

ORAL ARGUMENT SCHEDULED FOR FEBRUARY 1, 2019

No. 18-1051 (and consolidated cases)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOZILLA CORPORATION, *et al.*,

Petitioners,

v.

FEDERAL COMMUNICATIONS COMMISSION and
UNITED STATES OF AMERICA,

Respondents.

On Petition for Review of an Order of the Federal Communications Commission

**BRIEF *AMICI CURIAE* OF THE NATIONAL ASSOCIATION OF
MANUFACTURERS, THE CHAMBER OF COMMERCE OF THE
UNITED STATES OF AMERICA, THE BUSINESS ROUNDTABLE, AND
THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION IN
SUPPORT OF RESPONDENTS**

Peter C. Tolsdorf
Leland P. Frost
Manufacturers' Center for Legal Action
733 10th Street, NW
Suite 700
Washington, DC 20001
Phone: 202.637.3000
Email: ptolsdorf@nam.org
Email: lfrost@nam.org

*Counsel for the National
Association of Manufacturers*

John P. Elwood
Matthew X. Etchemendy
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com
Email: metchemendy@velaw.com

Counsel for Amici Curiae

(Names and addresses of additional counsel appear inside cover.)

October 18, 2018

Daryl Joseffer
Jonathan D. Urick
U.S. Chamber Litigation Center
1615 H Street, NW
Washington, DC 20062
Phone: 202.463.5337

*Counsel for the Chamber of Commerce
of the United States of America*

Liz Dougherty
Business Roundtable
300 New Jersey Avenue, NW
Suite 800
Washington, DC 20001
Phone: 202.872.1260

Counsel for the Business Roundtable

Kevin W. Brooks
Vinson & Elkins LLP
2001 Ross Avenue
Suite 3900
Dallas, TX 75201
Phone: 214.220.7805
Email: kbrooks@velaw.com

Counsel for Amici Curiae

Dileep Srihari
Telecommunications Industry
Association
1320 N. Courthouse Road
Suite 200
Arlington, VA 22201
Phone: 703.907.7715

*Counsel for the
Telecommunications
Industry Association*

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rule 28(a)(1), *amici curiae* submit this certificate as to parties, rulings, and related cases.

A. PARTIES AND AMICI

Except for the following, all parties, intervenors, and *amici* appearing in this Court are listed in the Joint Brief for Non-Government Petitioners and the Joint Brief for Government Petitioners.

The following parties have filed *amicus* briefs in support of petitioners: American Council on Education; Accreditation Council for Pharmacy Education; American Association of Colleges for Teacher Education; American Association of Colleges of Nursing; American Association of Community Colleges; American Association of State Colleges and Universities; American Library Association; Association of American Universities; Association of College & Research Libraries; Association of Jesuit Colleges and Universities; Association of Public and Land-grant Universities; Association of Research Libraries; College and University Professional Association for Human Resources; Consortium of Universities of the Washington Metropolitan Area; EDUCAUSE; Middle States Commission on Higher Education; National Association for Equal Opportunity in Higher Education; National Association of Independent Colleges and Universities; Student Affairs Administrators in Higher Education; Thurgood Marshall College Fund; Center for

Media Justice; Color of Change; Common Cause; Greenlining Institute; 18 Million Rising; Media Alliance; Media Mobilizing Project; Professors Michael Burstein, James Ming Chen, Rob Frieden, Barbara van Schewick, Catherine Sandoval, Allen Hammond, IV, Carolyn Byerly, Anthony Chase, Scott Jordan, and Jon Peha; Consumers Union; eBay Inc.; Electronic Frontier Foundation; Engine Advocacy; Twilio Inc.; William Cunningham; the Cities of New York, NY, Alexandria, VA, Baltimore, MD, Boston, MA, Buffalo, NY, Chicago, IL, Gary, IN, Houston, TX, Ithaca, NY, Los Angeles, CA, Lincoln, NE, Madison, WI, Newark, NJ, Oakland, CA, San Jose, CA, Schenectady, NY, Seattle, WA, Somerville, MA, Springfield, MA, Syracuse, NY, Tallahassee, FL, and Wilton Manors, FL; Cook County, IL; the Town of Princeton, NJ; the Mayor of Washington, DC; the Mayor and City Council of Portland, OR; International Municipal Lawyers Association; California State Association of Counties; United States Senators Edward Markey, Charles Schumer, Ron Wyden, Maria Cantwell, Tammy Baldwin, Brian Schatz, Richard Blumenthal, Tammy Duckworth, Cory Booker, Sheldon Whitehouse, Angus King, Kirsten Gillibrand, Benjamin Cardin, Dianne Feinstein, Jack Reed, Kamala Harris, Tina Smith, Patrick Leahy, Margaret Hassan, Jeanne Shaheen, Gary Peters, Jeffrey Merkley, Patty Murray, Chris Van Hollen, Bernard Sanders, Sherrod Brown, and Elizabeth Warren; and the following Members of Congress: Anna Eshoo, Nancy Pelosi, Frank Pallone, Michael Doyle, Janice Schakowsky, Peter Welch, Zoe

Lofgren, Mark Takano, Eleanor Holmes Norton, Ro Khanna, Jose Serrano, Adam Smith, Jared Huffman, Peter DeFazio, Maxine Waters, Pramila Jayapal, Jerry McNerney, Jamie Raskin, Tulsi Gabbard, Hakeem Jeffries, Mike Thompson, John Lewis, Yvette Clarke, Charlie Crist, Adriano Espaillat, James McGovern, Mark Pocan, Jacki Speier, Keith Ellison, Joe Courtney, Daniel Kildee, Betty McCollum, Stephen Lynch, David Price, Marcy Kaptur, Jimmy Panetta, Barbara Lee, Donald Beyer, Jr., Nydia Velazquez, Chellie Pingree, Sean Maloney, Lloyd Doggett, Raul Grijalva, Joseph Crowley, Jacky Rosen, Earl Blumenauer, Alan Lowenthal, Andre Carson, Joseph Kennedy III, Steve Cohen, Lucille Roybal-Allard, Albio Sires, Mark DeSaulnier, Rosa DeLauro, Gregorio Sablan, Bill Pascrell, Jr., Suzanne Bonamici, Diana DeGette, Kathy Castor, John Yarmuth, Jerrold Nadler, Grace Meng, Doris Matsui, John Larson, Carolyn Maloney, Sheila Jackson Lee, Danny Davis, John Sarbanes, Richard Nolan, Seth Moulton, Michelle Grisham, Colleen Hanabusa, Carol Shea-Porter, Katherine Clark, William Keating, and David Cicilline.

The following parties have filed *amicus* briefs or notices of intent to file *amicus* briefs in support of respondents: the Phoenix Center for Advanced Legal and Economic Public Policy Studies; the International Center for Law and Economics; Geoffrey A. Manne; Gus Hurwitz; Roslyn Layton; the Multicultural Media, Telecom and Internet Council; the National Association of Manufacturers; the Chamber of Commerce of the United States of America; the Business Roundtable; the

Telecommunications Industry Association; the Technology Policy Institute; Richard Bennett; John Day; Tom Evslin; Shane Tews; and Martin Geddes.

B. RULINGS UNDER REVIEW

References to the ruling at issue appear in the Joint Brief for Non-Government Petitioners and the Joint Brief for Government Petitioners.

C. RELATED CASES

The case on review has not previously been before this Court or any other court. In the order on review, the FCC rescinded the service classifications and rules that this Court upheld in *United States Telecom Association v. FCC*, 825 F.3d 674 (D.C. Cir. 2016). Seven petitions for certiorari seeking review of the *U.S. Telecom* decision are now pending before the Supreme Court. *See Berninger v. FCC*, No. 17-498; *AT&T Inc. v. FCC*, No. 17-499; *Am. Cable Ass’n v. FCC*, No. 17-500; *CTIA—The Wireless Ass’n v. FCC*, No. 17-501; *NCTA—The Internet & TV Ass’n v. FCC*, No. 17-502; *TechFreedom v. FCC*, No. 17-503; and *U.S. Telecom Ass’n v. FCC*, No. 17-504. Counsel is unaware of any other related cases within the meaning of D.C. Circuit Rule 28(a)(1)(C).

