

Nos. 15-3291 and 15-3555

In the United States Court of Appeals
for the Sixth Circuit

STATE OF TENNESSEE,
PETITIONER,

v.

FEDERAL COMMUNICATIONS COMMISSION AND THE UNITED STATES OF
AMERICA,
Respondents

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 COMMUNICATIONS
COMMISSION

**BRIEF OF NEXT CENTURY CITIES AND THE INSTITUTE FOR LOCAL
SELF-RELIANCE AS AMICI CURIAE SUPPORTING THE
RESPONDENTS**

Mark C. Del Bianco
D.C. Bar No. 342246
LAW OFFICE OF MARK C. DEL
BIANCO
3929 Washington Street
Kensington, MD 20895

(301) 602-5892
mark@markdelbianco.com
Counsel for Amici Curiae
Next Century Cities and the Institute for
Local Self-Reliance

In the United States Court of Appeals
for the Sixth Circuit

STATE OF TENNESSEE,
PETITIONER,

v.

FEDERAL COMMUNICATIONS COMMISSION AND THE UNITED STATES OF
AMERICA,
Respondents

STATE OF NORTH CAROLINA,
Petitioner,

v.

FEDERAL COMMUNICATIONS COMMISSION AND THE UNITED STATES OF
AMERICA,
Respondents

CERTIFICATE OF INTERESTED PERSONS

The undersigned counsel of record certifies that the following listed persons and entities as described in the fourth sentence of Rule 28.2.1 have an interest in the outcome of this case. These representations are made so that the Judges of this Court may evaluate possible disqualification or recusal.

Amici Curiae:

Next Century Cities, a part of New
Venture Fund

The Institute for Local Self-
Reliance

Counsel:

Mark C. Del Bianco
LAW OFFICE OF MARK C. DEL BIANCO
3929 Washington Street
Kensington, MD 20895

/s/ Mark C. Del Bianco

Attorney for Amici

INTEREST OF *AMICI*

Amici curiae Next Century Cities and The Institute for Local Self-Reliance (“ILSR”) submit this brief in support of the Respondents.

Amicus curiae Next Century Cities is a project of New Venture Fund, a 501(c)(3) public charity. Next Century Cities supports communities and their elected leaders, including mayors and other officials, as they seek to ensure that all have access to fast, affordable, and reliable Internet service. Next Century Cities has 121 members, more than 35 of which operate municipal broadband networks. Its members have embraced a variety of approaches for constructing and financing their networks, from public-private partnerships to self-provisioning.

Since 1974, *amicus curiae* ILSR has championed local self-reliance, a strategy that underscores the need for humanly scaled institutions and economies, together with the widest possible distribution of ownership. The Institute's mission is to provide innovative strategies, working models and timely information to support environmentally sound and equitable community development. To this end, ILSR works with citizens, activists, policymakers and entrepreneurs to design systems, policies and enterprises that meet local or regional needs; to maximize human, material, natural and financial resources; and to ensure that the benefits of these systems and resources accrue to all local citizens.

Next Century Cities and ILSR bring to this case unique knowledge of municipal broadband networks in the United States. Next Century Cities has more than 35 members that are successfully operating municipal broadband networks. Some have been operating for as long as 20 years. ILSR has researched municipal communications networks for a decade and maintains the most comprehensive database of such networks in the United States. It tracks over 450 communities with some form of publicly owned broadband telecommunications network that makes service available to private entities.

The *Amici Curiae* agree with the agency's conclusion that the preempted state statutes constitute barriers to broadband investment and deployment under Section 706 of the Telecommunications Act of 1996. This brief provides additional factual information on the nature and effect of those and other state laws that are intended to and do prevent competition from municipal broadband networks.

All parties have consented to the filing of this brief.

RULE 29(C) STATEMENT

Pursuant to FRAP 29(c), the *amici* provide the following information:

- (A) *Amici* and their counsel authored the brief in whole;
- (B) *Amici* contributed money that was intended to fund preparing or submitting the brief; and
- (C) no person other than *Amici* or their members contributed money that was intended to fund preparing or submitting the brief.

TABLE OF CONTENTS

CERTIFICATE OF INTERESTED PERSONS	III
INTEREST OF <i>AMICI</i>	IV
RULE 29(C) STATEMENT	VI
TABLE OF AUTHORITIES	VIII
SUMMARY OF THE ARGUMENT	1
ARGUMENT	2
A. Introduction	2
B. The Justifications for These State Law Barriers Proffered by Various Amici Curiae Are Specious	3
1. The Vast Majority of Municipal Broadband Network Projects Are Successful.....	4
2. There Are Numerous Municipal Broadband Business Models That have Proven to be Successful	6
3. Successful Municipal Broadband Networks Provide Cost Savings, Additional Revenues and Non-Financial Benefits to the Community	18
C. Many of The State Laws Are Intentionally Designed to Benefit Incumbents by Creating Barriers to Municipal Infrastructure Investment and Competition	23
D. State Law Barriers Do Not Decrease the Risk to Taxpayers	29
CONCLUSION.....	34
CERTIFICATE OF SERVICE	35
CERTIFICATE OF COMPLIANCE.....	36

TABLE OF AUTHORITIES

	Page(s)
STATUTES AND CODES	
5 U.S.C. § 706	1, 34
Colo. Rev. Stat. Ann. § 29-27-201 et seq.	27
N.C. Session Law 2011-84	23, 24, 29, 33
66 PA. CONS. STAT. § 3014(h) (2012)	25
Tenn. Code Ann. § 7-52-401	30
Tenn. Code Ann. § 7-52-601	30
Utah Code Annotated §§ 10-18-201-305	33
Agency Decisions	
<i>In re 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, 30 FCC Rcd 2408 (2015)</i>	<i>passim</i>
Other Authorities	
Hal R. Varian, Joseph Farrell, and Carl Shapiro, <i>The Economics of Information Technology: An Introduction</i>	7

SUMMARY OF THE ARGUMENT

The *Amici* submit this brief to support the conclusion reached by the FCC in its Memorandum Opinion and Order that the preempted state statutes constitute barriers to broadband investment and deployment under Section 706. See *In re 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*, 30 FCC Rcd 2408 (2015) (the “Order”).

