

**Case Nos. 15-3291 & 15-3555**

**IN THE UNITED STATES COURT OF APPEALS  
FOR THE SIXTH CIRCUIT**

**THE STATE OF TENNESSEE,  
*Petitioner***

v.

**FEDERAL COMMUNICATIONS COMMISSION  
AND THE UNITED STATES OF AMERICA,  
*Respondents***

-----

**THE STATE OF NORTH CAROLINA,  
*Petitioner***

v.

**FEDERAL COMMUNICATIONS COMMISSION  
AND THE UNITED STATES OF AMERICA,  
*Respondents***

---

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

---

**Brief of *Amicus Curiae* Coalition for Local Internet Choice  
in Support of Respondents**

---

November 12, 2015

Ashley Stelfox\*  
Baller Herbst Stokes & Lide  
2014 P Street, NW  
Suite 200  
Washington, D.C. 20036  
(410) 703-7122  
astelfox@baller.com

\*General Counsel to the  
Coalition for Local Internet Choice

**CORPORATE DISCLOSURE STATEMENT**

Pursuant to Fed. R. App. P. 26.1 and 6 Cir. R. 26.1, *Amicus* makes the following disclosures:

The Coalition for Internet Choice (“CLIC”) is a nonprofit, non-stock corporation organized under the laws of the District of Columbia. CLIC has no parent corporation, and no publicly held company owns 10 percent or more of its stock.

**TABLE OF CONTENTS**

	<b>Page</b>
CORPORATE DISCLOSURE STATEMENT .....	i
TABLE OF CONTENTS .....	ii
TABLE OF AUTHORITIES .....	iii
STATEMENT OF IDENTITY, INTEREST, AND SOURCE OF AUTHORITY TO FILE .....	viii
SUMMARY OF THE ARGUMENT .....	1
ARGUMENT .....	2
I. Introduction .....	2
II. Local Internet Choice Is Critical for Localities Because of the Positive Relationship between Broadband and Economic Development .....	6
III. The FCC’s Findings that Removing State Law Barriers Would Expand Broadband Investment and Deployment, Increase Competition, and Serve the Public Interest Were Correct .....	13
A. Local Internet Choice Stimulates Broadband Investment and Deployment .....	13
B. Local Internet Choice Leads to a Flourishing of Private Investment .....	16
C. Local Internet Choice Advances the Public Interest .....	21
CONCLUSION .....	23

**TABLE OF AUTHORITIES**

	<b>Page</b>
<b>Federal Statutes</b>	
47 U.S.C. 1302(b).....	3
<b>Administrative Materials</b>	
<i>2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment</i> , FCC 15-10, (2015) .....	2
<i>City of Wilson, North Carolina Petition for Preemption of North Carolina General Statute Sections 160A-340 et seq., The Electric Power Board of Chattanooga, Tennessee Petition for Preemption of a Portion of Tennessee Code Annotated Section 7- 52-601, Memorandum Opinion and Order</i> , 30 FCC Rcd. 2408 (2015).....	passim
<b>Other Authorities</b>	
Andrew Cohill, <i>Danville Transforms Its Community with Fiber</i> , BROADBAND COMMUNITIES MAGAZINE (last visited Nov. 12, 2015), <a href="http://www.bbpmag.com/MuniPortal/EditorsChoice/111editorschoice.php">http://www.bbpmag.com/MuniPortal/EditorsChoice/111editorschoice.php</a> .....	14
Bento Lobo, <i>The Realized Value of Fiber Infrastructure in Hamilton County, TN</i> (June 18, 2015), available at <a href="http://ftpcontent2.worldnow.com/wrcb/pdf/091515EPBFiberStudy.pdf">http://ftpcontent2.worldnow.com/wrcb/pdf/091515EPBFiberStudy.pdf</a> .....	9
<i>Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia</i> , APPALACHIAN PROSPERITY PROJECT (Aug. 2014), <a href="http://aproject.org/reports/MFG%20Blueprint%20LR.pdf">http://aproject.org/reports/MFG%20Blueprint%20LR.pdf</a> .....	6
Brian Whiteacre, <i>et al.</i> , <i>Broadband’s Contribution to Economic Growth in Rural Areas: Moving towards a Causal Relationship</i> , 38 TELECOMM. POLICY 1011 (Mar. 26, 2013), <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2239876">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2239876</a> .....	8
Cecilia Nguyen, <i>Click! expands into UPlace</i> , THE NEWS TRIBUNE, May 19, 2003, at B2.....	21

Chris Mitchell, *Mesa’s Focus on Dig Once and Fiber Leases Pays Off*,  
COMMUNITY BROADBAND NETWORKS (Feb. 24, 2015),  
<http://muninetworks.org/content/mesas-focus-dig-once-and-fiber-leases-pays-community-broadband-bits-podcast-139> ..... 12

CLIC Comments, *Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition*, WC Docket Nos. 14-115, 14-116, (Aug. 29, 2014), *available at*  
<http://apps.fcc.gov/ecfs/document/view?id=7521826170> ..... 12

Comment of Joyce Coltrin, *Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition*, Federal Communication Commission Docket No. 14-116, filed on July 29, 2014..... 21

Comments of NATOA, *et al.*, *NBP Public Notice #7, Contribution of Federal State, Tribal, and Local Government to Broadband*, GN 09-47, 09-51, 09-137, filed Nov. 6, 2009..... 16

*Expansion Plans*, GOOGLE FIBER, <https://fiber.google.com/newcities/>..... 15

FRONTIER COMMUNICATIONS, <http://west.frontier.com/or/sandy>  
(last visited Nov. 12, 2015)..... 17