Date: October 18, 2018

Respectfully submitted,

Peter C. Tolsdorf
Leland P. Frost
Manufacturers' Center for
Legal Action
733 10th Street, NW
Suite 700
Washington, DC 20001
Phone: 202.637.3000
Email: ptolsdorf@nam.org
Email: lfrost@nam.org

*Counsel for the National
Association of Manufacturers*

Daryl Joseffer
Jonathan D. Urick
U.S. Chamber Litigation Center
1615 H Street, NW
Washington, DC 20062
Phone: 202.463.5337

*Counsel for the Chamber of
Commerce of the United States of
America*

Liz Dougherty
Business Roundtable
300 New Jersey Avenue, NW
Suite 800
Washington, DC 20001
Phone: 202.872.1260

Counsel for the Business Roundtable

/s/ John P. Elwood

John P. Elwood
Matthew X. Etchemendy
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com
Email: metchemendy@velaw.com

Kevin W. Brooks
Vinson & Elkins LLP
2001 Ross Avenue
Suite 3900
Dallas, TX 75201
Phone: 214.220.7805
Email: kbrooks@velaw.com

Counsel for Amici Curiae

Dileep Srihari
Telecommunications Industry
Association
1320 N. Courthouse Road
Suite 200
Arlington, VA 22201
Phone: 703.907.7715

*Counsel for the Telecommunications
Industry Association*

CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1, *amici curiae* the National Association of Manufacturers (“NAM”), the Chamber of Commerce of the United States of America (“Chamber”), the Business Roundtable, and the Telecommunications Industry Association (“TIA”) make the following disclosures:

The NAM is a nonprofit trade association representing small and large manufacturers in every industrial sector and in all 50 states. The NAM has no parent corporation, and no publicly held company owns 10% or more of its stock.

The Chamber is a nonprofit corporation representing the interests of more than three million businesses of all sizes, sectors, and regions. The Chamber has no parent corporation, and no publicly held company owns 10% or more of its stock.

The Business Roundtable is an association of chief executive officers of leading U.S. companies. The Business Roundtable has no parent corporation, and no publicly held company owns 10% or more of its stock.

TIA is the leading trade association for the information and communications technology industry. TIA has no parent corporation, and no publicly held company owns 10% or more of its stock.

Date: October 18, 2018

Respectfully submitted,

Peter C. Tolsdorf
Leland P. Frost
Manufacturers' Center for
Legal Action
733 10th Street, NW
Suite 700
Washington, DC 20001
Phone: 202.637.3000
Email: ptolsdorf@nam.org
Email: lfrost@nam.org

*Counsel for the National
Association of Manufacturers*

Daryl Joseffer
Jonathan D. Urick
U.S. Chamber Litigation Center
1615 H Street, NW
Washington, DC 20062
Phone: 202.463.5337

*Counsel for the Chamber of
Commerce of the United States of
America*

Liz Dougherty
Business Roundtable
300 New Jersey Avenue, NW
Suite 800
Washington, DC 20001
Phone: 202.872.1260

Counsel for the Business Roundtable

/s/ John P. Elwood

John P. Elwood
Matthew X. Etchemendy
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com
Email: metchemendy@velaw.com

Kevin W. Brooks
Vinson & Elkins LLP
2001 Ross Avenue
Suite 3900
Dallas, TX 75201
Phone: 214.220.7805
Email: kbrooks@velaw.com

Counsel for Amici Curiae

Dileep Srihari
Telecommunications Industry
Association
1320 N. Courthouse Road
Suite 200
Arlington, VA 22201
Phone: 703.907.7715

*Counsel for the Telecommunications
Industry Association*

**CERTIFICATE OF COUNSEL REGARDING
AUTHORITY TO FILE AND SEPARATE BRIEFING**

All petitioners, respondents, and intervenors have consented to the filing of this brief. On October 17, 2018, *amici curiae* filed a written representation of that consent pursuant to D.C. Cir. R. 29(b).*

Pursuant to D.C. Cir. R. 29(d), counsel for *amici curiae* the National Association of Manufacturers, the Chamber of Commerce of the United States of America, the Business Roundtable, and the Telecommunications Industry Association hereby certify that no other non-government *amicus* brief of which they are aware focuses on the subject addressed herein, i.e., the increasingly competitive market for broadband, the importance of greater innovation and investment in broadband Internet access service for businesses and manufacturers whose operations and products are ever-more reliant on the Internet, and how the Commission's order under review will help the broadband sector meet the needs of America's businesses. As preeminent national business and trade associations, *amici* are particularly well-suited to provide the Court important context on these subjects that will assist it in resolving this case.

* Pursuant to Fed. R. App. P. 29(a)(4)(E), *amici curiae* state that no counsel for a party authored this brief in whole or in part, and no party or counsel for a party contributed money intended to fund the preparation or submission of this brief. No person other than *amici curiae*, their members, or their counsel contributed money intended to fund the preparation or submission of this brief.

Date: October 18, 2018

Respectfully submitted,

Peter C. Tolsdorf
Leland P. Frost
Manufacturers' Center for
Legal Action
733 10th Street, NW
Suite 700
Washington, DC 20001
Phone: 202.637.3000
Email: ptolsdorf@nam.org
Email: lfrost@nam.org

*Counsel for the National
Association of Manufacturers*

Daryl Joseffer
Jonathan D. Urick
U.S. Chamber Litigation Center
1615 H Street, NW
Washington, DC 20062
Phone: 202.463.5337

*Counsel for the Chamber of
Commerce of the United States of
America*

Liz Dougherty
Business Roundtable
300 New Jersey Avenue, NW
Suite 800
Washington, DC 20001
Phone: 202.872.1260

Counsel for the Business Roundtable

/s/ John P. Elwood

John P. Elwood
Matthew X. Etchemendy
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com
Email: metchemendy@velaw.com

Kevin W. Brooks
Vinson & Elkins LLP
2001 Ross Avenue
Suite 3900
Dallas, TX 75201
Phone: 214.220.7805
Email: kbrooks@velaw.com

Counsel for Amici Curiae

Dileep Srihari
Telecommunications Industry
Association
1320 N. Courthouse Road
Suite 200
Arlington, VA 22201
Phone: 703.907.7715

*Counsel for the Telecommunications
Industry Association*

TABLE OF CONTENTS

	Page
Certificate As To Parties, Rulings, And Related Cases.....	i
Corporate Disclosure Statement	vi
Certificate Of Counsel Regarding Authority To File And Separate Briefing.....	viii
Table of Authorities	xi
Glossary	xvii
Statutes and Regulations	1
Identity And Interest Of <i>Amici Curiae</i>	1
Summary Of Argument	3
Argument	4
I. Regulating Broadband Providers As Common Carriers Is Unnecessary and Unwise.....	6
A. The Broadband Market Is Highly Competitive	7
B. New Technologies Require Continuing Unrestricted Broadband Growth	14
II. The Commission's Order Promotes Investment Critical For Developing The Next Generation Of Broadband Technology	17
A. Burdensome Regulations Discourage Investment and Innovation.....	18
B. The Commission's Order Lifts The Regulatory Burdens Created By The <i>Title II Order</i>	24
Conclusion	26
Certificate of Compliance	28
Certificate of Service	29

TABLE OF AUTHORITIES

Cases:	Page(s)
<i>Global Crossing Telecomms., Inc. v. Metrophones Telecomms., Inc.</i> , 550 U.S. 45 (2007).....	5
* <i>Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.</i> , 545 U.S. 967 (2005).....	18, 25
<i>U.S. Telecom Ass’n v. FCC</i> , 825 F.3d 674 (D.C. Cir. 2016).....	4, 6, 14, 18, 19, 24
<i>USAir, Inc. v. Dep’t of Transp.</i> , 969 F.2d 1256 (D.C. Cir. 1992).....	19
 Rules:	
Fed. R. App. P. 29(a)(2).....	1
Fed. R. App. P. 29(a)(3).....	2
Fed. R. App. P. 29(a)(4)(E).....	1
 Administrative Materials:	
Larry Downes, Comment, <i>Restoring Internet Freedom</i> , WC Docket No. 17-108 (July 15, 2017), https://bit.ly/2O77jYK	7
<i>Federal-State Joint Board on Universal Service</i> , 13 FCC Rcd. 11501 (1998).....	5
Free Press, Comments, <i>Restoring Internet Freedom</i> , WC Docket No. 17-108 (July 17, 2017), https://bit.ly/2RDn6wg	10
<i>Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993</i> , 32 FCC Rcd. 8968 (2017).....	8
<i>Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion</i> , 33 FCC Rcd. 1660 (2018).....	9, 13
 * Authorities upon which we chiefly rely are marked with an asterisk.	