The FCC correctly concluded that the North Carolina and Tennessee laws at issue constitute barriers to broadband deployment and competition. This brief places that conclusion in the larger context of the many state laws limiting municipal broadband entry.

The justifications for these state law barriers proffered by various intervenors and *amici curiae* supporting the Petitioners – that they are necessary to protect taxpayers and to ensure that states maintain ultimate responsibility for the well-being of the cities and towns within their borders - are specious. Contrary to what they would have the Court believe, there are numerous proven municipal broadband business models and the vast majority of municipal broadband network

projects are successful. In addition, successful municipal broadband networks provide cost savings, additional revenues, and a wide variety of non-financial benefits to the community.

The evidence in the record shows that the preempted laws were intentionally designed to benefit incumbent telecommunications carriers by creating barriers to municipal infrastructure investment and competition, and the same is true for barriers enacted by other states. The evidence also shows that these state law barriers do not decrease the risk to taxpayers.

ARGUMENT

A. Introduction

Local governments have to juggle many responsibilities, one of which is ensuring that essential infrastructure is available on reasonable terms to businesses and residents. When communities lack access to modern broadband telecommunications services in the 21st century, the local economy suffers and quality of life declines. Because local governments have no legal authority to compel telecommunications service providers to upgrade their networks and offer modern broadband services, some communities have chosen to invest directly in

providing such services or in facilities that can be leased to other new competitors to provide them.

However, some states have enacted legal barriers to these pro-competitive strategies. The result of these barriers is undeniable: there is less investment in new, next generation broadband networks and less competition. Order ¶ 42 (P.A. 23)

B. The Justifications for These State Law Barriers Proffered by Various Amici Curiae Are Specious

Neither North Carolina nor Tennessee (nor any of the *amici* supporting the Petitioner states) challenges the FCC’s conclusion that the preempted state laws act as barriers to overall broadband infrastructure investment and overall broadband competition in Tennessee and North Carolina. Order ¶¶ 75-121 (P.A. 38-54). However, various *amici* supporting the states argue that states’ enactment of barriers to municipal broadband networks are justified by the need of states “to protect taxpayers from local governmental fiscal irresponsibility” or to “maintain ultimate responsibility for the well-being of the cities and towns within their borders.” Brief of *Amicus Curiae* American Legislative Exchange Council at 3 and 23 (“ALEC Br.”); Brief of *Amici Curiae* State Governors’ Association at 19 (“State Governors’ Association Br.”).

The arguments raised by these *amici* were considered in detail and, based upon thorough examination of the evidence in the record, were rejected by the FCC. Order ¶¶ 61-74 (P.A. 31-37). To assist the Court in assessing the purported justifications for the anti-competitive state barriers, *amici* offer the following information.

1. The Vast Majority of Municipal Broadband Network Projects Are Successful

Many of the *amici* supporting Petitioners assert that the preempted North Carolina and Tennessee statutory provisions and similar laws in other states are necessary to “protect taxpayer dollars” (State Governors’ Association Br. at 24), to prevent “fiscal irresponsibility” (ALEC Br. at 9) and to “promote financial stability” (Brief of *Amici Curiae* State of Alabama *et al* at 4 (“States Br.”)). The FCC considered these arguments in detail and found that they did not justify the preempted barriers. Specifically, it concluded that the evidence showed that there was “no basis to believe that either Chattanooga or Wilson would be highly likely to fail in their expansion efforts, given their substantial track records.” Order ¶ 61 (P.A. 31).

The success and financial strength of the Wilson and Chattanooga networks are representative of the outcomes of the vast majority of municipal broadband network projects. ILSR is tracking over 450 communities that have made some

form of investment in a municipal broadband network that provides competition to a private sector communications network. See *Community Network Map*, Inst. for Local Self-Reliance, <http://muninetworks.org/communitymap> (“*Community Map*”)(all URLs cited herein were last visited between November 9 and 11, 2015).

The *amici* supporting Petitioners have identified a total of seven municipal broadband projects in the last 20 years that they claim have struggled to achieve success. Those projects are UTOPIA, Provo, Georgia Fibernet, Memphis Networx, Groton, Burlington, and Lompoc. See ALEC Brief at 29; State Governors Association Br. at 21-23; States Br. at 10-16.¹ Assuming for a moment that the characterization and the numbers alleged by the *amici* supporting the states were correct, the failure rate they claim for municipal telecommunications projects (including broadband projects) is miniscule.

Certainly some municipal governments have made errors of planning or execution (or both) on broadband projects. However, there was substantial evidence in the record demonstrating that many municipal networks are successful.

¹ It appears that ALEC is claiming that Lafayette, Louisiana is an eighth example of municipal network failure, but this claim is ludicrous. So eager is ALEC to paint municipal projects as failures that it disingenuously points to Lafayette Utility Services’ debt load as evidence that that network has failed, even though LUS is paying its debt on time and nearly every private broadband firm has equally significant debt. ALEC Brief at 28. By any measure, the Lafayette network is a resounding success. See, e.g., “Lafayette, Louisiana: A Municipal Funded Fiber Success Story,” <http://princetonbroadband.com/2013/08/21/lafayette-louisiana-a-municipal-funded-fiber-success-story/>.

Order ¶ 62 and n. 177 (P.A. 32). This evidence is corroborated by the case studies in the ILSR database, some of which are discussed in the next two sections.

2. There Are Numerous Municipal Broadband Business Models That have Proven to be Successful

Wilson and Chattanooga are just two of the hundreds of examples of successful municipal networks that ILSR has studied. Both cities have adopted similar business models. Each has built a citywide fully fiber-optic network offering the triple play services of telephone, television, and Internet access using borrowed funds. See Order ¶¶ 22 & 33 (P.A. 9 & 16-17). ILSR's database shows that about 45 municipalities serving about 100 communities have used this model. See *Community Map*.

