: Internet Access Services: Status as of Dec. 31, 2015

Source: FCC Internet Access Services: Status as of June 30, 2016

Source: FCC Internet Access Services: Status as of Dec. 31, 2016