Administrative Materials—Continued: Page(s)

<i>Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 32 FCC Rcd. 7029 (2017).....</i>	11
<i>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, 30 FCC Rcd. 1375 (2015).....</i>	9, 10
<i>Protecting and Promoting the Open Internet, 30 FCC Rcd. 5601 (2015).....</i>	3, 19, 21, 22
<i>Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, 31 FCC Rcd. 13911 (2016).....</i>	23
<i>Restoring Internet Freedom, 33 FCC Rcd. 311 (2018)</i>	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25
<i>Brent Skorup, Comment, Restoring Internet Freedom, WC Docket No. 17-108 (Aug. 30, 2017), https://bit.ly/2yeIzUz</i>	21
<i>T-Mobile USA, Inc., Comments, Restoring Internet Freedom, WC Docket No. 17-108 (July 17, 2017), https://bit.ly/2ulyEaG.....</i>	20
<i>Wireless Telecomms. Bureau, Fed. Commc’ns Comm’n, Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero-Rated Content and Services (Jan. 11, 2017), https://bit.ly/2OJMwK5</i>	20, 21
<i>Wireline Competition Bureau, Industry Analysis & Tech. Div., Fed. Commc’ns Comm’n, Internet Access Services: Status as of December 31, 2016 (Feb. 2018), https://bit.ly/2Pkw0NK.....</i>	10

Other Authorities:

<i>Augmented Reality, U.S. NAVAL RES. LAB., https://bit.ly/2kRswFQ.....</i>	16
--	----

Other Authorities—Continued:**Page(s)**

Bo Begole, <i>Omnipresence and the Coming Age of “Remote Reality,”</i> VENTUREBEAT (July 13, 2015), https://bit.ly/2y7b5Hm	17
Ann Bosche et al., Bain & Co., <i>Unlocking Opportunities in the Internet of Things</i> (2018), https://bit.ly/2wtOmDH	16
Rick Boucher, <i>Insight: Congress Needs to Put the Net Neutrality Debate to Rest to Help Close the Digital Divide</i> , BLOOMBERG BNA (Sept. 6, 2018), https://bit.ly/2oMF1DJ	24
Rick Boucher, <i>Mississippi Has a Significant Stake in Outcome of Net Neutrality War</i> , CLARION LEDGER (July 1, 2018), https://on.thec-l.com/2IOA6tA	24
Patrick Brogan, USTelecom, <i>Broadband Investment Continues Trending Down in 2016</i> (Oct. 31, 2017), https://bit.ly/2yJ7v4E	11, 23
Roger Cheng, <i>With 5G and Sprint, T-Mobile Vows Cheaper Wireless Service Than Ever</i> , CNET (Aug. 22, 2018), https://cnet.co/2w6tva9	13
Samriddhi Dastidar, <i>SpaceX Launches First Starlink Satellites That Could Change Future of the Internet</i> , TECH TIMES (Feb. 25, 2018), https://bit.ly/2Pg3Nrp	14
AJ Dellinger, <i>Net Neutrality Advocates Have Concerns About T- Mobile’s New Unlimited Data Plan</i> , DAILY DOT (Aug. 18, 2016), https://bit.ly/2RwF7wz	20
Christian de Looper, <i>Gigabit Ethernet Will Bring Big Speed, Smooth Streaming and Dynamite Apps</i> , TECH TIMES (Oct. 9, 2014), https://bit.ly/2zURNGM	15
Yuming Ge et al., Brookings Inst., <i>Smart Transportation in China and the United States</i> (Dec. 2017), https://brook.gs/2BYG4YW	15
Kevin A. Hassett & Robert J. Shapiro, <i>The Impact of Title II Regulation of Internet Providers on Their Capital Investments</i> (Georgetown McDonough Sch. of Bus. Res. Paper No. 2540563, 2014), https://bit.ly/2zWJ3jg	24

Other Authorities—Continued:**Page(s)**

Jeremy Horwitz, <i>AT&T Finalizes 2018 5G Plan With Southern U.S. Cities, California in 2019</i> , VENTUREBEAT (Sept. 10, 2018), https://bit.ly/2CFfEgR	13
<i>Internet FAQs: How Is Internet Speed Measured?</i> , SPECTRUM, https://bit.ly/2BWSRuU	7
Swapna Krishna, <i>T-Mobile Aims to Lower Broadband Prices With Its 5G Service</i> , ENGADGET (Sept. 21, 2018), https://engt.co/2QtO6Nx	13
Blair Levin & Larry Downes, <i>Why Google Fiber Is High-Speed Internet’s Most Successful Failure</i> , HARV. BUS. REV. (Sept. 7, 2018), https://bit.ly/2CDBhhM	11
Robert Litan, Brookings Inst., <i>Regulating Internet Access as a Public Utility: A Boomerang on Tech If It Happens</i> (June 2014), https://brook.gs/2DQF37L	5
LOON, https://loon.co	14
Daniel Lyons, <i>A Win for the Internet: The FCC Wants to Repeal Title II Net Neutrality Regulations</i> , AEI (Apr. 26, 2017), https://bit.ly/2tkUiNf	7
Bernard Marr, <i>9 Powerful Real-World Applications of Augmented Reality (AR) Today</i> , FORBES (July 30, 2018), https://bit.ly/2AnmE0H	16
John W. Mayo et al., <i>An Economic Perspective of Title II Regulation of the Internet</i> (July 2017), https://bit.ly/2NsQa6q	8
Rachel Metz, <i>A Film Studio for the Age of Virtual Reality</i> , MIT TECH. REV. (Feb. 13, 2015), https://bit.ly/2zR6egh	16
Margi Murphy, <i>To Infinity and Beyond: Mark Zuckerberg, Elon Musk in Internet Space Race</i> , SYDNEY MORNING HERALD (July 24, 2018), https://bit.ly/2BYBr1a	13, 14
Sarah Murthi & Amitabh Varshney, <i>How Augmented Reality Will Make Surgery Safer</i> , HARV. BUS. REV. (Mar. 20, 2018), https://bit.ly/2IFRX76	16

Other Authorities—Continued:**Page(s)**

<i>Net Neutrality and the Role of Antitrust: Hearing Before the Subcomm. on Regulatory Reform, Commercial and Antitrust Law of the H. Judiciary Comm.</i> , 115th Cong. (2017) (statement of Maureen K. Ohlhausen, Acting Chairman, Fed. Trade Comm’n), https://bit.ly/2NoyKI8	9
Daniel Newman, <i>4 Reasons 5G Is Critical for Mass Adoption of AR and VR</i> , FORBES (Mar. 27, 2018), https://bit.ly/2DZCsbT	17
Magdalena Nohrborg, <i>LTE Overview</i> , 3GPP, https://bit.ly/2GWlBmq	8
Jonathan E. Nuechterlein & Christopher S. Yoo, <i>A Market-Oriented Analysis of the “Terminating Access Monopoly” Concept</i> , 14 COLO. TECH. L.J. 21 (2015)	8
* Maureen K. Ohlhausen, <i>Antitrust Over Net Neutrality: Why We Should Take Competition in Broadband Seriously</i> , 15 COLO. TECH. L.J. 119 (2016)	6, 7, 10
Maureen K. Ohlhausen, Comm’r, Fed. Trade Comm’n, Remarks to the U.S. Chamber of Commerce (Oct. 18, 2013), https://bit.ly/2NpCxVF	15
Ajit Pai, Chairman, Fed. Commc’ns Comm’n, Remarks at White House 5G Summit (Sept. 28, 2018), https://bit.ly/2OGXMqE	12
* Pew Research Center, <i>Killer Apps in the Gigabit Age</i> (Oct. 9, 2014), https://pewrsr.ch/2PfIMNJ	15, 16
David J. Redl, Assistant Sec’y for Commc’ns & Info., U.S. Dep’t of Commerce, Remarks at White House 5G Summit (Sept. 28, 2018), https://bit.ly/2ylcEAM	12
Glen O. Robinson, <i>The Federal Communications Act: An Essay on Origins and Regulatory Purpose</i> , in A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934, at 3 (Max D. Paglin ed., 1989)	5
John D. Seiver & Elizabeth Drogula, <i>Open Internet Advisory Opinions: Do You Feel Lucky?</i> , DAVIS WRIGHT TREMAINE (July 8, 2015), https://bit.ly/2NsbOb5	22

Other Authorities—Continued:**Page(s)**

Hal Singer, <i>Bad Bet by FCC Sparks Capital Flight From Broadband</i> , FORBES (Mar. 2, 2017), https://bit.ly/2BYhbwF	23
Seerat Sohi, <i>How the NBA Is Using Augmented Reality to Transform the Fan Experience</i> , SB NATION (July 17, 2018), https://bit.ly/2JvyIfC	16
Jonathan Spalter, <i>Broadband CapEx Investment Looking Up in 2017</i> , USTELECOM (July 25, 2018), https://bit.ly/2LHsxds	25
Nick Statt, <i>Charter’s Gigabit Internet Service Now Available in 27 Million US Homes</i> , VERGE (June 26, 2018), https://bit.ly/2IFZbYZ	11
Nick Statt, <i>FCC Approves SpaceX’s Ambitious Satellite Internet Plans</i> , VERGE (Mar. 29, 2018), https://bit.ly/2q1B6DX	14
Don Stein & Paraj Mathur, <i>Mixed Reality Is Ready for Investors</i> , VENTUREBEAT (May 7, 2018), https://bit.ly/2rxGPRM	17
<i>Types of Broadband Connections</i> , FED. COMMC’NS COMM’N, https://bit.ly/285eFwV	7
Antonio Villas-Boas, <i>Verizon’s Ultrafast 5G Home Internet Service Will Begin Rolling Out October 1 and Offer Download Speeds 10 Times as Fast as the US Average</i> , BUS. INSIDER (Sept. 16, 2018), https://read.bi/2xsDhDm	13
VNI Forecast Highlights Tool, CISCO, https://bit.ly/2vV2W8c	14, 15

GLOSSARY

As used herein,

2015 Broadband Progress Report means *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*, 30 FCC Rcd. 1375 (2015);

2018 Broadband Deployment Report means *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 33 FCC Rcd. 1660 (2018).

5G means fifth-generation;

BIAS means broadband Internet access service;

Chamber means Chamber of Commerce of the United States of America;

FCC or **the Commission** means Federal Communications Commission;

Kbps means kilobits per second;

LTE means long term evolution;

Mbps means megabits per second;

NAM means National Association of Manufacturers;

Order or **Restoring Internet Freedom Order** means *Restoring Internet Freedom*, 33 FCC Rcd. 311 (2018);

TIA means Telecommunications Industry Association;

Title II Order means *Protecting and Promoting the Open Internet*, 30 FCC Rcd. 5601 (2015);

Zero Rating Report means Wireless Telecomms. Bureau, Fed. Commc'ns Comm'n, *Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-Rated Content and Services* (Jan. 11, 2017), <https://bit.ly/2OJMwK5>.