*Garrett County, MD and Declaration Networks Group Announce Landmark Public/Private Partnership to Eliminate the Digital Divide*, YAHOO NEWS! (Sept. 15, 2015), <http://yhoo.it/1OGroOU> ..... 19

George Ford & Thomas Koutsky, *Economic Development: A Municipal Case Study from Florida*, 17 REV. OF URBAN & REG’L DEV. 219 (2005), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=925973](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=925973)..... 8

James Lardner, *Wave of the Future*, REMAPPING DEBATE (May 25, 2011), [http://www.remappingdebate.org/sites/default/files/Wave%20of%20the%20future\\_1.pdf](http://www.remappingdebate.org/sites/default/files/Wave%20of%20the%20future_1.pdf) ..... 12

James Manyika, *et al.*, *Disruptive technologies: Advances that will transform life, business, and the global economy*, MCKINSEY GLOBAL INSTITUTE (May 2013), [http://www.mckinsey.com/insights/business\\_technology/disruptive\\_technologies](http://www.mckinsey.com/insights/business_technology/disruptive_technologies) ..... 7

Jed Kolko, *Broadband and Local Growth*, PUB. POLICY INSTIT. OF CAL. 1  
 (Aug. 2010),  
<http://www.broadbandillinois.org/uploads/cms/documents/ssrn-id1680597.pdf> ..... 8

Jim Baller, *et al.*, *The Killer App for Local Fiber Networks*, BROADBAND COMMUNITIES MAGAZINE (Dec. 2014),  
<http://www.bbpmag.com/MuniPortal/EditorsChoice/1114editorschoice.php> ..... 7, 10

Joel Rose, *Frustrated Cities Take High-Speed Internet Into Their Own Hands*, NPR (Mar. 4, 2014),  
<http://www.npr.org/sections/alltechconsidered/2014/03/04/285764961/frustrated-cities-take-high-speed-internet-into-their-own-hands> ..... 19

Jon Brodtkin, *Comcast brings fiber to city that it sued 7 years ago to stop fiber rollout*, ARS TECHNICA (Apr. 20, 2015),  
<http://arstechnica.com/business/2015/04/comcast-brings-fiber-to-city-that-it-sued-7-years-ago-to-stop-fiber-rollout/> ..... 17

Jon Brodtkin, *Fed up with slow and pricey Internet, cities start demanding gigabit fiber*, ARS TECHNICA (Nov. 22, 2013),  
<http://arstechnica.com/business/2013/11/fed-up-with-slow-and-pricey-internet-cities-start-demanding-gigabit-fiber/> ..... 19, 20, 22

Jon Brodtkin, *Want gigabit fiber home Internet? Move to one of these cities*, ARS TECHNICA (Sept. 26, 2013),  
<http://arstechnica.com/business/2013/09/want-gigabit-fiber-home-internet-move-to-one-of-these-cities/> ..... 14

Karl Bode, *Ting/Tucows to Expand Gigabit Fiber to ‘Five or Six’ New Markets*, DSL REPORTS (Aug. 6, 2015),  
<http://www.dslreports.com/shownews/TingTucows-to-Expand-Gigabit-Fiber-to-Five-or-Six-New-Markets-134708> ..... 15, 19

Kate Murphy, *For the Tech-Savvy With a Need for Speed, a Limited Choice of Towns With Fiber*, N.Y. TIMES (Apr. 2, 2014),  
<http://nyti.ms/1isEYkS> ..... 15

*Lafayette is first in the nation to get Cox’s new broadband speed*, BUSINESS REPORT (Apr. 1, 2009),  
<https://www.businessreport.com/article/lafayette-is-first-in-the-nation-to-get-coxs-new-broadband-speed> ..... 18

Lara Malakoff & Katherine Bates, *Broadband’s Positive Impact on Ranching and Agriculture*, ICF INT’L (Nov. 15, 2013), <http://www.icfi.com/insights/white-papers/2013/broadbands-positive-impact-ranching-agriculture> ..... 6

Lee Rainie, *et al.*, *Killer Apps in the Gigabit Age*, PEW RESEARCH CENTER (Oct. 9 2014), <http://pewrsr.ch/1BMRnc1> ..... 3

Lisa Gonzalez, *Auburn Essential Services; A Workhorse in Northeast Indiana Saves Jobs, Serves Public*, COMMUNITY BROADBAND NETWORKS (Jan. 3, 2014), <http://muninetworks.org/content/auburn-essential-services-workhorse-northeast-indiana-saves-jobs-serves-public>..... 12

Lisa Gonzalez, *Municipal Network SpringNet Is Great for Local Businesses*, COMMUNITY BROADBAND NETWORKS (Sept. 26, 2012), <http://muninetworks.org/content/municipal-network-springnet-great-local-businesses>..... 11

Melonee Hurt, *Job Expansion in Martinsville, Va.*, LIVABILITY (Sept. 29, 2011), <http://www.livability.com/va/martinsville/business/job-expansion-martinsville-va>..... 11

Patina Adger, *Suddenlink Launches 1 Gig Service in BCS*, KBTX (July 10, 2015), <http://www.kbtx.com/home/headlines/Suddenlink-Launches-1G-313106881.html>..... 20

President Barack Obama, *Remarks by the President on Promoting Community Broadband, Delivered at Cedar Falls Utilities* (Jan. 14, 2015), <https://www.whitehouse.gov/the-press-office/2015/01/14/remarks-president-promoting-community-broadband>..... 11

Press Release, UC2B, *Urbana-Champaign Big Broadband Not-For-Profit (UC2B NFP) To Hold Expansion News Conference*, (May 29, 2014), <http://uc2b.net/wordpress/wp-content/uploads/2014/05/UC2B-iTV3-Press-Packet.pdf>..... 18

