



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Roy Blunt
United States Senate
260 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Blunt:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ 2015 *Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

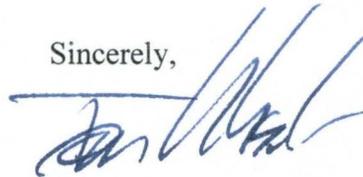
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Wheeler", written over a horizontal line.

Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Steve Daines
United States Senate
320 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Daines:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ *2015 Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

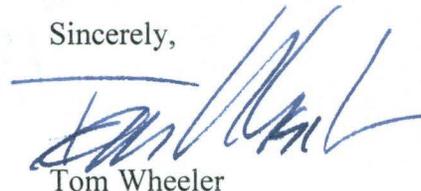
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Wheeler", is written over a horizontal line.

Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Deb Fischer
United States Senate
454 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Fischer:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ *2015 Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

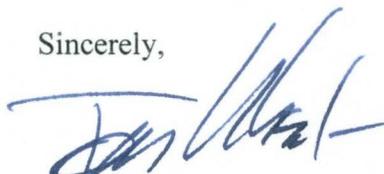
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,



Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Cory Gardner
United States Senate
354 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Gardner:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ 2015 *Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

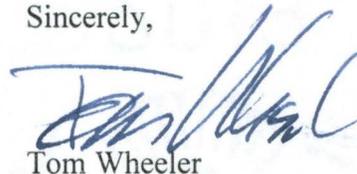
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Wheeler", is written over a faint, large-scale watermark of the United States map.

Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Ron Johnson
United States Senate
328 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Johnson:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ *2015 Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

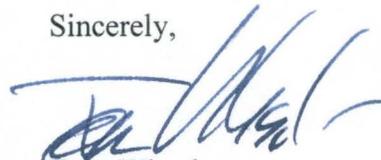
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,



Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

March 1, 2016

The Honorable Roger Wicker
United States Senate
555 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Wicker:

Thank you for your letter regarding the Commission's determination in the *2016 Broadband Progress Report* that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion, and the application of 25 Mbps download/3 Mbps upload as the benchmark for fixed advanced telecommunications capability.

As you know, Section 706 of the Telecommunications Act of 1996 charges the Commission with ensuring that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. Promoting competition and fueling consumer demand are the best tools to get us to that critical goal. I remain fully committed to taking steps to remove barriers to investment in order to encourage competition and accelerate broadband deployment throughout the country.

It is important to note that the 25 Mbps/3 Mbps speed benchmark, which was adopted by the Commission in the *2015 Broadband Progress Report*,¹ is not a definition of "broadband." Rather, the benchmark is used to measure the deployment of those broadband services that are able to provide Americans with "advanced telecommunications capability."² As the Commission explained in the *2016 Broadband Progress Report*, "'advanced telecommunications capability' is a statutory term with a definition that differs from, and in fact includes, the term 'broadband.'"³ In the Telecommunications Act of 1996, Congress entrusted the Commission with the task of interpreting a number of terms. The terms entrusted to the Commission's interpretation include "advanced," "high-speed," and "high-quality," and determining which broadband services provide "advanced telecommunications capability."⁴

¹ *2015 Broadband Progress Report*, 30 FCC Rcd at 1393, para. 26.

² See 47 U.S.C. § 1302(b).

³ See *2016 Broadband Progress Report* at 2, para 1 n.1; see also *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, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015); *2015 Broadband Progress Report*, 30 FCC Rcd at 1375, para. 1 n.1. Pursuant to section 706(d), "'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." 47 U.S.C. § 1302(d)(1).

⁴ See 47 U.S.C. § 1302(b), (d)(1); see also *2016 Broadband Progress Report* at 7, para. 13.