There are numerous business models for municipal broadband networks that have led to remarkable benefits for communities. Nonetheless, the vast majority of municipal network models have been effectively banned under North Carolina law and are limited geographically by Tennessee law. Therefore, we wish to inform the Court of these models and the impacts they have had on Internet access and benefits resulting from improved Internet access in their communities.

The majority of municipal networks are not citywide, as are those of Wilson and EPB. Rather, they are more limited in scope and only available to a portion of

the community's businesses and/or households. See *Community Map*. In fact, this is how EPB's network began. EPB was authorized by the Tennessee regulatory agency to provide telecommunications in 1999. Starting in 2003, it used excess capacity on its internal fiber network to provide communications services to private businesses that were in close proximity to its fiber optic footprint. Christopher Mitchell, *Broadband at the Speed of Light: How Three Communities Built Next-Generation Networks* 33 (Inst. for Local Self-Reliance 2012), <http://ilsr.org/wp-content/uploads/2012/04/muni-bb-speed-light.pdf>. In 2009, it expanded the network to pass all premises in its service territory. Order ¶ 22 (P.A. 9).

This approach of building incrementally has often been adopted by municipalities. The cost of adding extra fiber strands to an already planned project is quite small, often a rounding error in the total cost of the project. Hal R. Varian, Joseph Farrell, and Carl Shapiro, *The Economics of Information Technology: An Introduction* 9-10 (Cambridge U. Press 2004). For that reason, many public and private entities have chosen to include as many fiber strands as practical when constructing internal networks or similar telecommunications projects, and to lease dark fiber or light some of the excess fiber and provide telecommunications services in order to generate revenue. As documented below, communities often

take the revenue from such sales to expand the network over time, sometimes without ever incurring debt.

This incremental approach has proven very successful. For example, Mount Vernon, Washington has built a model municipal network serving only business customers, including telecommunications carriers. The city started by building its own fiber network to serve city anchor locations, which it believed would allow it to ensure higher quality connectivity for internal needs at more affordable rates than were available from existing carriers. Community Broadband Bits Podcast Episode 38, *In Washington, Mt. Vernon Attracts Bus. with Open Access Network*, (Mar. 19, 2013), <http://www.muninetworks.org/content/washington-mt-vernon-attracts-businesses-open-access-network-community-broadband-bits>. This approach saved it over \$100,000 per year in telecommunications expenses. L. Gonzalez, *Open Access Network in Mount Vernon, Washington Created More Jobs and Government Savings*, MuniNetworks.org (Mar. 21, 2013), <http://muninetworks.org/content/open-access-network-mount-vernon-washington-created-more-jobs-and-government-savings>. The city later received a state grant for economic development to expand the network to connect some local businesses. Community Broadband Bits Podcast Episode 38, *In Washington, Mt. Vernon Attracts Bus. with Open Access Network*, (Mar. 19, 2013),

<http://www.muninetworks.org/content/washington-mt-vernon-attracts-businesses-open-access-network-community-broadband-bits>. The network has never incurred debt. It now reaches 267 locations, over half of which are area businesses, but the city is not a service provider competing against incumbent operators. Hannah Trostle, *Another Washington Coastal City Considers Community Network*, MuniNetworks.org (Nov. 10, 2015), <http://muninetworks.org/content/another-washington-coastal-city-considers-community-network>. Rather, Mount Vernon makes its municipal network available to independent service providers that use the network to reach their customers. Currently, its website lists nine service providers available on the network. City of Mount Vernon, Washington, Fiber Optic Services, <http://www.mountvernonwa.gov/index.aspx?NID=756>. One of the private businesses that has moved to Mount Vernon specifically to take advantage of its network was profiled in the New York Times. Proprietor Eric Blank moved his business and 20 employees 61 miles out of Seattle, saying, “The fiber connection is the only reason we are in Mount Vernon...” Kate Murphy, *For the Tech-Savvy with a Need for Speed, a Limited Choice of Towns with Fiber*, N.Y. Times, April 2, 2014, http://www.nytimes.com/2014/04/03/technology/personaltech/for-the-tech-savvy-with-a-need-for-speed-a-limited-choice-of-towns-with-fiber.html?_r=1.

In Minnesota, Scott County built a 90 mile fiber optic ring to better connect its schools, public safety facilities, and other such locations. Christopher Mitchell and Lisa Gonzalez, *All Hands on Deck: Minnesota Local Gov't Models for Expanding Fiber Internet Access* 4 (Inst. for Local Self-Reliance 2014), http://ilsr.org/wp-content/uploads/downloads/2014/09/all_hands_on_deck_mn.pdf. (“*All Hands on Deck*”). They built the network in cooperation with a small telecommunications firm that competed with the local incumbent in providing some services (that firm has since been purchased by Zayo). *Id.* At 4-5. The network allowed Scott County’s schools to reduce the amount they paid for connectivity from \$58 per megabit to under \$7 per megabit. *Id.* at 4. The approximate cost of the network was \$4 million. It reduced the County’s leased line costs by \$500,000 per year, which allows the County to save approximately \$35,000 per year even while servicing the debt incurred in building the network. *Id.* Once the debt payments are finished, the County’s savings will be more substantial. In the meantime, the network has helped to lure two firms bringing between 800 and 1,000 jobs to the County. *Id.* at 5.

In Missouri, Springfield’s municipal utility built SpringNet, its own fiber optic network, and uses it to meet internal city needs and to provide telecommunications services to local businesses. In 2013, its revenues exceeded

expenses by over \$3.9 million. 2013 City Util. of Springfield, Mo. Auditor's Rep. and Fin. Statements 41 (Sept. 30, 2013 and 2012), <http://www.cityutilities.net/about/2013-annualreport-financials.pdf>. More importantly for the community, the network was essential in keeping Expedia, which employs 900 people, in Springfield. Community Broadband Bits Podcast 12, *Todd Murren with SpringNet, Mo.*, (Sept. 11, 2012).