Steve Fullhart, *GigaSpeed Internet Soon to be Offered in B/CS*, KBTX (Sept. 24, 2014), <http://www.kbtx.com/home/headlines/GigaSpeed-Internet-Soon-to-be-Offered-in-BCS-276059641.html> ..... 20

Tom Wheeler, Chairman, FCC, Remarks at 1776 Headquarters,  
Washington DC: The Facts and Future of Broadband Competition 4  
(Sept. 4, 2014), [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-329161A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-329161A1.pdf) ..... 4

WAVE BROADBAND, <http://www.wavebroadband.com/offers/>  
(last visited Nov. 12, 2015) ..... 17



**STATEMENT OF IDENTITY, INTEREST, AND SOURCE OF  
AUTHORITY TO FILE**

The Coalition for Local Internet Choice (“CLIC”) represents a variety of public and private interests that support the authority of local communities to make the broadband Internet choices that are essential for economic competitiveness, democratic discourse, and quality of life in the 21st century. CLIC’s membership ranges from city leaders and local businesses to Fortune 100 Internet companies, national public interest groups, and industry-wide associations.

The primary purpose of this *amicus curiae* brief is to underscore the importance of local Internet choice to the deployment of advanced networks, and to outline the critical role advanced networks play in furthering every goal a community has in meeting the challenges of the 21<sup>st</sup> century. Local Internet choice refers to the rights of communities to choose, through their elected officials, the best broadband Internet infrastructure for their businesses, institutions, and residents. Communities are best situated to make Internet infrastructure choices because they understand the unique needs of their businesses, institutions, and residents, and the broader imperative of obtaining an advanced broadband network that is capable of

facilitating progress in every area of importance to a community including: education, modern health care, safety, energy efficiency, smart transportation, democratic engagement, economic development, and much more.

In addition, this *amicus curiae* brief provides support for some of the FCC's factual findings in *City of Wilson, North Carolina Petition for Preemption of North Carolina General Statute Sections 160A-340 et seq., The Electric Power Board of Chattanooga, Tennessee Petition for Preemption of a Portion of Tennessee Code Annotated Section 7- 52-601, Memorandum Opinion and Order*, 30 FCC Rcd. 2408 (2015) ("Order") (PA 1-1).

This brief was drafted in part and filed by General Counsel to CLIC, Ashley Stelfox, who also participated in the drafting of the brief for the Intervenor, the City of Wilson, NC. No other attorney for the Parties or Intervenors authored this brief in whole or in part. CLIC is the sole funder of this brief.

CLIC respectfully submits this *amicus curiae* brief pursuant to Fed. R. App. P. 29(a). All parties have consented to this filing.

## **SUMMARY OF THE ARGUMENT**

Advanced broadband capacity is critical to a community's economic viability and vitality in the 21<sup>st</sup> century. Communities that are empowered to advocate for better, faster, cheaper broadband and to act to improve their current broadband infrastructure in the face of resistance from traditional service providers will be the same ones that possess the necessary broadband Internet infrastructure in the future.

A strong connection exists between broadband and economic development. This is confirmed through a survey of relevant academic studies and reports, as well as through the stories of communities that have invested in broadband, especially those that have invested in advanced broadband infrastructure.

In its *Order*, the FCC found that by removing portions of North Carolina and Tennessee state law barriers, Wilson and Chattanooga would experience higher levels of investment in broadband and more competition in the broadband marketplace, and that the public interest would be benefited in both communities. The same is true for many other communities where local Internet choice exists. Local Internet choice produces significant new investment in broadband infrastructure, spurs competitive action by incumbent service providers, and advances the public interest.

## ARGUMENT

### **I. Introduction**

Affordable, ubiquitous access to advanced communications capabilities is essential to our national and local interests, but that level of access will not occur in thousands of communities across America without the active engagement of local governments. The FCC, the expert agency in the field, recently issued a Broadband Progress Report and found that “meeting the definition of ‘advanced telecommunications capability’ require[d] consumers to have access to actual download (i.e., to the customer) speeds of at least 25 [megabits per second] and actual upload (i.e., from the customer) speeds of at least 3 [megabits per second].”<sup>1</sup> The FCC noted that, at home, most consumers are connected to multiple devices and need speeds at the 25 megabits per second (Mbps) level or higher in order for those devices to function simultaneously.<sup>2</sup> That general requirement of 25 Mbps does not take into account everyday uses that necessitate even greater capacity such as video streaming, online learning programs, or downloading larger files; moreover, it does not consider commercial capacity requirements, which are

---

<sup>1</sup> *2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment*, FCC 15-10, ¶ 26 (rel. February 4, 2015) (“*2015 Broadband Progress Report*”).

<sup>2</sup> Verizon recommends a 50 Mbps/50 Mbps plan for houses where there are 3-5 connected devices being used simultaneously; Comcast recommends plans with 25 Mbps for households with 2-3 devices online. *See 2015 Broadband Progress Report*, at ¶ 38, n. 193, 194.

typically much greater, or future applications that could require Internet capacity of greater than a Gigabit per second (Gbps).<sup>3</sup>

In the same 2015 Broadband Progress Report, the FCC provided a general overview of the broadband marketplace, as it is required to do by 47 U.S.C. 1302(b), to ensure that broadband is being deployed on a reasonable and timely basis. In the Report, the FCC found that 17 percent of Americans or 55 million people lack access to broadband that meets the 25 Mbps/3 Mbps definition. In rural America, this problem is particularly acute. The Report found that the majority of rural Americans, 53 percent or 22 million people, lack access to that same level of broadband. In light of these findings, the Report concluded that “broadband is not being deployed to all Americans in a reasonable and timely fashion.”<sup>4</sup>

The Report also flagged lack of competition as a major impediment to the widespread availability of advanced broadband. At 25 Mbps, three-quarters of American homes do not have a competitive choice for broadband, meaning that even where Americans may enjoy more robust broadband than their underserved

---

<sup>3</sup> Lee Rainie, *et al.*, *Killer Apps in the Gigabit Age*, PEW RESEARCH CENTER (Oct. 9 2014), <http://pewrsr.ch/1BMRnc1>.