STATUTES AND REGULATIONS

All applicable statutes and regulations are appended to the Brief for Respondents.

IDENTITY AND INTEREST OF *AMICI CURIAE*

The National Association of Manufacturers (“NAM”), the Chamber of Commerce of the United States of America (“Chamber”), the Business Roundtable, and the Telecommunications Industry Association (“TIA”) (collectively, “*amici*”) submit this brief in support of respondents, the Federal Communications Commission (“FCC” or “Commission”) and the United States of America.¹

The NAM is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 states. The NAM is the voice of the manufacturing community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create jobs across the United States. The Chamber is the world’s largest business federation. It represents 300,000 direct members and indirectly represents the interests of more than three million companies and professional

¹ Pursuant to Fed. R. App. P. 29(a)(4)(E), *amici curiae* state that no counsel for a party authored this brief in whole or in part, and no party or counsel for a party contributed money intended to fund the preparation or submission of this brief. No person other than *amici curiae*, their members, or their counsel contributed money intended to fund the preparation or submission of this brief. Pursuant to Fed. R. App. P. 29(a)(2), all petitioners, respondents, and intervenors have consented to the filing of this brief.

organizations of every size, in every industry sector, and from every region of the country. The Business Roundtable is an association of chief executive officers of leading U.S. companies that together have over \$7 trillion in annual revenues, employ nearly 15 million people, generate more than \$488 billion in revenues for small- and medium-sized businesses annually, and pay nearly \$296 billion in dividends to shareholders each year. The Telecommunications Industry Association is the leading trade association for the information and communications technology industry, with hundreds of members involved in the manufacture and deployment of the hardware and software that constitutes the nation's broadband networks. Because an important function of *amici* is to represent their members' interests before the courts, *amici* regularly file briefs in cases raising issues of concern to their members.

As preeminent national business and trade associations, *amici* have a significant interest in, and can offer a unique perspective on, the issues here. American businesses are the beneficiaries of a globally deployed broadband infrastructure, which has transformed (and will continue to transform) the way they operate, providing numerous opportunities to create and market innovative products and services. *Amici* believe that their perspective will assist the Court in resolving this case. See Fed. R. App. P. 29(a)(3).

SUMMARY OF ARGUMENT

The Commission correctly concluded that it could and should “return[] broadband Internet access service to a light-touch regulatory framework.” *Restoring Internet Freedom*, 33 FCC Rcd. 311, 374 ¶ 106 (2018) (JA____) (“*Order*” or “*Restoring Internet Freedom Order*”). The Commission’s return to form is eminently justified given the highly competitive nature of the broadband market and the importance of removing unnecessary barriers to further investment and innovation.

1. For years, the Internet thrived without common-carrier regulation. But in 2015, the Commission reclassified broadband Internet access service as a “telecommunications service.” See *Protecting and Promoting the Open Internet*, 30 FCC Rcd. 5601, 5610 ¶ 29 (2015) (“*Title II Order*”). That decision triggered application of Title II of the Communications Act of 1934, subjecting one of the most dynamic markets in history to the clumsy regulatory tools of a bygone era. The *Title II Order*’s heavy-handed regulatory approach was neither necessary nor appropriate for the rapidly evolving, highly competitive broadband market. That is especially true given the countless new Internet-reliant technologies and products on the horizon. The twenty-first century economy requires a nimble, growth-oriented broadband sector to meet increasing demand for bandwidth-hungry technologies—not a broadband sector burdened by invasive and investment-dampening regulation.

2. The *Title II Order* increased compliance costs and produced massive regulatory uncertainty, chilling investment and innovation. Capital investment in broadband actually declined when the *Title II Order* went into effect, but increased dramatically after the FCC announced its intent to repeal that order. By lifting the burdens imposed by Title II regulation, the *Restoring Internet Freedom Order* opens the way for providers to freely invest in crucial broadband infrastructure and experiment with new business models. The Commission's return to its pre-2015 understanding of broadband Internet access service represents the best policy for both American businesses and their customers.

ARGUMENT

The Commission correctly concluded that returning to a “light-touch, market based” regulatory framework “pave[s] the way for additional innovation and investment that will facilitate greater consumer access to more content, services, and devices, and greater competition.” *Order* ¶¶ 207, 208 (JA____, ____). “[U]tility-style regulation” (*id.* ¶ 39 (JA____)) under Title II of the Communications Act of 1934 is a poor fit for the most technologically advanced and dynamic information system in history.

“Title II is legacy legislation from the era of monopoly telephone service,” *U.S. Telecom Ass’n v. FCC*, 825 F.3d 674, 770 (D.C. Cir. 2016) (Williams, J., concurring in part and dissenting in part), enacted during the Great Depression and

cribbed from a 19th-century railroad statute. *See Global Crossing Telecomms., Inc. v. Metrophones Telecomms., Inc.*, 550 U.S. 45, 48-49 (2007).² The FCC has long acknowledged the clumsy fit between Title II regulation and broadband Internet service. *See Order* ¶¶ 8-15 (JA____-____). Soon after enactment of the Telecommunications Act of 1996, the Commission recognized “the negative policy consequences of a conclusion that Internet access services should be classed as ‘telecommunications,’” stating: “[C]lassifying Internet access services [under Title II] could have significant consequences for the global development of the Internet. We recognize the unique qualities of the Internet, and do not presume that legacy regulatory frameworks are appropriately applied to it.” *Federal-State Joint Board on Universal Service*, 13 FCC Rcd. 11501, 11540 ¶ 82 (1998) (footnote omitted).

“The Internet thrived for decades under the light-touch regulatory regime in place before the *Title II Order*” *Order* ¶ 109 (JA____). Unlike old Ma Bell, the market for broadband Internet access is characterized by fierce competition, rapid expansion, and nimble adaptation, all of which help the broadband market meet increasing demand for innovative, bandwidth-hungry technologies. Broadband is a vital tool for stimulating job growth and improving the delivery of a broad range of

² *See also* Glen O. Robinson, *The Federal Communications Act: An Essay on Origins and Regulatory Purpose*, in A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934, at 3 (Max D. Paglin ed., 1989); Robert Litan, Brookings Inst., *Regulating Internet Access as a Public Utility: A Boomerang on Tech If It Happens 2* (June 2014), <https://brook.gs/2DQF37L>.

services from education to healthcare. *Amici* have long supported a free and open Internet. They support a legislative solution that protects consumers, promotes innovation and investment, and provides regulatory certainty. But they oppose regulating broadband service providers under the heavy-handed legacy framework of Title II. Rather than investment- and innovation-killing regulation under the ill-fitting Title II framework, the U.S. economy needs *more* investment and *more* innovation in the broadband space—consistent with the “pro-competitive, deregulatory goals of the 1996 [Telecommunications] Act.” *Id.* ¶ 194 (JA____). The Commission’s current position—and, prior to 2015, its longstanding one—is correct: Broadband providers should not be regulated as common carriers.

I. Regulating Broadband Providers As Common Carriers Is Unnecessary and Unwise

“Title II . . . fits cases where all hope (of competitive markets) is lost.” *U.S. Telecom*, 825 F.3d at 770 (Williams, J., concurring in part and dissenting in part). “Title II means utility-style regulation by which the government has the authority . . . to set rates, impose equal treatment obligations, . . . and otherwise deprive private firms of the ability to operate as they would in a free market.”³ It is not appropriate for the highly competitive and rapidly evolving broadband Internet

³ Maureen K. Ohlhausen, *Antitrust Over Net Neutrality: Why We Should Take Competition in Broadband Seriously*, 15 COLO. TECH. L.J. 119, 127 (2016) (hereinafter Ohlhausen, *Antitrust*).

market.⁴ Moreover, the investment- and innovation-dampening effects of Title II regulation are precisely the *opposite* of what is needed to bring about the Internet American businesses and consumers “need ten, twenty years from now.” Statement of Chairman Ajit Pai, *Restoring Internet Freedom*, 33 FCC Rcd. 311, 530 (JA____) (2018) (“Pai Statement”).

