

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petitions Pursuant to Section 706 of the)	
Telecommunications Act of 1996)	
for Removal of State Barriers to)	WC Docket No. 14-115
Broadband Investment)	WC Docket No. 14-116
and Competition)	

**COMMENTS OF
NEW AMERICA FOUNDATION'S OPEN TECHNOLOGY INSTITUTE**

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Executive Summary

As the National Broadband Plan notes, “Broadband is *the* great infrastructure challenge of the early 21st century.”¹ The Commission should do all it can to encourage innovation around different approaches and different models of broadband deployment.

In the last few years, more and more local governments have been responding to this challenge by investing in their own broadband networks. Local governments exist to serve the needs of their communities. And when a community feels its broadband needs are not being met, the local government should have the right exercise local choice – to assess its options and respond in a way that it deems most appropriate. The Commission should act on the requests of the Petitioners and preempt the laws that communities cite as being barriers to broadband investment.

Local broadband networks support many of the Commission’s policy goals. Local networks have a clear impact on competition, offering some of the highest speed broadband services available and spurring other providers to respond with improved services of their own. Local networks also offer important quality of life benefits to communities. They provide high-capacity bandwidth resources to meet the needs of community anchor institutions like schools, libraries, and community centers and encourage local economic development. Local broadband networks are developing new models for broadband deployment, and removing state laws that prohibit communities from deploying their own broadband networks will allow more innovation and experiments to occur across the country.

¹ *Connecting America: The National Broadband Plan*, 2010, at 3 (“NBP”), available at: www.broadband.gov/plan/ (emphasis original).

I. INTRODUCTION

The Open Technology Institute at the New America Foundation (“OTI”) submits these comments in support of the petitions filed on July 24, 2014, by the Electric Power Board of Chattanooga, Tennessee (“EPB”) and the City of Wilson, North Carolina (“Wilson”) (collectively “Petitioners”).²

The Commission should act on the requests of the Petitioners and allow local leaders to make broadband investments that address the challenges and needs of their communities in the long run. Local broadband networks also support additional important Commission policy goals, by promoting competition and providing community anchor institutions (“CAIs”) with access to high-speed broadband infrastructure to meet their growing bandwidth needs. Currently 21 states have passed laws that ban or restrict local investment in broadband infrastructure,³ and these proceedings afford the Commission to consider both the value that local broadband networks can provide for communities, as well as the challenges that state bans and restrictions can pose for those networks.

II. LOCAL BROADBAND NETWORKS PROMOTE COMPETITION AND INVESTMENT.

A. Local broadband networks can serve as effective competitors in a community.

² Petition Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition, filed by Electric Power Board, Chattanooga, Tennessee, WC Docket No.14-116 (filed July 24, 2014) (“EPB Petition”); Petition Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition, filed by City of Wilson, North Carolina, WC Docket No.14-115 (filed July 24, 2014) (“Wilson Petition”).

³ The BallerHerbst Law Group has compiled a list of state law that ban or limit communities. *See* State Restrictions On Community Broadband Services Or Other Public Communications Initiatives, BallerHerbst Law Group , June 1, 2014, available at: <http://www.baller.com/pdfs/BallerHerbstStateBarriers%286-1-14%29.pdf>;

Chairman Wheeler has emphasized that preserving and encouraging competition is an important policy goal, describing the Commission as a “pro-competition agency.”⁴ Affirming the Petitioners’ ability to invest in broadband infrastructure presents an important opportunity for the Commission to preserve existing community-led projects, and pave the way for innovative new competitive options in the future. It will also encourage investment in high-capacity, affordable broadband networks. Research from OTI’s *Reining in the Cost of Connectivity* report, a comparison of residential broadband services available in a number of international and U.S. cities, revealed that municipal networks offer some of the fastest broadband speeds in the country and rank among the world leaders in broadband service.⁵ Residents of the cities OTI surveyed with municipal broadband providers have access to better broadband offerings than those available in major U.S. cities like New York, NY, Los Angeles, CA, and Washington, DC, and are on par with products available in much larger international cities like Hong Kong, Seoul and Tokyo.⁶