<sup>4</sup> *2015 Broadband Progress Report* at ¶ 6.

peers, they only have one option for a service provider<sup>5</sup>—and that service provider may not offer services that are affordable or accessible for many Americans.

Indeed, without any competitors, a service provider has much less incentive to invest in new technologies, provide adequate customer service, or offer accessible rates.

At the same time, the importance of next-generation broadband communications networks to America's economic development and global competitiveness has never been more apparent. Around the world, next-generation networks are stimulating innovation and investment. The countries that make affordable access to such networks most widely and quickly available — to their businesses, institutions, and residents — will be the ones that are most successful in the emerging information-based global economy. Nationally, the competitive landscape is not vastly different. Many industries and businesses now consider broadband a prerequisite for locating in a particular community. Communities recognize that in order to attract these new businesses, and ultimately bring new jobs and residents into the community, they must have broadband infrastructure that can support the needs of industrial and business users.

---

<sup>5</sup> Tom Wheeler, Chairman, FCC, Remarks at 1776 Headquarters, Washington DC: The Facts and Future of Broadband Competition 4 (Sept. 4, 2014), [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-329161A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-329161A1.pdf).

It would understate the case for robust broadband to only discuss it as a competitive necessity. Advanced communications networks represent the electricity of the 21<sup>st</sup> Century — the platform, driver, and enabler of our economy, our democracy, and almost every other area of key interest to local governments. The link between these core government functions and the availability of advanced broadband is so apparent to localities that creative and innovative local governments have sought to secure the benefits of this infrastructure for their communities for nearly a generation.

For these reasons, local communities must have the authority and opportunity to play an essential role in determining and shaping their own broadband Internet futures. Communities, through their local leaders, are best suited to choose the right approach for obtaining better, faster, cheaper broadband. In some cases, communities have worked with incumbent providers to increase the incumbents' broadband offerings in the community. Others have partnered with private companies to take advantage of existing infrastructure or develop new broadband infrastructure. Still others have found it necessary to build their own networks. The method through which a community works to bring advanced broadband access and availability to its community is less important than the outcome — that communities have access to advanced broadband — but having a choice, itself, is critical.

## II. Local Internet Choice Is Critical for Localities Because of the Positive Relationship between Broadband and Economic Development

In almost every case, one of the major forces driving a community's advocacy for better broadband is the community's desire to promote economic development and ensure the community's future viability and vitality.

Communities recognize that as the nation's economy shifts to an information-based economy, the communities that do not have access to advanced broadband networks will be left behind. It is no longer only traditional IT-intensive industries that require high-capacity Internet; rather, demand is growing in nearly all sectors as new Internet-based technologies continue to emerge,<sup>6</sup> and demand will continue to rise into the future. A 2013 report by the McKinsey Global Institute calculated the potential economic value of various disruptive technologies worldwide, including the Internet of Things, cloud technology, and 3-D printing.<sup>7</sup> The results

---

<sup>6</sup> See, e.g., Lara Malakoff & Katherine Bates, *Broadband's Positive Impact on Ranching and Agriculture*, ICF INT'L (Nov. 15, 2013) (discussing the various agricultural uses for broadband), <http://www.icfi.com/insights/white-papers/2013/broadbands-positive-impact-ranching-agriculture>; *Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia*, APPALACHIAN PROSPERITY PROJECT (Aug. 2014) (explaining how broadband has attracted diverse manufacturing companies to Southwest Virginia including a mattress manufacturer), <http://aproject.org/reports/MFG%20Blueprint%20LR.pdf>.

<sup>7</sup> James Manyika, et al., *Disruptive technologies: Advances that will transform life, business, and the global economy*, MCKINSEY GLOBAL



demonstrated that new Internet-based technologies are capable of revolutionizing entire industries and generating trillions of dollars in economic impact.<sup>8</sup>

Indeed, there already exists a substantial connection between broadband availability and a community's economic growth opportunities. In December 2014, Broadband Communities Magazine published an article authored by CLIC leadership that catalogues and summarizes the most influential studies conducted within the past ten years linking economic development to broadband availability.<sup>9</sup> Each study represents a significant step forward in understanding the relationship between broadband and economic development, but a few are worth noting here. In 2005, a study by Dr. George Ford and Mr. Thomas Koutsky of the Phoenix Institute concluded that "broadband infrastructure can be a significant contributor to economic growth ... [and] efforts to restrict municipal broadband investment could deny communities an important tool in promoting economic

---

INSTITUTE (May 2013),  
[http://www.mckinsey.com/insights/business\\_technology/disruptive\\_technologies](http://www.mckinsey.com/insights/business_technology/disruptive_technologies).

<sup>8</sup> *Id.* at 5.

<sup>9</sup> Jim Baller, *et al.*, *The Killer App for Local Fiber Networks*, BROADBAND COMMUNITIES MAGAZINE (Dec. 2014),  
<http://www.bbpmag.com/MuniPortal/EditorsChoice/1114editorschoice.php>.

development.”<sup>10</sup> A 2010 study by Dr. Jed Kolko of the Public Policy Institute of California demonstrated a positive relationship that “leans in the direction of a causal relationship” between broadband expansion and local economic growth.<sup>11</sup> A 2013 study led by Dr. Brian Whiteacre of Oklahoma State University examined the relationship between broadband and economic development for rural areas and concluded that high levels of broadband adoption in rural areas “causally (and positively) impacted income growth” and economic development.<sup>12</sup>

Two more recent studies emphasize the economic benefits of the availability of advanced broadband. Dr. Bento Lobo of the University of Tennessee at Chattanooga measured the realized value of fiber to Hamilton County, Tennessee

---

<sup>10</sup> George Ford & Thomas Koutsky, *Economic Development: A Municipal Case Study from Florida*, 17 REV. OF URBAN & REG’L DEV. 219 (2005), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=925973](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=925973).