A. The Broadband Market Is Highly Competitive

Many service providers offer broadband throughout the United States, including cable television, landline telephone, and mobile wireless companies, as well as satellite Internet providers.⁵ As the Commission’s data shows, approximately 97% of Americans live in census blocks where at least *three* providers offer fixed broadband Internet access at speeds of at least 3 Mbps down and 0.768 Mbps up. *Order* ¶ 124 (JA____).⁶ And 76.5% live in census blocks where two or

⁴ See *id.* (“The typical justification for common carrier regulation—natural monopoly—is absent from the broadband [Internet service provider] market.”); Daniel Lyons, *A Win for the Internet: The FCC Wants to Repeal Title II Net Neutrality Regulations*, AEI (Apr. 26, 2017), <https://bit.ly/2tkUiNf> (explaining that while the Title II “regulatory model may be appropriate for static utility monopolies such as water delivery, it is inappropriate in a competitive, dynamic market such as internet access”); cf. Larry Downes, Comment, *Restoring Internet Freedom*, WC Docket No. 17-108, at 6 (July 15, 2017), <https://bit.ly/2O77jYK>.

⁵ See generally *Types of Broadband Connections*, FED. COMM’NS COMM’N, <https://bit.ly/285eFwV> (last visited Oct. 8, 2018).

⁶ “Mbps” refers to megabits (one million bits) per second. See, e.g., *Internet FAQs: How Is Internet Speed Measured?*, SPECTRUM, <https://bit.ly/2BWSRuU> (last visited Oct. 8, 2018). “Down” is shorthand for “download,” and “up” is shorthand for “upload.” See *Order* ¶ 125 n.456 (JA____).

more providers offer fixed broadband at speeds of at least 25 Mbps down and 3 Mbps up. *Id.* Turning to mobile broadband, recent data indicates that approximately 97% of the U.S. population lives in census blocks with LTE mobile broadband coverage by three or more providers.⁷

The Commission's opponents downplay broadband competition, focusing narrowly—and misleadingly—on the percentage of the population with access to multiple fixed wireline (as opposed to satellite or terrestrial wireless) options, and only at speeds of at least 25 Mbps down and 3 Mbps up. See Non-Government Pet'rs' Br. 57; see also *id.* at 14, 19, 56; Non-Government Pet'r-Intervenors' Br. 2, 11-12.⁸ But looking at just one narrow slice of the market at a single point in time

⁷ See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, 32 FCC Rcd. 8968, 9022 ¶ 77 & Chart III.D.4 (2017). “LTE is a type of wireless technology . . . that is characterized by fast upload and download data transfer speed and low latency.” *Id.* at 9031 ¶ 85. The acronym stands for “long term evolution.” See, e.g., Magdalena Nohrborg, *LTE Overview*, 3GPP, <https://bit.ly/2GWlBmq> (last visited Oct. 8, 2018).

⁸ Alternatively, proponents of the *Title II Order*'s approach rely on a “gatekeeper” or “terminating access monopoly” theory to dismiss competition. See Non-Government Pet'rs' Br. 59 (citing *Order* ¶ 135 (JA____)); see also Non-Government Pet'r-Intervenors' Br. 10-11; cf. Government Pet'rs' Br. 11-12. That theory is “implausible” and “economically vacuous,” John W. Mayo et al., *An Economic Perspective of Title II Regulation of the Internet* 2-3 (July 2017), <https://bit.ly/2NsQa6q>, at least absent certain “very limited circumstances” not applicable here, Jonathan E. Nuechterlein & Christopher S. Yoo, *A Market-Oriented Analysis of the “Terminating Access Monopoly” Concept*, 14 COLO. TECH. L.J. 21, 21-23 (2015); see also FCC Br. 91 (noting lack of “sound theoretical or empirical support” for the terminating access monopoly theory in this context).

provides a grossly distorted picture of broadband competition. As a former Acting Chairman of the Federal Trade Commission has explained, “measuring [broadband] competition isn’t a simple exercise of counting how many wireline [Internet service providers] in an area provide broadband at a certain speed threshold,” because that simplistic approach ignores “the disciplining effect of substitutes and potential entrants,” as well as “improving speeds” and “the expansion of mobile broadband.”⁹

Start with opponents’ narrow focus on broadband at speeds of at least 25 Mbps down and 3 Mbps up. They suggest that narrow perspective is justified because 25 Mbps down and 3 Mbps up is the Commission’s current speed benchmark for “advanced telecommunications capability” in the context of fixed (non-mobile) services. *See* Non-Government Pet’rs’ Br. 57 n.13; Non-Government Pet’r-Intervenors’ Br. 11-12.¹⁰ But that benchmark was only set in 2015: before

⁹ *Net Neutrality and the Role of Antitrust: Hearing Before the Subcomm. on Regulatory Reform, Commercial and Antitrust Law of the H. Judiciary Comm.*, 115th Cong. 3 (2017) (statement of Maureen K. Ohlhausen, Acting Chairman, Fed. Trade Comm’n), <https://bit.ly/2NoyKI8>.

¹⁰ *See Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 33 FCC Rcd. 1660, 1664-65 ¶¶ 14-15, 1667-68 ¶¶ 20, 21 (2018) (“2018 Broadband Deployment Report”); *accord Order* ¶ 125 n.456 (JA____). The non-government petitioners assert that “[t]he FCC defines BIAS”—i.e., broadband Internet access service—“as at least 25 Mbps up/3 Mbps down.” Non-Government Pet’rs’ Br. 57 n.13. That is incorrect. *See Order* ¶ 21 (JA____-____) (defining “broadband Internet access service”); *accord 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*, 30 FCC Rcd. 1375, 1376 ¶ 1

2015, the benchmark was 4 Mbps down and 1 Mbps up, and before 2010 the benchmark was 200 *Kbps* (i.e., 0.2 Mbps) down and 200 Kbps up.¹¹ In short, the proverbial “goal posts” are moving—and rapidly so—precisely because broadband speeds have improved so quickly and dramatically. For instance, “[t]he percentage of fixed connections with a downstream speed of at least 25 Mbps [grew] from 33% . . . in December 2013 to 60% . . . in December 2016.”¹² And the percentage of Americans with access to multiple providers at speeds of at least 25 Mbps down and 3 Mbps up is rising steadily,¹³ as even some of the Commission’s opponents have acknowledged.¹⁴

Progress shows no signs of slowing. Despite recent declines following the *Title II Order*’s issuance, see *Order* ¶ 90 (JA____-____), providers continue to invest

n.1 (2015) (“*2015 Broadband Progress Report*”) (“For simplicity, . . . we sometimes refer to ‘advanced telecommunications capability’ as ‘broadband,’ but . . . ‘advanced telecommunications capability’ has a unique definition . . . that differs from the term ‘broadband’ in other contexts.”).

¹¹ See *2015 Broadband Progress Report*, 30 FCC Rcd. at 1377 ¶ 3, 1393 ¶ 26, 1403 ¶¶ 45-46.

¹² Wireline Competition Bureau, Industry Analysis & Tech. Div., Fed. Commc’ns Comm’n, *Internet Access Services: Status as of December 31, 2016*, at 5 (Feb. 2018), <https://bit.ly/2Pkw0NK>.

¹³ See Ohlhausen, *Antitrust*, 15 COLO. TECH. L.J. at 131 (noting that “competition is increasing” at speeds of “twenty-five Mbps”); compare *Order* ¶¶ 124-125 (JA____-____), with *2015 Broadband Progress Report*, 30 FCC Rcd. at 1421-22 ¶ 83 & Chart 2.

¹⁴ See Free Press, Comments, *Restoring Internet Freedom*, WC Docket No. 17-108, at 98-99 & fig. 5 (July 17, 2017), <https://bit.ly/2RDn6wg>.

tens of billions of dollars every year to upgrade networks for higher speeds and greater capacity.¹⁵ Vigorous competition is already emerging for the next frontier of broadband service, gigabit broadband—speeds approaching *one billion* bits per second, orders of magnitude faster than traditional broadband. When Google announced plans to bring gigabit speeds to consumers, it set off a chain reaction, leading incumbent broadband providers to promise customers improved pricing, faster speeds, and network upgrades.¹⁶ Now, numerous companies are rolling out gigabit infrastructure.¹⁷ Gigabit Internet service is thus poised to enjoy robust competition.

