



March 15, 2019

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: GN Docket No. 18-238
WC Docket No. 11-10

Madam Secretary:

This letter provides notice of an oral ex parte presentation to the Commission in the above-captioned dockets. On March 11, 2019, undersigned counsel, along with Paula Boyd, John Kahan, Dean Kain, and Allen Kim of Microsoft Corporation, met with Randy Clarke in Commissioner Starks' office, to discuss broadband mapping.

Mr. Kahan discussed how the Commission's broadband availability data, which underpins FCC Form 477 and the Commission's annual Section 706 report, appears to overstate the extent to which broadband is actually available throughout the nation. For example, in some areas the Commission's broadband availability data suggests that Internet Service Providers ("ISP") have reported significant broadband availability (25 Mbps down/3 Mbps up) while Microsoft's usage data indicates that only a small percentage of consumers actually access the Internet at broadband speeds in those areas.¹

Mr. Kahan also suggested that the Commission's ongoing effort to more accurately measure broadband could be improved by drawing on the FCC's subscription data, along with other broadband data sets from third-parties such as Microsoft, to compliment survey data submitted under the current rules. In addition, the Commission should modify its survey instructions to focus more narrowly on identifying where broadband is actually being used, without including where it could be used, as is required today.

¹ See, Letter from Paula Boyd and David LaFuria, Docket No. 11-10, (Jan 2, 2019); at <https://ecfsapi.fcc.gov/file/101032040607838/2019%200102%20ex%20parte%20letter%20FINAL.pdf>; Letter from Paula Boyd and David LaFuria, Docket No. 11-10, (Dec. 5, 2018) at <https://ecfsapi.fcc.gov/file/1206313012489/2018%201205%20ex%20parte%20letter%20FINAL.pdf>

Mr. Kahan, noted the importance of having a clear and meaningful definition of broadband availability in order to accurately determine what is being measured, highlighting the importance of ensuring that the FCC's broadband reports are accurate.

A copy of the presentation slides provided at the meeting is enclosed for the record.

Should you have any questions, please contact the undersigned directly.

Sincerely,

MICROSOFT CORPORATION

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Enclosure

cc: Randy Clarke
Paula Boyd
John Kahan
Allen Kim
Dean Kain



Meeting with Randy Clarke Commissioner Geoffrey Starks' office

March 11, 2019



Agenda

- Answer any open questions on the released Microsoft Usage data.
 - Availability does not equal usage; however usage gives us the ground truth in the progress we are making in broadband adoption.
- Discuss the possibility of using the FCC Subscription data, Microsoft Usage data, and other 3rd party public data to show a more transparent view of today's actual gaps in broadband progress.
 - Explore how best to visualize that data.
- Explore the definition of “broadband availability” and any steps we can jointly take to define “broadband availability” from a consumer perspective
- Discuss draft FCC 2019 broadband report.

Broadband usage based on Microsoft data

- Answer any open questions on the released Microsoft Usage data
- Analysis available here: <https://news.microsoft.com/rural-broadband/>

Maps showing FCC fixed broadband availability and broadband usage based on Microsoft data



FCC broadband map

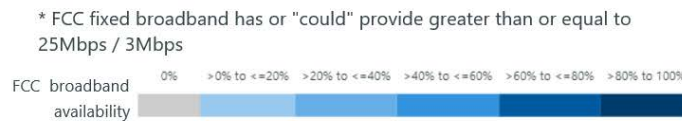
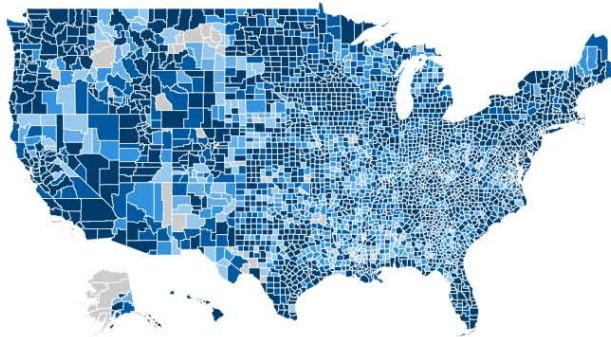
FCC and Microsoft

Congressional districts

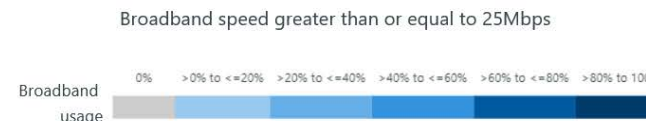
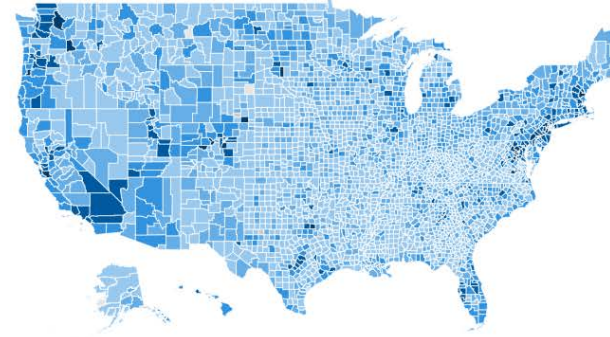
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- Louisiana
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- Massachusetts

FCC indicates broadband is not available to 24.7M people



Microsoft data indicates 162.8M people do not use the internet at broadband speeds



Data sources: FCC 2018 Broadband Report based on Form 477 data from December 2016 and Microsoft data from September 2018
Form 477 sample data format: 00000000000000,DBAName,0,0,0,0,0,0

Discuss the possibility of using the FCC Subscription data, Microsoft Usage data, and other 3rd party public data to show a more transparent view of today's actual gaps in broadband progress.