<sup>11</sup> Jed Kolko, *Broadband and Local Growth*, PUB. POLICY INSTIT. OF CAL. 1 (Aug. 2010), <http://www.broadbandillinois.org/uploads/cms/documents/ssrn-id1680597.pdf>.

<sup>12</sup> Brian Whiteacre, *et al.*, *Broadband’s Contribution to Economic Growth in Rural Areas: Moving towards a Causal Relationship*, 38 TELECOMM. POLICY 1011 (Mar. 26, 2013), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2239876](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2239876).

in a study earlier this year.<sup>13</sup> Dr. Lobo considered the net benefit of high-speed broadband as well as its impact in four categories: households, the community, businesses, and utility effects. The study utilized data from Hamilton County, Tennessee, specifically measuring the impact of Chattanooga EPB's fiber-to-the-home (FTTH) broadband network and Smart Grid infrastructure. Dr. Lobo found that from 2011 to 2015, the fiber infrastructure in the county generated benefits ranging from \$865 million to \$1.3 billion overall and between \$2,832 and \$3,762 in benefits *per resident*. Most of the benefits came in the form of new investments, business efficiencies, and such smart grid efficiencies as reduced maintenance, operating, and repair costs.

In addition, Broadband Communities recently published a report by analyst Steven Ross highlighting the relationship between broadband availability and population growth. Using data from the National Broadband Map, the study evaluated the impact of access to 25 Mbps broadband service on population growth while controlling for other causes. The study concluded that access to such broadband service is strongly correlated with population growth. Specifically, counties ranked in the bottom half of their state for access to 25 Mbps experienced

---

<sup>13</sup> Bento Lobo, *The Realized Value of Fiber Infrastructure in Hamilton County, TN* (June 18, 2015), available at <http://ftpcontent2.worldnow.com/wrcb/pdf/091515EPBFiberStudy.pdf>

population growth of only of about 0.27 percent from 2010 to 2013. In contrast, counties in the top half of their state rankings saw population growth of 2.79 percent. These findings are especially important to rural communities, which have seen out-migration in recent years, especially among younger residents, and for which population retention and growth represents an existential issue.

These studies represent a portion of an evolving body of scholarship that continues to find a significant link between broadband and economic development. Studies alone, however, can only tell part of the story of broadband in America. The rest of the story is told by the localities themselves, which increasingly recognize advanced communications networks as essential to growth, economic vitality, lifestyle, education, and healthcare.

Cedar Falls, Iowa is a prime example of what can happen when a city invests in its broadband infrastructure. In the 1990s, Cedar Falls Utilities built a city-wide, municipal broadband network. A little over five years ago, Cedar Falls made the transition to an all-fiber network and became the first gigabit city in the state of Iowa. The numbers are telling: twenty years ago, the city had twenty-seven businesses and \$5 million in taxable valuation; in 2014, the city had 160 businesses and \$270 million in taxable valuation.<sup>14</sup> President Obama has called the Cedar

---

<sup>14</sup> Jim Baller, *et al.*, *The Killer App for Local Fiber Networks*, BROADBAND COMMUNITIES MAGAZINE (Nov. 2014), <http://www.bbpmag.com/MuniPortal/EditorsChoice/1114editorschoice.php>.

Falls network “visionary” and Google named Cedar Falls the best city in Iowa for e-commerce.<sup>15</sup>

While Cedar Falls has deservedly received substantial attention for its network, there are numerous additional examples of cities building out robust broadband networks and then seeing new businesses and industries locating and investing in their communities. Martinsville, Virginia credits its municipal fiber network with attracting major businesses to the city, including a large defense contractor and an international technology consulting company. These new offices alone created over 500 new jobs in Martinsville, a city of 14,000 people.<sup>16</sup> In Springfield, Missouri, the community-based broadband network enabled travel search behemoth Expedia to locate a call center in the city.<sup>17</sup> Pulaski, Tennessee’s municipal broadband network enabled that city to attract federal government business in the form of contracts to back up large data sets in Pulaski’s data

---

<sup>15</sup> President Barack Obama, Remarks by the President on Promoting Community Broadband, Delivered at Cedar Falls Utilities (Jan. 14, 2015), <https://www.whitehouse.gov/the-press-office/2015/01/14/remarks-president-promoting-community-broadband>.

<sup>16</sup> Melonee Hurt, *Job Expansion in Martinsville, Va.*, LIVABILITY (Sept. 29, 2011), <http://www.livability.com/va/martinsville/business/job-expansion-martinsville-va>.

<sup>17</sup> Lisa Gonzalez, *Municipal Network SpringNet Is Great for Local Businesses*, COMMUNITY BROADBAND NETWORKS (Sept. 26, 2012), <http://muninetworks.org/content/municipal-network-springnet-great-local-businesses>.

center.<sup>18</sup> Mesa, Arizona's investment in fiber throughout the city has been credited with drawing numerous technology companies to the area, including Apple's Global Command Center.<sup>19</sup>

In addition to attracting new businesses, many communities credit advanced broadband networks with preserving existing businesses and industries. In Bristol, Virginia, a major coal producer elected to stay in Bristol after merging with another producer and cited Bristol's broadband service as a major factor in its decision.<sup>20</sup> Auburn, Indiana risked losing one of the largest businesses in the city, Cooper Tire and Rubber, due to lack of broadband availability.<sup>21</sup> Its municipal electrical system already had some broadband infrastructure in place and was able

---

<sup>18</sup> CLIC Comments, *Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition*, WC Docket Nos. 14-115, 14-116, (Aug. 29, 2014), available at <http://apps.fcc.gov/ecfs/document/view?id=7521826170>.