But rapid speed increases are only one aspect of the broader competitive picture. “[F]ixed satellite” and “fixed terrestrial wireless” broadband place further “competitive constraints on wireline providers,” *Order* ¶ 125 (JA____), as does “mobile Internet access,” *id.* ¶ 130 (JA____). If satellite and terrestrial wireless options are included, the vast majority of Americans (76.5%) live in census blocks served by two or more providers offering fixed broadband at speeds of at least

¹⁵ Patrick Brogan, USTelecom, *Broadband Investment Continues Trending Down in 2016*, at 2-3 (Oct. 31, 2017), <https://bit.ly/2yJ7v4E>.

¹⁶ See Blair Levin & Larry Downes, *Why Google Fiber Is High-Speed Internet’s Most Successful Failure*, HARV. BUS. REV. (Sept. 7, 2018), <https://bit.ly/2CDBhhM>.

¹⁷ See *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 32 FCC Rcd. 7029, 7032 ¶ 8 (2017); see also, e.g., Nick Statt, *Charter’s Gigabit Internet Service Now Available in 27 Million US Homes*, VERGE (June 26, 2018), <https://bit.ly/2IFZbYZ>.

25 Mbps down and 3 Mbps up, and nearly all (93.6%) live in census blocks served by *three* or more providers offering at least 10 Mbps down and 1 Mbps up. *Id.* ¶ 124 (JA____-____); *accord* FCC Br. 87. And “[t]here is even greater competition in mobile wireless.” *Order* ¶ 129 (JA____) (emphasis omitted); *see also* FCC Br. 86.

The non-government petitioners dismiss the relevance of these emerging alternatives, referring generically to “questions” about whether fixed satellite and fixed terrestrial wireless service are effective competitors to wireline broadband, and emphasizing the Commission’s finding that mobile service is not “*currently*” a “full substitute[] for fixed service.” Non-Government Pet’rs’ Br. 57-58, 59-60 (emphasis added and citation omitted). But once again, that argument ignores the speed of progress.

First, consider terrestrial wireless broadband. America’s wireless industry is racing to deploy new fifth-generation (“5G”) networks,¹⁸ which will revolutionize both in-home and mobile wireless broadband. Verizon’s 5G in-home wireless Internet service—designed to replace wire-based in-home broadband—officially launched on October 1, 2018, offering customers in four U.S. cities the ability to

¹⁸ *See, e.g.*, Ajit Pai, Chairman, Fed. Commc’ns Comm’n, Remarks at White House 5G Summit (Sept. 28, 2018), <https://bit.ly/2OGXMqE>; David J. Redl, Assistant Sec’y for Commc’ns & Info., U.S. Dep’t of Commerce, Remarks at White House 5G Summit (Sept. 28, 2018), <https://bit.ly/2ylcEAM>; *cf.* FCC Br. 87 (discussing growth of 5G).

access typical network speeds around 300 Mbps.¹⁹ And AT&T recently announced plans to begin introducing mobile 5G to customers across the United States.²⁰

In addition to terrestrial wireless broadband, existing “satellite . . . providers are continuing to increase their offerings of high-speed services.” *2018 Broadband Deployment Report*, 33 FCC Rcd. at 1665 ¶ 15 n.26. “2016 marked the first instance where 25 Mbps/3 Mbps satellite service was reported in the [Commission’s] data,” and “[t]he 2017 launches of the high throughput Jupiter 2 and ViaSat 2 satellites by Hughes and ViaSat, respectively, could further increase [such] offerings in the future.” *Id.* at 1681 ¶ 51. SpaceX and Facebook have also revealed plans for new satellite Internet systems designed to increase high-speed broadband availability.²¹ SpaceX’s “Starlink” system will use approximately 12,000 satellites to “provide

¹⁹ See Antonio Villas-Boas, *Verizon’s Ultrafast 5G Home Internet Service Will Begin Rolling Out October 1 and Offer Download Speeds 10 Times as Fast as the US Average*, BUS. INSIDER (Sept. 16, 2018), <https://read.bi/2xsDhDm>. T-Mobile has plans for a similar service. See Swapna Krishna, *T-Mobile Aims to Lower Broadband Prices With Its 5G Service*, ENGADGET (Sept. 21, 2018), <https://engt.co/2QtO6Nx>.

²⁰ See Jeremy Horwitz, *AT&T Finalizes 2018 5G Plan With Southern U.S. Cities, California in 2019*, VENTUREBEAT (Sept. 10, 2018), <https://bit.ly/2CFfEgR>. T-Mobile has likewise “committed to building a nationwide 5G network by 2020,” and reports that it is “deploying its 5G network this year and will turn it on for consumers in early 2019.” Roger Cheng, *With 5G and Sprint, T-Mobile Vows Cheaper Wireless Service Than Ever*, CNET (Aug. 22, 2018), <https://cnet.co/2w6tva9>.

²¹ See Margi Murphy, *To Infinity and Beyond: Mark Zuckerberg, Elon Musk in Internet Space Race*, SYDNEY MORNING HERALD (July 24, 2018), <https://bit.ly/2BYBr1a>.

low-cost . . . high-speed, cable-like internet all over the world.”²² Starlink is already underway: earlier this year, the Commission authorized SpaceX to provide broadband satellite services and the company launched its first demo satellites.²³

In light of the remarkable array of options for ever-faster broadband, there can be no serious contention that onerous common-carrier regulation under Title II—designed for circumstances where “incurable monopoly” “prev[ails],” *U.S. Telecom*, 825 F.3d at 778 (Williams, J., concurring in part and dissenting in part)—is the right policy. The path forward is competitive innovation, not burdensome regulation.

B. New Technologies Require Continuing Unrestricted Broadband Growth

Even with all the remarkable applications and services available today, we are only in the early stages of the broadband economy. Between 2016 and 2021, domestic Internet traffic is expected to triple, with an increase per capita from 67 gigabytes to 191 gigabytes.²⁴ Over the same period, Internet video traffic will triple,

²² *Id.*

²³ See Nick Statt, *FCC Approves SpaceX’s Ambitious Satellite Internet Plans*, VERGE (Mar. 29, 2018), <https://bit.ly/2q1B6DX>; Samriddhi Dastidar, *SpaceX Launches First Starlink Satellites That Could Change Future of the Internet*, TECH TIMES (Feb. 25, 2018), <https://bit.ly/2Pg3Nrp>. Alphabet’s “Loon” project will also provide wireless Internet access via a “network of balloons traveling along the edge of space,” to expand Internet connectivity to underserved areas. LOON, <https://loon.co> (last visited Oct. 8, 2018).

²⁴ *VNI Forecast Highlights Tool*, CISCO, <https://bit.ly/2vV2W8c> (last visited Oct. 8, 2018).

mobile data traffic will experience a compound annual growth rate of 34%, and the total number of networked devices will increase from 2.5 billion to 4.4 billion.²⁵ According to the Pew Research Center, a host of new technologies and products will become available whose promise for American businesses and their customers can be realized only if Internet speed and capacity continue to grow at its historic pace.²⁶

Every year, more devices are connected “to the Internet, without the active role of a live person, so that they can collect and communicate information on their own and, in many instances, take action based on the information they send and receive”—a phenomenon called “the Internet of Things.”²⁷ Networked personal sensors will improve healthcare by permitting “continuous health monitoring.” Pew Report, *supra*, at 13. Networked sensors in traffic infrastructure will improve traffic control as signals adjust vehicle flow in real time, based on factors like congestion and weather.²⁸ The Internet of Things represents a massive opportunity for American businesses: analysts predict that combined Internet of Things markets

²⁵ *Id.*

²⁶ Pew Research Center, *Killer Apps in the Gigabit Age* 8 (Oct. 9, 2014) (“Pew Report”), <https://pewrsr.ch/2PfIMNJ>; cf. Christian de Looper, *Gigabit Ethernet Will Bring Big Speed, Smooth Streaming and Dynamite Apps*, TECH TIMES (Oct. 9, 2014), <https://bit.ly/2zURNMG>.

²⁷ Maureen K. Ohlhausen, Comm’r, Fed. Trade Comm’n, Remarks to the U.S. Chamber of Commerce 1 (Oct. 18, 2013), <https://bit.ly/2NpCxVF>.

²⁸ Yuming Ge et al., Brookings Inst., *Smart Transportation in China and the United States* 1, 5-6, 12 (Dec. 2017), <https://brook.gs/2BYG4YW>.

will reach “\$520 billion in 2021, more than double the \$235 billion spent in 2017.”²⁹

Fast broadband is the “lynchpin” of this new technology. Pew Report, *supra*, at 2.