Municipal networks can increase competitive pressure in local broadband markets and often improve options available to consumers. As the EPB Petition notes, once EPB began offering its broadband and television services in the community, Comcast responded by

⁴ Tom Wheeler, “Opening Day at the FCC: Perspectives, Challenges, and Opportunities,” *Official FCC Blog*, November 5, 2013, available at <https://www.fcc.gov/blog/opening-day-fcc-perspectives-challenges-and-opportunities>. “During my confirmation hearing I described myself as “an unabashed supporter of competition because competitive markets produce better outcomes than regulated or uncompetitive markets.” Yet we all know that competition does not always flourish by itself; it must be supported and protected if its benefits are to be enjoyed. This agency is a pro-competition agency.” *Id.*

⁵ Hibah Hussain, Danielle Kehl, Patrick Lucey, and Nick Russo, *Reining in the Cost of Connectivity*, Open Technology Institute, January, 2014, *see* Appendix B, Table 1: Wired Speed Leaders, at 25, (“Reining in Cost of Connectivity Paper”) available at: http://newamerica.net/publications/policy/reining_in_the_cost_of_connectivity

⁶ *Id.* At the time of OTI’s research, we found that 1 Gbps broadband products were available in Seoul, South Korea, Tokyo, Japan, and Hong Kong, China. Domestically, 1 Gbps broadband products were available in Chattanooga, TN, Lafayette, LA, Bristol, VA and Kansas City, KS/Kansas City, MO, but not in the larger U.S. cities we surveyed.

increasing its broadband speeds and lowering its prices for cable television.⁷ The Wilson Petition notes that “the competition introduced by Greenlight’s entry into the market has also forced the established providers to offer better services and rates” to the community.⁸ Similar competitive pressure can be seen in other municipal broadband communities. Cox Communications chose the city of Lafayette, LA—as opposed to a larger market in its service area like Phoenix, AZ—as the first market in the U.S. to debut its 50 Mbps broadband service, largely in response to the high-speed broadband services offered by the municipal network in Lafayette.⁹ Additionally, a Government Accountability Office report examining the impact of federal broadband deployment programs on services available to small businesses acknowledges the competitive benefits that municipal broadband networks can have, noting that two area broadband providers invested in their networks and offered faster speeds in response to a local network built in Monticello, MN.¹⁰

Municipal networks often offer faster broadband speeds overall for subscribers, and they are also more likely, as is the case with both Petitioners in this proceeding, to offer symmetrical upload and download speed.¹¹ Higher upload speeds are increasingly important for both business and individual uses. Web developers, video and image production companies, and local health

⁷ EPB Petition at 27-28.

⁸ Wilson Petition at 20.

⁹ Christopher Mitchell, *Broadband at the Speed of Light: How Three Communities Built Next-Generation Networks*, Benton Foundation and Institute for Local Self-Reliance, April 2012, at 29, (“Broadband at the Speed of Light Paper”) available at: <http://www.muninetworks.org/reports/how-chattanooga-bristol-and-lafayette-built-best-broadband-america>.

¹⁰ *Federal Broadband Deployment Programs and Small Business*, Government Accountability Office, GAO-14-203, February 2014, at 11, available at <http://www.gao.gov/assets/670/660734.pdf>.

¹¹ Reining in Cost of Connectivity Paper, Appendix D, Full Data Set; For services offer by Greenlight see “Internet Service,” Greenlight Community Broadband, available at: <http://www.greenlightnc.com/about/internet/>. Services from incumbent providers are typically asymmetrical, with download speeds several times faster than upload speeds. DSL and cable infrastructure is technical capable of offering symmetrical service but providing such broadband products has not been a priority.

care professionals need fast upload speeds to share content effectively,¹² while individuals increasingly require increased upload speeds to share user-generated content.¹³ The EPB Petition notes that with symmetrical upload speeds its network upstream data traffic is equal to nearly half of the total volume of downstream data traffic.¹⁴

B. Local broadband networks represent investments that communities believe would not occur otherwise.

Many municipal networks share a similar origin story: local leaders recognize that their community needs additional broadband resources and approach incumbent broadband providers, asking them how they can work with the incumbent provider to incentivize investments. Most find their requests either declined or ignored.¹⁵ The Wilson Petition explains that “the City’s