<sup>19</sup> Chris Mitchell, *Mesa's Focus on Dig Once and Fiber Leases Pays Off*, COMMUNITY BROADBAND NETWORKS (Feb. 24, 2015), <http://muninetworks.org/content/mesas-focus-dig-once-and-fiber-leases-pays-community-broadband-bits-podcast-139>.

<sup>20</sup> James Lardner, *Wave of the Future*, REMAPPING DEBATE (May 25, 2011), [http://www.remappingdebate.org/sites/default/files/Wave%20of%20the%20future\\_1.pdf](http://www.remappingdebate.org/sites/default/files/Wave%20of%20the%20future_1.pdf).

<sup>21</sup> Lisa Gonzalez, *Auburn Essential Services; A Workhorse in Northeast Indiana Saves Jobs, Serves Public*, COMMUNITY BROADBAND NETWORKS (Jan. 3, 2014), <http://muninetworks.org/content/auburn-essential-services-workhorse-northeast-indiana-saves-jobs-serves-public>.

to extend the existing infrastructure to Cooper Tire and Rubber in order to retain the business.<sup>22</sup>

### **III. The FCC's Findings that Removing State Law Barriers Would Expand Broadband Investment and Deployment, Increase Competition, and Serve the Public Interest Were Correct**

In the Order, the FCC considered whether removing portions of North Carolina and Tennessee laws would expand investment and deployment, increase competition, and serve the public interest. The FCC concluded that doing so would further each stated goal. *Order*, at ¶ 15 (P.A. 6). The FCC's findings were correct as applied to North Carolina and Tennessee and can also be applied to nearly any community where local Internet choice exists.

#### **A. Local Internet Choice Stimulates Broadband Investment and Deployment**

The FCC determined that if Wilson and Chattanooga EPB were not precluded by state laws from expanding their networks, they would invest in new broadband deployments. This is a principle of local Internet choice. Where localities are unconstrained by state law barriers, there has been a renaissance of creative broadband projects, opportunities, and investment.

In the particular cases of Wilson and Chattanooga EPB, the FCC found that both would be deploying broadband to the surrounding regions but for state law

---

<sup>22</sup> *Id.*

barriers. The FCC noted both the technical capabilities of these networks, as well as demand for services, and concluded that “but for the challenged statutory provisions, EPB and Wilson would likely expand their broadband services into neighboring communities and meet existing demand for service in those communities.” *Order*, at ¶ 76. (P.A. 38).

Given local Internet choice, localities engage the broadband market in a wide variety of ways. Hundreds of local governments have built their own networks. In many of these cases, a city-owned electric utility built a network that competes with existing cable and telephone companies. Residents and businesses can choose between the city and national companies for high-speed Internet access, television, and telephone services. These municipal networks were some of the first in the nation to offer citywide ultra-fast gigabit access.<sup>23</sup>

In other cases, the city has built a physical network and allows one or more independent companies to use it to offer services within the community. Danville,

---

<sup>23</sup> Jon Brodtkin, *Want gigabit fiber home Internet? Move to one of these cities*, ARS TECHNICA (Sept. 26, 2013) (listing municipal networks among the early adopters of gigabit networks), <http://arstechnica.com/business/2013/09/want-gigabit-fiber-home-internet-move-to-one-of-these-cities/>.



Virginia, and Mount Vernon, Washington, have both seen significant job growth with this approach.<sup>24</sup>

And in other cases, cities have partnered with private companies to get ultra-fast networks. Google is in the process of building fiber networks in approximately a dozen communities with which it has partnered — and it is in negotiation with a dozen or so more communities that are interested in partnerships.<sup>25</sup> Similarly, Ting Fiber has been recruited by multiple cities, and has developed partnerships with several (including Westminster, Maryland), and is in negotiation with several more.<sup>26</sup>

---

<sup>24</sup> See Andrew Cohill, *Danville Transforms Its Community with Fiber*, BROADBAND COMMUNITIES MAGAZINE (last visited Nov. 12, 2015), <http://www.bbpmag.com/MuniPortal/EditorsChoice/1111editorschoice.php>; see also Kate Murphy, *For the Tech-Savvy With a Need for Speed, a Limited Choice of Towns With Fiber*, N.Y. TIMES (Apr. 2, 2014), <http://nyti.ms/1isEYkS>.

<sup>25</sup> *Expansion Plans*, GOOGLE FIBER, <https://fiber.google.com/newcities/>.

<sup>26</sup> Karl Bode, *Ting/Tucows to Expand Gigabit Fiber to 'Five or Six' New Markets*, DSL REPORTS (Aug. 6, 2015), <http://www.dslreports.com/shownews/TingTucows-to-Expand-Gigabit-Fiber-to-Five-or-Six-New-Markets-134708>.

## **B. Local Internet Choice Leads to a Flourishing of Private Investment**

Where localities invest in their broadband infrastructure, incumbents follow suit — as one would expect, given the basic economic reality that competition begets investment and innovation. Indeed, private investment has followed public investment in nearly every instance where a locality has decided to invest in broadband, and in several notable cases, merely investigating the possibility of building a municipal network causes incumbents to respond by upgrading their own networks.<sup>27</sup> The FCC recognized this reality in *Wilson and Chattanooga*: “[t]he experience of Wilson and EPB also suggests that the threat of entry or actual entry of a municipal provider spurs positive responses by the incumbent broadband provider.” *Order*, at ¶ 49. (P.A. 26).