Faster broadband speeds are also essential to high-tech applications known as “virtual reality” and “augmented reality.” Pew Report, *supra*, at 8; *see also* Pai Statement, 33 FCC Rcd. at 530 (JA____). Virtual reality uses a headset to create the illusion of being in another place: the headset covers the wearer’s eyes, and the image displayed on the headset screen changes in response to the viewer’s movements, making the viewer “feel transported to someone else’s reality.”³⁰ Augmented reality puts “virtual objects on real-world scenes in real-time” to create “a new artificial environment.”³¹ Although augmented reality requires further development, it has a wide range of potential applications in healthcare, defense, entertainment, and more.³² “52 of the Fortune 500 are testing or have deployed

²⁹ Ann Bosche et al., Bain & Co., *Unlocking Opportunities in the Internet of Things* 1 (2018), <https://bit.ly/2wtOmDH>.

³⁰ Rachel Metz, *A Film Studio for the Age of Virtual Reality*, MIT TECH. REV. (Feb. 13, 2015), <https://bit.ly/2zR6egh>.

³¹ Bernard Marr, *9 Powerful Real-World Applications of Augmented Reality (AR) Today*, FORBES (July 30, 2018), <https://bit.ly/2AnmE0H>.

³² *See* Sarah Murthi & Amitabh Varshney, *How Augmented Reality Will Make Surgery Safer*, HARV. BUS. REV. (Mar. 20, 2018), <https://bit.ly/2IFRX76>; *Augmented Reality*, U.S. NAVAL RES. LAB., <https://bit.ly/2kRswFQ> (last visited Oct. 8, 2018); Seerat Sohi, *How the NBA Is Using Augmented Reality to Transform the Fan Experience*, SB NATION (July 17, 2018), <https://bit.ly/2JvyIfC>.

[alternative reality or virtual reality] products/solutions.”³³ But to ensure the image syncs with the viewer’s movements will require high-capacity broadband infrastructure that can *instantly* transmit massive amounts of video and audio data.³⁴ More investment and innovation in broadband is thus crucial to realizing these (and other) technological advances.

II. The Commission’s Order Promotes Investment Critical For Developing The Next Generation Of Broadband Technology

In light of the vibrant and competitive market for broadband services, regulation under Title II can only be understood as “a solution in search of a problem.” *Order* ¶ 87 (JA____). And the specific regulatory approach adopted under the *Title II Order* imposed both higher compliance costs and legal uncertainty that made it impossible for companies to predict how they should do business. A Title II regulatory environment would hurt not only the broadband companies that must decide how to invest their resources, but also the countless American businesses that rely on a rapidly developing Internet infrastructure—and their customers. By contrast, “a return to Title I classification will facilitate critical broadband

³³ Don Stein & Paraj Mathur, *Mixed Reality Is Ready for Investors*, VENTUREBEAT (May 7, 2018), <https://bit.ly/2rxGPRM>.

³⁴ Daniel Newman, *4 Reasons 5G Is Critical for Mass Adoption of AR and VR*, FORBES (Mar. 27, 2018), <https://bit.ly/2DZCsbT>; Bo Begole, *Omnipresence and the Coming Age of “Remote Reality,”* VENTUREBEAT (July 13, 2015), <https://bit.ly/2y7b5Hm>.

investment and innovation by removing regulatory uncertainty and lowering compliance costs.” *Id.* ¶ 20 (JA____).

A. Burdensome Regulations Discourage Investment and Innovation

The *Title II Order* “consist[ed] of three components.” *U.S. Telecom*, 825 F.3d at 695. First, the FCC “reclassified both fixed and mobile ‘broadband Internet access service’ as telecommunications services,” *id.*—a classification that triggers “mandatory common-carrier regulation under Title II,” *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 973-74, 976 (2005). Second, the FCC used its authority to “forbear . . . from applying certain Title II provisions to broadband service.” *U.S. Telecom*, 825 F.3d at 695-96. Third, the FCC promulgated a set of “open internet rules, which it applied to both fixed and mobile broadband service.” *Id.* at 696. As explained below, that regulatory regime discouraged innovation and investment by subjecting providers to burdensome, unnecessary, and vague regulation, as well as the ever-present threat of yet more regulation to come.

1. *The Title II Order Created Regulatory Burdens and Tremendous Uncertainty for Providers*

Under the *Title II Order*, broadband providers found their “charges” and “practices” subject to the broad but ambiguous standards applicable under Sections 201 and 202 of the Communications Act. *See U.S. Telecom*, 825 F.3d at 691. And they were subject to the *Title II Order*’s sweeping but undefined “General Conduct Rule,” which “prohibit[ed] broadband providers from unreasonably interfer[ing]

with or unreasonably disadvantag[ing]” users’ access to content or content providers’ dissemination of content. *Id.* at 696 (internal quotation marks omitted); *see also Title II Order*, 30 FCC Rcd. at 5659-60 ¶ 136. Although these rules may sound superficially attractive, in practice they created massive regulatory uncertainty, chilling investment and innovation and raising the cost of regulatory compliance.

Consider first the uncertainties inherent in the Commission’s General Conduct Rule. Although the *Title II Order* outlined a non-exhaustive list of seven open-ended factors the Commission would consider in its “case-by-case” application of the General Conduct Rule under the “totality of the circumstances,” *Title II Order*, 30 FCC Rcd. at 5661-64 ¶¶ 138-145, that approach provided virtually no guidance on which broadband providers could base their business decisions—as is “typical[.]” with open-ended “[m]ulti-factor tests,” *USAir, Inc. v. Dep’t of Transp.*, 969 F.2d 1256, 1263 (D.C. Cir. 1992). In effect, the General Conduct Rule warned providers “to behave in accordance with what the Commission *might* require, without articulating any actual standard.” *Order* ¶ 247 (JA____); *see also* FCC Br. 75-76.

The FCC Wireless Telecommunications Bureau’s investigation into zero-rated Internet services perfectly illustrates the uncertainty created by these vague standards. “2016 was a year of significant creativity and experimentation” in “zero-rated services,” which allow users to access certain content “without the data

consumed . . . count[ing] toward the usage allowances . . . imposed by an operator’s service plan[.]”³⁵ For example, T-Mobile’s popular “Binge On” program “allowed users to watch video content from select [applications] like Netflix, Hulu, and YouTube without it counting against their monthly data allotment.”³⁶ It is difficult to see how programs like this could be harmful (and easy to see how they could benefit users), especially given the robust competition in mobile broadband. Nonetheless, the result under the *Title II Order*’s regulatory regime was “a thirteen-month investigation” into various mobile broadband providers’ zero-rating programs, “during which providers were left uncertain” about the future of their offerings. *Order* ¶ 250 (JA____).³⁷

In the end, the Wireless Telecommunications Bureau issued a report identifying a grab-bag of vague factors by which to “evaluat[e]” such programs under the *Title II Order*’s framework.³⁸ The report’s assessment of the specific zero-

³⁵ Wireless Telecomms. Bureau, Fed. Commc’ns Comm’n, *Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero-Rated Content and Services 2* (Jan. 11, 2017) (“Zero Rating Report”), <https://bit.ly/2OJMwK5>.

³⁶ AJ Dellinger, *Net Neutrality Advocates Have Concerns About T-Mobile’s New Unlimited Data Plan*, DAILY DOT (Aug. 18, 2016), <https://bit.ly/2RwF7wz>.

³⁷ See also T-Mobile USA, Inc., Comments, *Restoring Internet Freedom*, WC Docket No. 17-108, at 8-11 (July 17, 2017), <https://bit.ly/2ulyEaG> (describing “T-Mobile’s experience with Binge On” and the “nearly . . . full year” investigation into the program’s compliance with the General Conduct Rule).

³⁸ *Zero Rating Report* 3-5.

rating programs under consideration was inconclusive: for example, the report said that it was “*unlikely*” that Binge On “violates the General Conduct Rule,” but found “a *substantial possibility*” that certain other practices under investigation “*may* violate” that rule.³⁹ This type of “equivocal assessment” does nothing more than “signal[] to all innovators to ‘lawyer up.’”⁴⁰ And while the report was later retracted, *see Order* ¶ 158 (JA____), that only further emphasizes the uncertainty of the regulatory framework to which providers were subject under the *Title II Order*.

In such an uncertain environment, broadband providers ultimately have to choose between spending significant additional time and resources to analyze proposed plans against the Commission’s past statements and actions, in the hope that they will be in compliance, or shelving their plans to innovate and invest in new technologies. While the *Title II Order* adopted an “advisory opinion” process ostensibly designed to help mitigate confusion, it refused “to establish any firm deadlines to rule on” requests, *Title II Order*, 30 FCC Rcd. at 5707-08 ¶ 234, and the Enforcement Bureau could choose simply not to respond. *Id.* at 5706-07 ¶ 231. Sophisticated legal advice would be necessary even to *seek* an advisory opinion, in order to provide the Commission sufficient detail to persuade it to respond and to

³⁹ *Id.* at 11-12 (emphasis added).