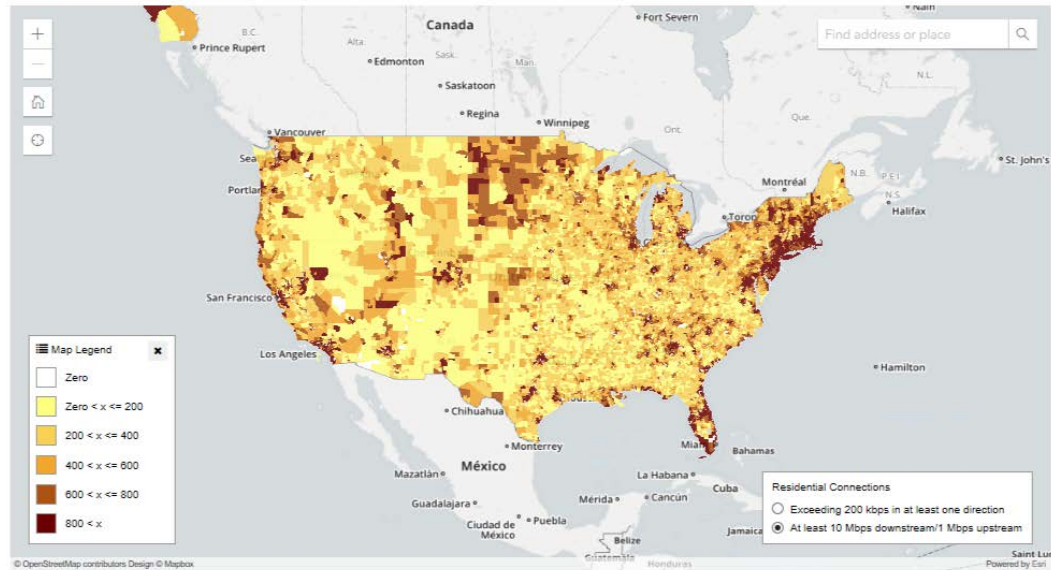
Figure 32 - Continued
Residential Fixed Connections and Households by State as of June 30, 2017
 (Connections and households, in thousands)

State	Households	At least 200 kbps in at least One Direction		At least 10 Mbps Down and 1 Mbps Up		At least 25 Mbps Down and 3 Mbps Up		At least 100 Mbps Down and 10 Mbps Up	
		Connections	Subscriberhip Ratio	Connections	Subscriberhip Ratio	Connections	Subscriberhip Ratio	Connections	Subscriberhip Ratio
Nevada	1,031	891	0.88	740	0.72	580	0.58	-	-
New Hampshire	521	484	0.93	414	0.79	373	0.72	135	0.26
New Jersey	3,195	2,945	0.92	2,792	0.87	2,696	0.84	1,076	0.34
New Mexico	763	548	0.72	332	0.43	288	0.38	80	0.10
New York	7,266	6,189	0.85	5,726	0.79	5,038	0.69	2,078	0.29
North Carolina	3,815	3,062	0.80	2,369	0.62	1,981	0.52	1,108	0.29
North Dakota	305	246	0.81	215	0.70	172	0.56	31	0.10
Northern Mariana Isl	16	-	-	-	-	-	-	0	0.00
Ohio	4,601	3,573	0.78	2,880	0.63	1,764	0.38	277	0.06
Oklahoma	1,462	1,014	0.69	741	0.51	477	0.33	140	0.10
Oregon	1,546	1,304	0.84	1,045	0.68	922	0.60	265	0.17
Pennsylvania	4,962	4,031	0.81	3,397	0.68	3,010	0.61	1,155	0.23
Puerto Rico	1,237	-	-	-	-	-	-	-	-
Rhode Island	410	363	0.88	349	0.85	314	0.76	-	-
South Carolina	1,839	1,436	0.78	1,181	0.64	731	0.40	100	0.05
South Dakota	334	259	0.78	220	0.66	188	0.56	17	0.05
Tennessee	2,522	1,865	0.74	1,576	0.62	1,207	0.48	292	0.12
Texas	9,290	7,320	0.79	6,131	0.66	4,368	0.47	2,072	0.22
Utah	918	792	0.86	601	0.65	525	0.57	214	0.23
Vermont	257	242	0.94	171	0.67	135	0.53	53	0.21
Virgin Islands	43	27	0.62	-	-	-	-	-	-
Virginia	3,090	2,534	0.82	2,204	0.71	1,967	0.64	708	0.23
Washington	2,697	2,390	0.89	1,950	0.72	1,786	0.66	682	0.25
West Virginia	739	530	0.72	373	0.50	296	0.40	72	0.10
Wisconsin	2,310	1,820	0.79	1,435	0.62	950	0.41	27	0.01
Wyoming	227	177	0.78	128	0.57	105	0.46	1	0.00
Total	119,064	97,071	0.82	80,671	0.68	64,520	0.54	21,774	0.18

= Rounds to Zero; * = Data withheld to maintain firm confidentiality.
 Note: Figures may not sum to totals due to rounding.
 Sources: FCC Form 477 (Connections); 2012-2016 5-year estimates; Census 2010.