*Wilson* and *Chattanooga* both have access to world-class broadband through their own investments and the responses of their competitors. For years, incumbent providers said there was no use for a gigabit network, and that such networks were a wasteful investment. *Chattanooga* and *Wilson*, however, decided

---

<sup>27</sup> See, e.g., Comments of NATOA, *et al.*, *NBP Public Notice #7, Contribution of Federal State, Tribal, and Local Government to Broadband*, GN 09-47, 09-51, 09-137, filed Nov. 6, 2009, at 35. Lake City, Colorado was promised an expansion and improvement of broadband services, but was told that any expansion would be in the future. Lake City conducted a study to look into its broadband options. This step alone spurred action for the service provider, which immediately moved up the timeline and budget for improvements.

to invest in a next-generation broadband networks regardless. They both correctly forecasted that new applications would require higher bandwidths and speeds such that investing in networks that were only capable of meeting the demands at the time would be inadequate. Their foresight has been proven, and moreover, has incited incumbent providers to upgrade their own networks to provide comparable services. The incumbent providers in Chattanooga, Comcast and AT&T, have upgraded their networks in response to the city's own efforts. Most recently, Comcast announced that Chattanooga is one of a handful of cities where it will be launching 2Gbps FTTH service.<sup>28</sup>

Other communities have seen a similar response from incumbent Internet service providers after investing in broadband. SandyNet, the community-owned broadband network in Sandy, Oregon, offers residents 100 Mbps symmetrical service for \$40 per month or 1 Gbps for \$60 per month. SandyNet's main competitors responded to this service as one would expect — by competing. The incumbent provider, Frontier, dropped its price to \$30 per month, although only for speeds up to 6 Mbps.<sup>29</sup> Wave Broadband, another provider in the community, has

---

<sup>28</sup> Jon Brodtkin, *Comcast brings fiber to city that it sued 7 years ago to stop fiber rollout*, ARS TECHNICA (Apr. 20, 2015), <http://arstechnica.com/business/2015/04/comcast-brings-fiber-to-city-that-it-sued-7-years-ago-to-stop-fiber-rollout/>.

<sup>29</sup> FRONTIER COMMUNICATIONS, <http://west.frontier.com/or/sandy> (last visited Nov. 12, 2015).

now initiated a year-long promotion in Sandy, offering 55 Mbps for \$40 per month.<sup>30</sup>

Likewise, Lafayette, Louisiana was at the center of a “high-stakes battle for Internet customers.”<sup>31</sup> After Lafayette completed a build out of its all-fiber broadband and was about to launch its upgraded services, Cox Cable announced that Lafayette would be the first city in the country that Cox would upgrade to DOCSIS 3.0, a cable technology that combines channels together to increase Internet speed and capabilities. At the time, Lafayette’s municipal Internet services were offered through Lafayette Utilities System (LUS) at speeds of 50 Mbps for uploads and downloads. Cox’s DOCSIS 3.0 enabled Internet speeds of 50 Mbps upload and 5 Mbps download.

Even in communities where the locality does not itself build or extend a network, local Internet choice enables and catalyzes private investment in broadband. In Champaign and Urbana, Illinois, a private company, iTV-3, committed in 2014 to building new infrastructure throughout the communities in

---

<sup>30</sup> WAVE BROADBAND, <http://www.wavebroadband.com/offers/> (last visited Nov. 12, 2015).

<sup>31</sup> *Lafayette is first in the nation to get Cox’s new broadband speed*, BUSINESS REPORT (Apr. 1, 2009), <https://www.businessreport.com/article/lafayette-is-first-in-the-nation-to-get-coxs-new-broadband-speed>.

return for use of publicly-owned fiber assets.<sup>32</sup> In Garrett County, Maryland, Declaration Networks recently committed to investing in an advanced wireless network in partnership with the county.<sup>33</sup> And in Westminster, Maryland, a city investment in fiber optics led Ting Internet to invest in infrastructure and staff to provide gigabit services throughout the city.<sup>34</sup>

College Station, Texas received an upgrade from its incumbent provider after the city became serious about finding a strategic partner to upgrade its network. In late 2013, College Station issued an RFI requesting information from private entities about partnering to develop a fiber network in the city and initiated talks with several private companies.<sup>35</sup> Then in 2014, Suddenlink announced the launch of “Operation GigaSpeed” in College Station:

---

<sup>32</sup> Press Release, UC2B, Urbana-Champaign Big Broadband Not-For-Profit (UC2B NFP) To Hold Expansion News Conference, (May 29, 2014), <http://uc2b.net/wordpress/wp-content/uploads/2014/05/UC2B-iTV3-Press-Packet.pdf>.

<sup>33</sup> *Garrett County, MD and Declaration Networks Group Announce Landmark Public/Private Partnership to Eliminate the Digital Divide*, YAHOO NEWS! (Sept. 15, 2015), <http://yhoo.it/1OGroOU>.

<sup>34</sup> Karl Bode, *Ting/Tucows to Expand Gigabit Fiber to 'Five or Six' New Markets*, DSL REPORTS (Aug. 6, 2015), <http://www.dslreports.com/shownews/TingTucows-to-Expand-Gigabit-Fiber-to-Five-or-Six-New-Markets-134708>.