⁴⁰ Brent Skorup, Comment, *Restoring Internet Freedom*, WC Docket No. 17-108, at 18 (Aug. 30, 2017), <https://bit.ly/2yeIzUz>.

ensure the opinion would bind the Commission.⁴¹ Although the advisory opinion process may have been a well-intentioned effort to provide guidance, it proved to be “too uncertain and costly,” not to mention out of step with “the rapid pace of innovation” in the broadband Internet access market. *Order* ¶ 252 (JA____-____) (citation omitted). Indeed, “no [Internet service provider] . . . requested an advisory opinion in the two years” following “the launch of the advisory opinion process.” *Id.*

2. *The Title II Order Also Chilled Investment Through the Threat of Regulatory Creep*

But the negative impact of the *Title II Order* extended even beyond the problems inherent in the specific regulatory framework imposed in that order, such as the extreme vagueness of the General Conduct Rule. “[C]oncern about ‘regulatory creep’” also “exacerbated the regulatory uncertainty created by the *Title II Order*.” *Order* ¶ 101 (JA____). Although the Commission decided to forbear from enforcing some Title II provisions for the time being, it acknowledged that the *entire sweep* of Title II could be imposed in the future. *See Title II Order*, 30 FCC Rcd. at 5839-40 ¶ 495 (stating FCC would proceed “incrementally” in considering Title II’s requirements); *id.* at 5839 ¶ 495 n.1487 (suggesting FCC could “whittle away” at forborne sections and noting “Commission’s authority to revisit its [current]

⁴¹ *See* John D. Seiver & Elizabeth Drogula, *Open Internet Advisory Opinions: Do You Feel Lucky?*, DAVIS WRIGHT TREMAINE (July 8, 2015), <https://bit.ly/2NsbOb5>.

decision”). The threat of being subject to the full range of Title II common-carrier regulation—“such as rate regulation and unbundling/open access requirements,” *Order* ¶ 101 (JA____)—left providers in limbo, with no clear idea of what the regulatory landscape would be in the near future.

Providers’ concerns about further regulation proved warranted. For example, “the Commission proceeded, in the wake of the reclassification in the *Title II Order*, to adopt complex and highly prescriptive privacy regulations for broadband Internet access service.” *Order* ¶ 158 (JA____) (citing *Protecting the Privacy of Customers of Broadband and Other Telecommunications Services*, 31 FCC Rcd. 13911 (2016)). Although those regulations were “ultimately . . . disapproved by Congress under the Congressional Review Act,” such “initial actions provide[d] cause for significant concerns that the regulatory framework adopted in the *Title II Order* would be anything but ‘light-touch’ over time.” *Id.* The prospect of regulatory creep under Title II further disincentivized investment in light of entirely reasonable “concerns that the Commission could reverse course in the future and impose a variety of costly regulations” that would sap such investments’ value. *Id.* ¶ 101 (JA____).

It is thus no surprise that, beginning in 2015, capital investments by U.S. broadband providers declined for the first time since the recession ended in 2009.⁴²

⁴² See Brogan, *supra*, at 2-3; Hal Singer, *Bad Bet by FCC Sparks Capital Flight From Broadband*, FORBES (Mar. 2, 2017), <https://bit.ly/2BYhbwF>; see also FCC Br. 81.

As econometric analysis suggests, providers “are likely to invest significantly less than they would absent Title II regulation.”⁴³ Simply put, because the *Title II Order* left broadband providers guessing as to which rules governed their activities, “investment was naturally withheld.”⁴⁴ At the same time, providers—particularly smaller ones, which “lack the extensive resources necessary to comply with burdensome regulation”—had to “divert significant resources to legal compliance” (i.e., lawyers and consultants). *Order* ¶ 103 (JA____). That is an especially perverse outcome, given the widespread concern about the need for better broadband in more rural, relatively underserved areas.⁴⁵ *Accord id.* ¶¶ 103-106 (JA____-____).

B. The Commission’s Order Lifts The Regulatory Burdens Created By The *Title II Order*

As the Commission correctly recognized, the *Title II Order*’s heavy-handed regulatory approach ran directly contrary to the “pro-competitive, deregulatory” purposes of the Telecommunications Act of 1996. *Order* ¶ 63 (JA____) (citation omitted); *accord U.S. Telecom*, 825 F.3d at 770 (Williams, J., concurring in part and

⁴³ Kevin A. Hassett & Robert J. Shapiro, *The Impact of Title II Regulation of Internet Providers on Their Capital Investments* 1, 4 (Georgetown McDonough Sch. of Bus. Res. Paper No. 2540563, 2014), <https://bit.ly/2zWJ3jg>.

⁴⁴ Rick Boucher, *Insight: Congress Needs to Put the Net Neutrality Debate to Rest to Help Close the Digital Divide*, BLOOMBERG BNA (Sept. 6, 2018), <https://bit.ly/2oMF1DJ>.

⁴⁵ *See generally* Rick Boucher, *Mississippi Has a Significant Stake in Outcome of Net Neutrality War*, CLARION LEDGER (July 1, 2018), <https://on.thec-l.com/2IOA6tA>.

dissenting in part) (discussing 1996 Act’s deregulatory purposes). By “end[ing] utility-style regulation of the Internet in favor of the market-based policies necessary to preserve the future of Internet freedom,” *Order* ¶ 2 (JA____), the Commission has lifted the unnecessary burdens and uncertainty imposed by the *Title II Order*, clearing the way for more investment and innovation. Indeed, although it will necessarily take time for the positive effects of the Commission’s recent decision to become fully manifest, preliminary data suggests that in anticipation of the repeal of the *Title II Order*, investment by broadband providers increased by *around \$1.5 billion*.⁴⁶ As explained above, *see supra* Part I.B, such investment is crucial to ensure that American businesses and their customers have access to the Internet infrastructure they “need ten, twenty years from now.” Pai Statement, 33 FCC Rcd. at 530 (JA____).

* * * * *

In returning to the longstanding treatment of broadband Internet access service as an “information service” not subject to Title II, the Commission acted well within its legal authority, adopting an interpretation of the relevant statutory language that the Supreme Court has already upheld as reasonable. *See Brand X*, 545 U.S. at 986. This Court should deny the petitions for review and affirm the

⁴⁶ See Jonathan Spalter, *Broadband CapEx Investment Looking Up in 2017*, USTELECOM (July 25, 2018), <https://bit.ly/2LHsxds>.

Commission's decision to lift an outdated and heavy-handed regulatory approach that would stand in the way of the broadband growth and innovation the country needs.

CONCLUSION

The petitions for review should be denied.

Date: October 18, 2018

Respectfully submitted,

Peter C. Tolsdorf
Leland P. Frost
Manufacturers' Center for
Legal Action
733 10th Street, NW
Suite 700
Washington, DC 20001
Phone: 202.637.3000
Email: ptolsdorf@nam.org
Email: lfrost@nam.org

*Counsel for the National
Association of Manufacturers*

Daryl Joseffer
Jonathan D. Urick
U.S. Chamber Litigation Center
1615 H Street, NW
Washington, DC 20062
Phone: 202.463.5337

*Counsel for the Chamber of
Commerce of the United States of
America*

/s/ John P. Elwood

John P. Elwood
Matthew X. Etchemendy
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com
Email: metchemendy@velaw.com

Kevin W. Brooks
Vinson & Elkins LLP
2001 Ross Avenue
Suite 3900
Dallas, TX 75201
Phone: 214.220.7805
Email: kbrooks@velaw.com

Counsel for Amici Curiae

Liz Dougherty
Business Roundtable
300 New Jersey Avenue, NW
Suite 800
Washington, DC 20001
Phone: 202.872.1260

Counsel for the Business Roundtable

Dileep Srihari
Telecommunications Industry
Association
1320 N. Courthouse Road
Suite 200
Arlington, VA 22201
Phone: 703.907.7715

*Counsel for the Telecommunications
Industry Association*

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 29(a)(5) and Fed. R. App. P. 32(a)(7), because this brief contains 6,114 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and D.C. Cir. R. 32(e)(1).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6), because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2016 in Times New Roman 14-point font.

Date: October 18, 2018

/s/ John P. Elwood

John P. Elwood

Vinson & Elkins LLP

2200 Pennsylvania Avenue, NW

Suite 500 West

Washington, DC 20037

Phone: 202.639.6518

Email: jelwood@velaw.com

Counsel for Amici Curiae

CERTIFICATE OF SERVICE

Pursuant to Rule 25 of the Federal Rules of Appellate Procedure, I hereby certify that, on October 18, 2018, I electronically filed the foregoing *Brief Amici Curiae of the National Association of Manufacturers, the Chamber of Commerce of the United States of America, the Business Roundtable, and the Telecommunications Industry Association in Support of Respondents* with the Clerk of the Court for the U.S. Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system, and served copies of the foregoing via the Court's CM/ECF system on all ECF-registered counsel.

/s/ John P. Elwood

John P. Elwood
Vinson & Elkins LLP
2200 Pennsylvania Avenue, NW
Suite 500 West
Washington, DC 20037
Phone: 202.639.6518
Email: jelwood@velaw.com

Counsel for Amici Curiae