In Massachusetts, the small town of Holyoke not only connects its own facilities through the Holyoke Gas & Electric municipal fiber network, it is working with nearby communities to help them build municipal networks. See David Talbot et al., *Holyoke: A Massachusetts MLP Seizes Internet Access Business Opportunities*, (Berkman Ctr. for Internet and Society at Harvard U. 2015), https://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/2015-07_broadbandVERTICAL_0.pdf. Holyoke Gas & Electric, which connects some 300 businesses and large institutions, saves the town \$300,000 per year by self-provisioning. *Id.* at 2. HG&E also manages the nearby Leverett municipal fiber gigabit network, which was built in partnership with a local telecommunications company. *Id.*

In 2010, Martin County, Florida was facing a cost increase of 814 percent from Comcast to continue leasing dark fiber for internal county needs. Lisa

Gonzalez and Christopher Mitchell, Florida Fiber: Martin County Saves Big with Gigabit Network 3 (Inst. for Local Self-Reliance 2012), <http://ilsr.org/wp-content/uploads/2012/06/martin-county-fiber.pdf>. After studying the options, Martin County built its own network and is projecting a savings of more than \$30 million over 20 years compared to the cost of leasing lines. *Id.* at 9, Table 4. As with many municipal approaches, Martin County worked with a local telecommunications company to lower its deployment cost. *Id.* at 6. The network serves schools and nearby hospital facilities, but the County cites Florida state law barriers to municipal networks as a reason it is not expanding further. *Id.* at 9.

For a majority of communities, the decision to invest in a municipal network is reluctantly made only after the incumbent providers refuse to meet local needs. For instance, the municipal utility in Franklin, Kentucky, decided to build the Franklin Municipal FiberNET to connect its industrial sites after Comcast and AT&T proved unwilling. The network's Fiber Services Manager Tammie Carey explained the County's reasoning:

“Our Industrial Authority was working with several industries regarding possibly locating in our community. A need they had was large amounts of reliable bandwidth. The existing companies would not build fiber to the industrial park locations. The city saw this as a major hindrance with our economic development recruitment and made the decision to invest in a system.”

L. Gonzalez, *Franklin Municipal FiberNET Spurs Economic Development, Serves Government*, MuniNetworks.org (Feb. 4, 2013), <http://muninetworks.org/content/franklin-municipal-fibernet-spurs-economic-development-serves-government-kentucky>.

In Indiana, the city of Auburn built its network out incrementally as well. The network was initially designed to meet city and municipal public needs. L. Gonzalez, *Auburn Essential Services; A Workhorse in Northeast Indiana Saves Jobs, Serves Public*, MuniNetworks.org (Jan. 3, 2014), <http://www.muninetworks.org/content/auburn-essential-services-workhorse-northeast-indiana-saves-jobs-serves-public>. City leaders tried to entice the incumbent providers to provide faster business and residential broadband service throughout the community. In 2004, one of the city's largest employers, Cooper Tire and Rubber, was considering closing its facility, in part because of the lack of reliable broadband capacity. *Id.* After the incumbent providers declined the city's entreaties, the city stepped up to keep Cooper from moving its facility, which provided \$7 million in payroll income, elsewhere. The city installed fiber from the existing network out to the Cooper facility. Community Broadband Bits Podcast 77, *In Indiana, Auburn Built Fiber Network Incrementally*, (Dec. 17, 2013), <http://www.muninetworks.org/content/indiana-auburn-built-fiber-network->

incrementally-community-broadband-bits-episode-77. When other city businesses learned of the availability of this higher quality broadband option, they sought to connect as well. Over the last eight years, the city network has been built out so that it now passes the majority of business and residential addresses in the town.

Id.

The great majority of municipal networks using a business model similar to that of Wilson and Chattanooga have been successful as well. An example is the Spanish Fork Community Network in Utah, which has operated for more than a dozen years. Spanish Fork uses a citywide triple-play model, offering television, telephone, and Internet data services in direct competition with incumbent operators. Community Broadband Bits Podcast 60, *Spanish Fork Discusses Stunning Success*, (Aug 20, 2013), <http://muninetworks.org/content/spanish-fork-discusses-stunning-success-community-broadband-bits-podcast-60>. Network construction began in 2001, following city approval of a \$7.5 million revenue bond to build the hybrid fiber-coaxial network. Cimaron Neugebauer, *Spanish Fork Steers Clear of UTOPIA, Builds Own Network*, Salt Lake Trib., Dec. 2, 2012, <http://www.sltrib.com/sltrib/money/55045925-79/network-fork-spanish-community.html.csp>. The city currently makes about \$1 million a year profit from the network services and has paid off the construction bonds.

<http://muninetworks.org/content/spanish-fork-building-gig-fiber-over-cable-network-community-broadband-bits-podcast-170>. It is using the surplus to offset costs of other government operations at the same time that it has begun an upgrade to a full fiber-optic gigabit network.

In Tennessee, Morristown's municipal fiber network is quite similar to Chattanooga's, and Morristown was just the fourth city in the United States with citywide gigabit access. The citywide network serves 44 percent of residents and the largest employers in town use the network as well. Community Broadband Bits Podcast 35, *Morristown Explains Why it Built a Fiber Network for Itself*, (Feb. 26, 2013), <http://muninetworks.org/content/morristown-explains-why-it-built-fiber-network-itself-community-broadband-bits-35>. Like the vast majority of municipal networks with debt, Morristown is current on its repayment schedule. *Id.*

In Oregon, Sandy is one of the few communities that have built a citywide fiber-to-the-home network without having a municipal electric utility. Before beginning to build the network, Sandy forecast that it would need 35 percent of households to take service to make it work financially. Hannah Trostle and Christopher Mitchell, *SandyNet Goes Gig: A Model for Anytown USA 4* (Inst. for Local Self-Reliance 2015), <https://ilsr.org/wp-content/uploads/2015/11/sandynet-2015.pdf>. As they are finishing the network this fall, approximately 60 percent of

local households have signed up. *Id.* The network has received accolades from local businesses:

“I think at that time it was a 100 Mbps connection for probably an eighth of the cost of what we were getting [from the prior service provider]. So we were going to get 10 times faster than what we could have gotten before for a fraction of the cost. It was a no-brainer. It was a win for us.”