Residential Fixed Internet Access Service Connections per 1000 Households by Census Tract

As of June, 2017



Map shows the number of residential fixed Internet access service connections per 1,000 households based on June 2017 Form 477 broadband subscribership data. Includes data on connections by census tract for both service over 200 kbps in at least one direction and service at least 10 Mbps down / 1 Mbps up. For more information, see the [Internet Access Services Reports](#).

Explore the definition of broadband availability

- What does “broadband” mean to the consumer?
 - FCC definition is 25Mbps down and 3 Mbps up
- What does it mean to have broadband “available” to the consumer?
 - Quality, Cost, and Time

Pew Research

65% of U.S. adults who are home broadband users (01/18/18)

Per Pew Research article in August 2013
“Our broadband question has historically tried to distinguish between dial-up users and those with higher connection speeds.”

Phone survey question: “At home, do you connect to the Internet through a dial-up telephone line, or do you have some other type of connection, such as a DSL-enabled phone line, a cable TV modem, a wireless connection, or a fiber optic connection such as FIOS

American Fact Finder

67% of households with broadband subscriptions (2013-2017)

An Internet "subscription" refers to a type of service that someone pays for to access the Internet such as a cellular data plan, broadband such as cable, fiber optic or DSL, or other type of service. This will normally refer to a service that someone is billed for directly for Internet alone or sometimes as part of a bundle

Broadband such as cable, fiber optic, or DSL

FCC

54% subscription ratio of residential fixed connections and households at least 25Mbps down and 3Mbps up

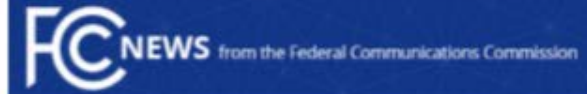
Form 477 Fixed Broadband Subscription

Report the total number of in-service connections—and report the number of in-service connections that are in consumer service plans—for each unique combination of census tract and service characteristic.

Broadband connections are wired “lines” or wireless “channels” that enable the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kbps in at least one direction

Draft FCC 2019 broadband report

- ~2-point increase in national broadband availability from ~92% to ~94%
- ~9-point increase in broadband availability in rural areas from ~69% to ~78%
- https://thedcoffice.com/late_releases_files/02-19-2019/DOC-356271A1.pdf



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For Immediate Release

REPORT: AMERICA'S DIGITAL DIVIDE NARROWS SUBSTANTIALLY

*Draft 2019 Broadband Deployment Report Shows More Than 25% Drop in
Americans Lacking Access to Fixed Broadband*

WASHINGTON, February 19, 2019—The digital divide between Americans with and without access to modern broadband networks has narrowed substantially, according to the draft 2019 Broadband Deployment Report, which was circulated by FCC Chairman Ajit Pai to his fellow commissioners today.

“For the past two years, closing the digital divide has been the FCC’s top priority,” Chairman Pai said. “We’ve been tackling this problem by removing barriers to infrastructure investment, promoting competition, and providing efficient, effective support for rural broadband expansion through our Connect America Fund.

“This report shows that our approach is working. But we won’t rest until all Americans can have access to broadband and the 21st century opportunities it provides to communities everywhere.”

The Chairman’s draft of the annual FCC report to Congress shows that since last year’s report, the number of Americans lacking access to a fixed broadband connection meeting the FCC’s benchmark speed of 25 Mbps/3 Mbps has dropped by over 25%, from 26.1 million Americans at the end of 2016 to 19.4 million at the end of 2017. Moreover, the majority of those gaining access to such high-speed connections, approximately 5.6 million, live in rural America, where broadband deployment has traditionally lagged.

The private sector has responded to FCC reforms by deploying fiber to 5.9 million new homes in 2018, the largest number ever recorded. And overall, capital expenditures by broadband providers increased in 2017, reversing declines that occurred in both 2015 and 2016.

Other key findings of the report include the following, based on data through the end of 2017:

- The number of Americans with access to 100 Mbps/10Mbps fixed broadband increased by nearly 20%, from 244.3 million to 290.9 million.
- The number of Americans with access to 250 Mbps/50 Mbps fixed broadband grew by over 45%, to 205.2 million, and the number of rural Americans with access to such service more than doubled

Based on these and other data, the report concludes that advanced telecommunications services – broadband – is being deployed on a reasonable and timely basis. The Commission is expected to vote on the report in the coming weeks.

END