The Commission arrived at this 25 Mbps/3 Mbps benchmark for fixed services through an analysis that considered a number of factors, including deployment, common uses, industry trends and consumer needs. Specifically, the Commission's determination was based on the speeds required to use high-quality video, data, voice, and other commonly used broadband applications, factoring in the needs of multiple simultaneous users in the average American household, and the increasing adoption by consumers of bandwidth-intensive services, such as HD video streaming.⁵ The 25 Mbps/3 Mbps benchmark was also supported by prevailing trends in the broadband market, which demonstrated that providers were marketing 25 Mbps/3 Mbps services as appropriate to serve the needs of a typical household,⁶ and by data showing rapidly increasing migration to services at or above 25 Mbps/3 Mbps by consumers, where such services were available.⁷ In light of these trends, the Commission determined that 4 Mbps/1 Mbps no longer provided American households with sufficient bandwidth to make full use of "advanced" telecommunications services, including HD video streaming and video calling, online gaming, telehealth and telemedicine applications.⁸

Your letter also references a speech I delivered in September of 2014 at 1776. The speech on our Agenda for Broadband Competition focused on the goal of protecting and promoting competition in the high-speed broadband marketplace. We continue to pursue that goal. There is nothing in our policies that disincentivizes providers from offering service at 25/3 Mbps or above.

You also express concern that the Commission may use different service metrics for the term "broadband" in different regulatory proceedings. The Commission has a responsibility within the context of its various efforts to maximize the availability and adoption of broadband and to establish appropriate broadband service measurements. Different statutory directives and contexts, however, may call for different metrics. For example, as discussed above, in reaching a determination under section 706(b), the Commission has established, consistent with the statutory definition, a measurement for advanced telecommunications capability based on the deployment and availability of broadband services that "enable[] users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology," as required by section 706(b) of the Telecommunications Act of 1996.

The Commission's Connect America Fund proceeding, on the other hand, is focused on supporting the deployment of broadband-capable networks to high-cost areas. Here, the measurement for broadband is necessarily different than that measurement established for advanced telecommunications capability in the Broadband Progress Report. This difference can be attributed to the fact that the Connect America Fund proceeding is responding to the statutory goal of universal service. Section 254 of the Telecommunications Act of 1996 directs the

⁵ *2015 Broadband Progress Report*, 30 FCC Rcd at 1395-1401, paras. 29-40.

⁶ *Id.* at 1394, 1400, paras. 28, 38.

⁷ *Id.* at 1401-03, paras. 41-44.

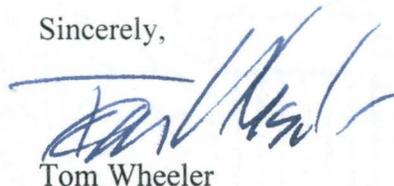
⁸ *Id.* at 1403-04, paras. 45-47.

Commission to base its policies on the principle that consumers in rural, insular and high-cost areas of the country have access to advanced telecommunications and information services that are reasonably comparable to those services in urban areas, at reasonably comparable rates. The Commission works with available funds in order to extend broadband availability to areas where the marketplace alone does not currently provide even a minimum level of service, focusing on areas that face geographical challenges with deploying in relatively un-populated areas that lack high speed, high capacity infrastructure. The Commission has required carriers receiving Connect America Fund support to provide, at a minimum, service of 10 Mbps/1 Mbps, and we expect many locations will receive higher speeds. The broadband speeds supported by universal service will always be an evolving standard. We already have in place initiatives that will support faster service—for example, a number of our Rural Broadband Experiment winners will offer 25Mbps/5 Mbps or better.

Your letter also notes the Commission's *2015 Open Internet Order*, which adopted rules to protect and promote the open Internet for all Americans—today and into the future. In that Order, the Commission defined “broadband Internet access service” functionally as a “mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints”⁹ This approach reflects a view that consumers of broadband Internet access services—of all speeds—are entitled to a free and open Internet.

I appreciate your interest in this matter. Please let me know if I can be of any further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Wheeler", is written over a horizontal line.

Tom Wheeler

⁹ *2015 Open Internet Order*, 30 FCC Rcd at 5682, para. 187.