Id. at 2.

A local realtor at Mal & Seitz Real Estate expressed a similar view:

“Being in real estate, I encounter a lot of people who have very specific Internet needs—people who do work from home, primarily. And in the outskirts of Sandy, where Internet is not as available, that’s a big concern for a lot of people. And some people even choose to live closer to town because of it.”

Id. at 5.

This section demonstrates that there are a wide variety of successful business models for municipal broadband networks. The most common by far is the incremental approach. *Amici* have not identified any failures among community networks built using the incremental approach and there is no evidence of such a failure in the agency record. However, networks using these approaches are prohibited from expanding beyond municipal boundaries in Tennessee and are effectively prohibited by the de facto ban on municipal networks in North Carolina.

Another model that is being used successfully in many communities is the public-private partnership, where communities have decided the best way to improve Internet access locally is by working with existing Internet service providers in a partnership. For instance, the city of Westminster, Maryland, is building a citywide municipal fiber network and has contracted with Ting, a non-incumbent wireless and wireline telecommunications company, to operate it. See “Ting to take 1 Gig service to Westminster, Md.,” <http://www.fiercetelecom.com/story/ting-take-1-gig-service-westminster-md/2015-01-14>; and Community Broadband Bits Podcast 134, *Ting Delivering FTTH is Great News for Community Fiber* (Jan. 20, 2015), <http://muninetworks.org/content/ting-delivering-ftth-great-news-community-fiber-community-broadband-bits-episode-134>. Other cities have used a similar approach. For example, the private company MCG operates a municipal fiber network in Indianola, Iowa, and IVNet operates on the Princeton, Illinois fiber network. “Indianola, Iowa Getting Community-Owned Fiber Service: 25/25Mbps as Low as \$5/Month,” <http://stopthecap.com/2012/08/13/indianola-iowa-getting-community-owned-fiber-service-2525mbps-as-low-as-5month/>; L. Gonzalez, “*Community Built Network Saves Local Jobs in Princeton, Illinois*,”

<http://muninetworks.org/content/community-built-network-saves-local-jobs-princeton-illinois> (2013).

When cities are seeking partners to operate their networks, they typically issue requests for proposals (RFPs). Incumbents are invited to participate, but very rarely do. For instance, when Minnesota's Lac Qui Parle County asked incumbent Frontier to partner for an American Recovery and Reinvestment Act broadband award, it declined. *All Hands on Deck* at 53. But a nearby cooperative was willing and worked with the County to build fiber throughout the rural region. *Id.* Elsewhere in rural Minnesota, a rural consortium of cities with poor Internet access offered to finance and build a network for incumbents, but Frontier, CenturyLink, and Mediacom all refused. *Id.* at 60. Many municipalities have engaged in partnerships with private telecommunications firms, but the large incumbents have nearly always refused to participate.

3. Successful Municipal Broadband Networks Provide Cost Savings, Additional Revenues and Non-Financial Benefits to the Community

ILSR has documented many examples of municipal networks that substantially benefit taxpayers by decreasing the pressure on the tax base by using public money more efficiently. A few examples are discussed in the preceding section. Others include:

- Burbank, California: The school district has saved \$330,000 since connecting to the city's dark fiber network, ONE Burbank. L. Gonzalez, *Dark Fiber Network Saving Money, Generating Revenue in Burbank*, MuniNetworks.org (Sept. 22, 2015), <http://www.muninetworks.org/content/dark-fiber-network-saving-money-generating-revenue-burbank>.
- Shafter, California: Schools pay only \$1,200 per year for 1 gigabit connectivity. L. Gonzalez, *In California, Tough Economic Times Led Shafter to Adjust Network Plan*, MuniNetworks.org (July 18, 2013), <http://www.muninetworks.org/content/california-tough-economic-times-led-shafter-adjust-network-plan>.
- Longmont, Colorado: Schools save \$100,000 a year with 10 times the bandwidth. L. Gonzalez, *Longmont Schools Save, Increase Bandwidth With Help from LPC*, MuniNetworks.org (Oct. 17, 2014), <http://www.muninetworks.org/content/longmont-schools-save-increase-bandwidth-help-lpc>.
- Palm Coast, Florida: Flagler County School District saves \$200,000 a year with more reliable service. D. Collado, *Palm Coast's FiberNET Produces Dramatic Savings Locally*, MuniNetworks.org (Dec. 10, 2013),

<http://www.muninetworks.org/content/palm-coasts-fibernet-produces-dramatic-savings-locally>.

ILSR maintains and makes publicly available a partial list of the various economic development benefits resulting from municipal networks. See Municipal Networks and Economic Development, MuniNetworks.org, <http://www.muninetworks.org/content/municipal-networks-and-economic-development>. It also maintains and makes available a spreadsheet providing summaries of the benefits identified in connection with 58 municipal networks. <https://docs.google.com/spreadsheets/d/1b0fQThw9E6KJrIPveXnXmuVfQpIp9WkAs20uILoyF2I/>. The examples include:

- The Dalles, Oregon, received a much-needed economic boost in the form of 200 jobs and millions of dollars in tax revenues when Google invested \$1.2 billion in a data center that used the city's municipal fiber network, Q-Life. *Id.*
- Thomasville, Georgia's municipal fiber network revitalized the community's downtown and brought more than 200 jobs to Main Street. *Id.*
- When the city of Princeton, Illinois set up a municipal broadband network, it kept 300 jobs in the community with the global industrial machinery company, Ingersoll Rand. *Id.*; see also L. Gonzalez, *Community Built*

Network Saves Local Jobs in Princeton, Illinois, MuniNetworks.org (Jan. 4, 2013), <http://muninetworks.org/content/community-built-network-saves-local-jobs-princeton-illinois>.