<sup>35</sup> See Jon Brodtkin, *Fed up with slow and pricey Internet, cities start demanding gigabit fiber*, ARS TECHNICA (Nov. 22, 2013), <http://arstechnica.com/business/2013/11/fed-up-with-slow-and-pricey->

“Bryan-College Station is one of the largest communities we serve, and it’s a pleasure for us to announce that it will be the first in Texas to get Suddenlink’s 1 Gigabit service” said Suddenlink Southwest Region Senior Vice President of Operations Dave Giles in a statement. “What’s more, we’ll be making this great new service available to all customers in Bryan-College Station, not just to a few chosen neighborhoods.”<sup>36</sup>

Suddenlink completed the upgrade this summer and began offering gigabit Internet services to consumers in July.<sup>37</sup>

In all of these examples, local action prompted the competitive responses from existing Internet providers. As Blair Levin, former Chief of Staff to the FCC and primary author of the National Broadband Plan, has noted: “Communities are recognizing that they need to have better networks than they have today, and they actually have to take action. Market forces won't drive it.”<sup>38</sup> Some incumbent

---

[internet-cities-start-demanding-gigabit-fiber/](http://www.npr.org/sections/alltechconsidered/2014/03/04/285764961/frustrated-cities-take-high-speed-internet-into-their-own-hands/); Joel Rose, *Frustrated Cities Take High-Speed Internet Into Their Own Hands*, NPR (Mar. 4, 2014), <http://www.npr.org/sections/alltechconsidered/2014/03/04/285764961/frustrated-cities-take-high-speed-internet-into-their-own-hands>.

<sup>36</sup> Steve Fullhart, *GigaSpeed Internet Soon to be Offered in B/CS*, KBTX (Sept. 24, 2014), <http://www.kbtx.com/home/headlines/GigaSpeed-Internet-Soon-to-be-Offered-in-BCS-276059641.html>.

<sup>37</sup> Patina Adger, *Suddenlink Launches 1 Gig Service in BCS*, KBTX (July 10, 2015), <http://www.kbtx.com/home/headlines/Suddenlink-Launches-1G-313106881.html>.

<sup>38</sup> Jon Brodtkin, *Fed up with slow and pricey Internet, cities start demanding gigabit fiber*, ARS TECHNICA (Nov. 22, 2013), <http://arstechnica.com/business/2013/11/fed-up-with-slow-and-pricey-internet-cities-start-demanding-gigabit-fiber/>.

providers may agree. Steve Kipp, a Comcast spokesperson, said that competition with Tacoma, Washington's community broadband network, Click!, "will bring out the best in the company."<sup>39</sup> He continued "It's that competition that has really spurred the additional investment in cable and customer service."<sup>40</sup>

### C. Local Internet Choice Advances the Public Interest

The FCC concluded that by removing the state law barriers in North Carolina and Tennessee it was acting in the public interest. *Order*, at ¶ 15 (P.A.6). Ultimately, local Internet choice is about advancing the public interest. Especially in rural America, residents should not have to choose between their homes and the economic opportunities that advanced broadband capabilities afford.<sup>41</sup>

Communities need to have the tools by which they can improve Internet access for

---

<sup>39</sup> Cecilia Nguyen, *Click! expands into UPlace*, The News Tribune, May 19, 2003, at B2, available at: [http://baller.saidev.co/wp-content/uploads/Comcast\\_Kipp\\_Tacoma\\_Competition\\_-May-19-2003.pdf](http://baller.saidev.co/wp-content/uploads/Comcast_Kipp_Tacoma_Competition_-May-19-2003.pdf).

<sup>40</sup> *Id.*

<sup>41</sup> *See, e.g.*, Comment of Joyce Coltrin, *Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition*, Federal Communication Commission Docket No. 14-116, filed on July 29, 2014 ("In our group there is a lady who lost her medical transcription job because she works from home and could not meet speed requirements because her satellite speed service was too slow. A neighbor's poultry business is at great risk due to their forced dependence on hot spot communication links....College students drive to McDonald's to use wi-fi, and work from their cars to do homework and projects. This situation is choking business and making our children third class citizens.").

their residents' well-being and the economic future. As many scholars and economists have noted, the broadband marketplace is not going to dramatically change because the economics of bringing advanced broadband communications systems are still difficult.<sup>42</sup> The only thing that has a proven track record of improving the broadband environment for communities is local involvement.<sup>43</sup>

---

<sup>42</sup> Jon Brodtkin, *Fed up with slow and pricey Internet, cities start demanding gigabit fiber*, ARS TECHNICA (Nov. 22, 2013), <http://arstechnica.com/business/2013/11/fed-up-with-slow-and-pricey-internet-cities-start-demanding-gigabit-fiber/>.

<sup>43</sup> *Id.*



**CONCLUSION**

CLIC requests that this Court deny petitioners' request to vacate the FCC Order and affirm the FCC Order.

Respectfully,

/s/ Ashley Stelfox

---

Ashley Stelfox  
Baller Herbst Stokes & Lide  
2014 P Street, NW, Suite 200  
Washington, D.C. 20036

General Counsel to the Coalition for Local  
Internet Choice

## CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitations of Fed. R. App. P. 32(a)(7)(B) and Fed. R. App. P. 29(d) because: This brief contains 5,751 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii), as calculated by the word-counting function of Microsoft Office 2010.
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 in 14-point Times New Roman.

DATED: November 12, 2015

/s/ Ashley Stelfox  
*Counsel for Amicus Curiae*

### **CERTIFICATE OF SERVICE**

I hereby certify that on November 12, 2015, pursuant to 6 Cir. R. 25, I electronically filed the foregoing *amicus curiae* brief with the Clerk of the Court for the United States Court of Appeals for the Sixth Circuit by using the CM/ECF system. I certify that all participants in the case that are registered CM/ECF users will receive service accomplished by the CM/ECF system.

DATED: November 12, 2015

/s/ Ashley Stelfox  
*Counsel for Amicus Curiae*