The Santa Monica, California City Net network is a prime example of a municipal network delivering more efficient stewardship of taxpayer dollars. City Net was instituted when the city realized it could self-provision a higher quality network at a lower cost than continuing to lease facilities from existing providers. The city reinvested its savings to expand City Net, yielding an impressive list of public benefits, including free Wi-Fi in many business corridors, four out of five traffic signals synchronized, hundreds of video cameras assisting public safety, and real time parking information. Eric Lampland and Christopher Mitchell, Santa Monica City Net: An Incremental Approach to Building a Fiber Optic Network ii (Inst. for Local Self-Reliance 2014), <http://ilsr.org/wp-content/uploads/2014/03/santa-monica-city-net-fiber-2014-2.pdf>. Thanks to City Net, Santa Monica has kept its telecom outlays flat even as it derived ever greater public benefits from the network. More than 100 private buildings have connected to the network to allow their tenants a better choice in providers. The network now generates revenue for the city from the many subscribers and has launched a pilot to connect low-income residential households. *Id.* at 1.

Approximately 70 similar case studies can be found at the Community Broadband Bits Podcast Index where ILSR's Broadband Bits podcast has interviewed representatives from many communities that have built their own networks. Inst. For Local Self-Reliance, Community Broadband Bits Podcast Index, MuniNetworks.org, <http://muninetworks.org/content/community-broadband-bits-podcast-index>. In numerous cases, the gains from municipal networks resulted in lower taxes and tax rates. For example, Chattanooga's EPB has publicly explained that its electricity rates are lower than they otherwise would be, in part because the telecom subscribers pay for costs that would otherwise have to be absorbed by the electrical division. Community Broadband Bits Podcast 175, *Chattanooga Crushes It - Marketing, Technology, and Nearby Communities*, (Nov. 3, 2015), <http://muninetworks.org/content/chattanooga-crushes-it-marketing-technology-and-nearby-communities-community-broadband-bits->. Due to income from its fiber optic network, EPB has been able to forego electrical rate increases. *Id.* In Georgia, surpluses from the municipal cable network in Thomasville assisted in lowering a local fire tax, saving taxpayers over \$5 million between 2010 and 2013. D. Collado, *Thomasville Removes Local Tax, Citing Strong Broadband Revenues*, MuniNetworks.org (Nov. 20, 2013),

<http://muninetworks.org/content/thomasville-removes-local-tax-citing-strong-broadband-revenues>.

These examples demonstrate the numerous benefits that high speed municipal broadband networks can bring to communities. Municipalities with inadequate broadband have little hope of retaining employers, much less of attracting new businesses to keep their economy robust.

C. Many of The State Laws Are Intentionally Designed to Benefit Incumbents by Creating Barriers to Municipal Infrastructure Investment and Competition

State law barriers to municipal network entry have consistently originated from incumbent providers seeking to protect their services from competition. The statute in which the preempted North Carolina statutory provisions are found - Session Law 2011-84 - is a paradigmatic example of this phenomenon. Intervenor City of Wilson demonstrated in its brief that the statute was largely written by the incumbent cable industry, and that its purpose was to hinder or prevent by competitive entry by municipalities in order to protect the private incumbent broadband providers from competition. See *Wilson Brief* at 19-21. Both Wilson and the challenged Order detail how the various provisions of the preempted North Carolina law work together to systematically prevent construction of municipal broadband networks. *Id.* at 24; *Order* ¶ 94 (P.A. 44). The statute has to date

achieved its goal. Since its enactment, no new municipal networks have been built in North Carolina.

Neither the statute nor the experience is unique to North Carolina. The preempted sections of Session Law 2011-84 are largely based on model anti-municipal broadband legislation developed by *amicus curiae* ALEC, which in turn was based on a Utah law.

The Utah law was drafted in 2000 using bullet points provided by incumbent providers that wanted to limit municipal entry into the telecommunications market. Brendan Greeley and Allison Fitzgerald, *Pssst...Wanna Buy a Law?*, Bloomberg Bus., Dec. 1, 2011, <http://www.bloomberg.com/bw/magazine/pssst-wanna-buy-a-law-12012011.html>. The law was successful – in the more than a decade since it passed, only two municipal networks have been built and both have struggled financially. See, *infra*, pp. 33-34.

The ALEC model bill based on the Utah law was subsequently introduced in several other states over the years. A number of states, including North Carolina, South Carolina and Louisiana, have enacted versions of the bill at the behest of incumbent providers. See *The Fight Over Municipal Broadband*, Fiscal Note, Dec. 2 2014, <https://www.fiscalnote.com/2014/12/02/the-fight-over-municipal-broadband/>. Louisiana enacted a version of the bill in 2004, before Lafayette

began construction on its citywide fiber optic deployment. In a legislative compromise, Lafayette accepted some barriers, though less onerous than those in North Carolina, rather than abandon its plan. Christopher Mitchell, *Broadband at the Speed of Light: How Three Communities Built Next-Generation Networks* 19 (Inst. for Local Self-Reliance 2012), <http://ilsr.org/wp-content/uploads/2012/04/muni-bb-speed-light.pdf>. As in North Carolina, the statute has successfully stifled any other municipal competition: despite the success of the Lafayette network, no Louisiana municipality has entered the market since the law was passed.

After Kutztown, Pennsylvania, built the first fiber-to-the-home network in the nation, the Pennsylvania legislature in 2004 passed an anti-municipal broadband law widely regarded as one of the strictest in the nation. 66 PA. CONS. STAT. § 3014(h) (2012). Now, local governments must literally ask incumbent providers for permission to create competition. The statute only allows municipalities to build their own networks if they first request the local incumbent telecommunications service provider to provide network services of specific speed. *Id.*, § 3014(h)(2). If the incumbent declines to provide the requested service, the municipality may then construct its network. An incumbent can delay a municipal network by as much as fourteen months without actually providing comparable

service. The incumbent's agreement to provide the requested data speed is the only relevant inquiry under Pennsylvania law — not price, quality of service, etc. Not surprisingly, no Pennsylvania municipality has constructed a fiber broadband network to connect local businesses or residents since the law was enacted.

Understanding the actual experience of municipalities seeking to build networks is essential in evaluating whether state barriers to municipal networks represent a legitimate state interest in protecting taxpayers or whether they primarily serve to protect incumbent operators from competition.

It is difficult to know how many municipalities have been foreclosed from constructing broadband networks by these state barriers. When a community recognizes that state law has effectively prevented it from entering the telecommunications market or upgrading its infrastructure via one of the many municipal broadband models, it rarely issues a press release.

Fortunately, Colorado provides a set of useful data points on this issue. In 2005, Qwest (now CenturyLink), the state's largest incumbent telephone company, successfully lobbied for a state law that prohibited local governments from building or partnering to create broadband competition unless they held a referendum and received voter approval. Dave Hughes, *Colorado Lawmakers Bow to Qwest on Municipal Broadband*, *MuniWireless*, Apr. 19, 2005,

<http://muniwireless.com/2005/04/19/dave-hughes-colorado-lawmakers-bow-to-qwest-on-municipal-broadband/>. This barrier is widely credited with dissuading Google from building a fiber network anywhere in the state. Erica Meltzer, *Boulder Seeks Authority to Create Citywide Broadband Network*, Daily Camera, June 12, 2014, http://www.dailycamera.com/news/boulder/ci_25949336.

The law is not as draconian as the ALEC model. It requires local governments to hold a referendum before building its own network or partnering with other telecommunications firms that might use municipal fiber. Colo. Rev. Stat. Ann. § 29-27-201 et seq. Unlike the North Carolina law, the Colorado restriction does not come with a web of other barriers that effectively prohibit investment. Local communities' response to the law reveals the depth of their desire for better broadband service and more competition. In 2014 and early 2015, ten Colorado communities held these state-required referenda, and voters in all ten approved of going forward to explore the municipal broadband options. T. Ernste, *Let it be Local: 43 Colorado Communities to Vote on Better Broadband*, MuniNetworks.org (Oct. 30, 2015), <http://www.muninetworks.org/content/let-it-be-local-43-colorado-communities-vote-better-broadband>. In November 2015, 43 additional local jurisdictions voted on proposals to reclaim their broadband rights. Voters in every jurisdiction overwhelmingly passed the proposal, by margins of up

to 93%. L. Gonzalez, *Voters Quiet the Drums at the Polls in Colorado*, MuniNetworks.org (Nov. 4, 2015), <http://www.muninetworks.org/content/voters-quiet-drums-polls-colorado>.

Kansas had a similar experience with cable incumbents seeking to prevent competition, but there the outcome was different. In 2014, cable lobbyists in Kansas drafted and introduced their own bill that would have limited not only municipal networks but even Google Fiber's Kansas City buildout. See Jon Brodtkin, *Who Wants Competition? Big Cable Tries Outlawing Municipal Broadband in Kansas*, Ars Technica, Jan. 31, 2014, <http://arstechnica.com/tech-policy/2014/01/who-wants-competition-big-cable-tries-outlawing-municipal-broadband-in-kansas/>. The bill was killed by a state Senate committee following an outpouring of opposition from residents, businesses and local officials. Tim Carpenter, *Wire Cut on Senate Bill Banning Municipal Broadband Networks*, Topeka Cap.-J., Feb.5, 2014, <http://cjonline.com/news/state/2014-02-05/wire-cut-senate-bill-banning-municipal-broadband-networks> and Kate Cox, *Proposed Kansas Bill Banning Municipal Fiber Expansion Has Met Its Doom*, Consumerist, Feb. 21, 2014, <http://consumerist.com/2014/02/21/proposed-kansas-bill-banning-municipal-fiber-expansion-has-met-its-doom/>.

Incumbent telecommunications providers have authored and lobbied for barriers to municipal broadband networks to prevent the competition envisioned by the 1996 Telecommunications Act. See Allan Holmes, *How Big Telecom Smothers City-Run Broadband*, Ctr. for Pub. Integrity, Aug. 28, 2014, <http://www.publicintegrity.org/2014/08/28/15404/how-big-telecom-smothers-city-run-broadband>; see also Phillip Dampier, *Anti-Community Broadband N.C. State Rep. Marilyn Avila's Fun Weekend in Asheville: Did you Pay?*, Stop the Cap!, Jan. 23, 2012, <http://stopthecap.com/2012/01/23/anti-community-broadband-n-c-state-rep-marilyn-avilas-fun-weekend-in-asheville-did-you-pay/>. These firms have far greater interest in protecting their market power than protecting any taxpayer. The attempts of various *amici curiae* to justify the barriers as taxpayer protection statutes are simply red herrings.

D. State Law Barriers Do Not Decrease the Risk to Taxpayers

State statutes ostensibly intended to “decrease the risk to taxpayers,” such as N.C. Session Law 2011-84, in practice have different effects. They most often prevent any new municipal entry (as in North Carolina, Florida, and Louisiana). Even in the limited number of cases where the laws are not *de facto* absolute barriers, the evidence shows that they can paradoxically increase the risk to taxpayers.

Tennessee’s geographic limitation on broadband service is a good example of this increased risk. EPB is permitted by Tennessee law to extend its fiber network – over which it provides both voice and data services - anywhere in the state for the purposes of delivering voice telephone service. However, it would not be able to obtain maximum value from its network because Section 601 prohibits municipal electric service providers from providing “cable service, two-way video, video programming” and “Internet services” outside their electricity service footprint. Compare Tenn. Code Ann. § 7-52-401 and § 7-52-601; see Order ¶ 169 (P.A. 71). Thus, if EPB built a fiber network outside its electric service area, it would have only one revenue stream – voice telephone service. For EPB or any other municipal network, the risk of trying to build a successful network solely with voice telephone revenue is substantially greater than if it could generate multiple revenue streams over the same network by deploying bundles of voice, video, and Internet access. Thus, far from protecting municipal or state taxpayers, Section 601 serves the interests of incumbent telecommunications providers by cordoning their most profitable lines of business off from competition.

A lay person might assume that bigger telecommunications networks inherently have more risk than smaller ones. However, this is not correct. “Due to characteristics of scale and scope involved in delivering broadband services,

significant up-front costs are required to enter into such ventures.” ALEC Br. at 27. These up front or fixed costs include not only the fiber purchase and installation, but substantial equipment and other expenditures, such as space for a network operations center (“NOC”). Smaller networks actually pose a greater financial risk than large networks because they have to recoup these large fixed costs from a smaller number of potential customers.

This advantage of scope and scale is magnified where an operator already has experience running a successful network. For example, the risk posed by an expansion of EPB Fiber Optics or Wilson’s Greenlight to serve nearby residents businesses is quite low. As the FCC recognized, both have demonstrated great competence and indeed offer some of the most advanced services in the nation. See Order ¶¶ 80, 122 (P.A. 40, 54). Both EPB’s and Wilson’s infrastructure, particularly the expensive NOCs, can serve a much larger population than state law allows. Both networks could be expanded at far lower cost than would be required for the neighboring communities to construct their own networks. Allowing them to expand to serve neighboring communities would only require modest incremental expenses for scaling up their workforce and expanding a physical infrastructure they clearly understand.

Any state that was actually seeking to minimize risk to taxpayers would surely prefer allowing successful municipal networks to expand rather than requiring smaller communities with no network experience to build their own expensive broadband networks.

The risks posed by the Tennessee and North Carolina laws are real but so far are largely theoretical because of the financial and operational expertise of the Wilson, EPB, and Morristown managements. But the practical effects of such laws can be seen elsewhere in Tennessee and in Utah. Various intervenors and *amici* supporting the Petitioners point to the financial struggles of three municipal networks that they claim allegedly demonstrate the need for state laws to protect municipal taxpayers: iProvo and UTOPIA in Utah and Memphis Networx in Tennessee. See ALEC Br. at 28; State Governors' Association Br. at 21; States Br. at 11-13; Brief of Intervenor National Association of Regulatory Utility Commissioners at 34. These *amici* and intervenor are being disingenuous. They are well aware that those networks, which together cost Utah and Tennessee taxpayers tens of millions of dollars, were planned, constructed and operated under the very state laws that they claim are necessary to "protect" taxpayers.

Memphis Networx was a municipal network built by Memphis, Tennessee after the Tennessee law preempted in the Order was enacted. It was financed by

debt taken on by the city and adopted a wholesale-only business model. Chris Davis, *Networx Down*, Memphis Flyer, June 21, 2007, <http://www.memphisflyer.com/memphis/networx-down/Content?oid=1137245>.

Caught up in the dotcom bubble collapse, it was never profitable and was sold by Memphis at a loss to a private company in 2007. *Id.*

The experience in Utah was similar. Section B(2) above discussed the success of the Spanish Fork Community Network in Utah. The Utah telecommunications incumbents' response to this network was to convince the legislature to pass what is now Utah Code Annotated §§ 10-18-201-305. That law contained many provisions similar to the restrictions of N.C. Session Law 2011-84 and effectively required any future municipal networks to operate as wholesale-only providers, selling capacity to Internet service providers, who in turn offered retail services to businesses and consumers.

In the decade since the law was passed, only two municipal networks have been constructed in Utah – iProvo in Provo and UTOPIA, which serves multiple communities south of Salt Lake City. Both networks have struggled to meet their financial and operational objectives, due in substantial part to the wholesale-only model. In the case of Provo, the selection of the wholesale model was dictated by

state law. Kevin Garlick, who was Provo City Energy Director from 1997 to 2013, recently stated in an interview:

“As a successful and reliable municipal electric utility, we wanted to leverage our customer relationship by offering telecom services. The community and municipal council supported that. We wanted and planned to use the same retail model that Spanish Fork used. However, the state law essentially forced us to adopt the more risky wholesale-only model that led to our financial problems.”

How Lobbyists in Utah Put Taxpayer Dollars at Risk to Protect Cable Monopolies, MuniNetworks.org (Nov. 11, 2015), <http://muninetworks.org/content/how-lobbyists-utah-put-taxpayer-dollars-risk-protect-cable-monopolies>.

These examples demonstrate that, far from protecting taxpayers, the Utah law created additional costs for taxpayers in Provo and the UTOPIA cities, and contributed to the demise of the iProvo network. ALEC calls UTOPIA one of the “highly publicized instances of local government broadband network financial ruin” without acknowledging that the failure occurred under one of the taxpayer protective laws it favors. ALEC Br. at 28. The law did not protect taxpayers, but it did achieve its proponents’ goal of protecting incumbent providers from strong competition. Meanwhile, the Spanish Fork Community Network, which is not subject to the restrictions of the Utah law, remains a beacon of success.

CONCLUSION

The Amici Curiae agree with the agency's conclusion that the preempted state statutes constitute barriers to broadband investment and deployment under Section 706 of the Telecommunications Act of 1996.

Respectfully submitted,

/s/Mark C. Del Bianco

Mark C. Del Bianco

D.C. Bar No. 342246

LAW OFFICE OF MARK C. DEL BIANCO

3929 Washington Street

Kensington, MD 20895

(301) 602-5892

mark@markdelbianco.com

*Counsel for amici curiae Next Century
Cities and the Institute for Local Self-
Reliance*

CERTIFICATE OF SERVICE

I hereby certify that, on November 12, 2015, I e-filed this brief and served it on the counsel of record through the Sixth Circuit's CM/ECF site, and caused the following to be served by U.S. mail first class:

William J. Kirsch
Apt 211
1211 S. Eads St.
Arlington, VA 22202

/s/ Mark C. Del Bianco

CERTIFICATE OF COMPLIANCE

Pursuant to the Sixth Circuit's ECF Filing Standards and the rules cited below, I hereby certify that:

1. This brief complies with the type-volume limitations of FED. R. APP. P. 32(a)(7)(B) because this brief contains 7076 words, according to the word count function of Microsoft© Word 2013, excluding the parts of the brief exempted by FED. R. APP. P. 32(a)(7)(B)(iii).

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 2013 in 14-point Times New Roman typeface for text and 12-point for footnotes.

3. This document has been scanned for viruses with the most recent version of a commercial virus-scanning program (Norton Anti-Virus) and is free of viruses.

/s/ Mark Del Bianco
Attorney for *Amici Curiae*