¹² For a discussion of the needs of tech industries, *see* Ashley Archibald, “Top 10 Employers Show Stability, Growth,” Santa Monica Daily Press, April 22, 2013, available at <http://smdp.com/top-10-employers-show-stability-growth/12137>; “Chattanooga Celebrates Fourth Anniversary of City-wide Gigabit Network by Upgrading all Service; Gigabit Service Now Available to Residents at \$69.99 a Month,” *The Chattanooga Area Chamber of Commerce*, Press Release, September 17, 2013, available at: <http://www.chattanoogachamber.com/news-media/news/2013/9/chattanooga-celebrates-fourth>, “The launch of true high-speed bandwidth has been critical to Chattanooga’s recent economic successes,” said J.Ed. Marston, VP of Marketing and Communications at the Chattanooga Area of Commerce. “Companies that are heavily reliant on the Internet have found that EPB’s unprecedented speeds, *especially when it comes to synchronistic upload speeds*, directly support their successes.” (emphasis added), *Id*; Also see videos testimonials of Travis Gauthier and Daniel Keding, LUSFiberLafayette YouTube page, available at: <https://www.youtube.com/user/LUSFiberLafayette/videos>; For the needs of doctors office, see discussion of Cape Fear Otolaryngology in Allan Holmes, “How big telecom smothers city-run broadband,” *Center for Public Integrity*, August 28, 2014, available at <http://www.publicintegrity.org/2014/08/28/15404/how-big-telecom-smothers-city-run-broadband/#19>; Benjamin Lennett, Patrick Lucey, Joanne Hovis, and Andrew Afflerbach, *The Art of the Possible: An Overview of Public Broadband Options*, Open Technology Institute and CTC Technology & Energy, May 6, 2014, at 35-39 (“The Art of the Possible: An Overview of Public Broadband Options Paper”), available at: http://newamerica.net/publications/policy/the_art_of_the_possible_an_overview_of_public_broadband_options

¹³ Pew finds that 54 percent of adult internet users have shared pictures or videos online. Maeve Duncan, *Photo and Video Sharing Grow Online*, Pew Research Center, October 28, 2013, available at: <http://www.pewinternet.org/2013/10/28/photo-and-video-sharing-grow-online/>.

¹⁴ EPB Petition at 28-29. EPB states that over the course of seven days the downstream traffic averaged 9.39 gigabytes, while upstream traffic averaged 4.34 gigabytes.

¹⁵ Remarks of Joanne Hovis at the New America Foundation, May 29, 2014, at 40:35, (“Remarks of Joanne Hovis”), available at: http://oti.newamerica.net/events/2014/localism_over_consolidation

officials asked the incumbent communication service providers to build or partner with the City in building a Fiber-to-the-home ('FTTH') network in Wilson. Neither was willing to do so."¹⁶

Today, more and more communities are publicly airing their frustration with the current status of competition and investment from incumbent providers.¹⁷ Localities from small towns like Leverett, MA, to much larger cities like Syracuse, NY, Baltimore, MD, and Seattle, WA, are starting to explore investments in broadband infrastructure.¹⁸ Concerned that incumbent providers will not make the investments in broadband infrastructure needed to meet current and future broadband needs, communities frequently take it upon themselves to solve the problem.¹⁹ The Chairman's own blog post on the subject of municipal broadband acknowledges that

¹⁶ Wilson Petition at 18. *Also see* Todd O'Boyle and Christopher Mitchell, *Carolina's Connected Community: Wilson Gives Greenlight to Fast Internet*, Institute for Local Self-Reliance and Common Cause, December 2012, at 2, 6. ("Greenlight Paper"), available at: <http://www.muninetworks.org/reports/wilsons-greenlight-leads-north-carolina-fast-internet>. Indeed, accounts from local officials in Wilson said that Time Warner Cable representatives "laughed" at their inquiries. *Id.*

¹⁷ Joel Rose, "Frustrated Cities Take High-Speed Internet Into Their Own Hands," *NPR*, March 4, 2014, available at: <http://www.npr.org/blogs/alltechconsidered/2014/03/04/285764961/frustrated-cities-take-high-speed-internet-into-their-own-hands>

¹⁸ Susan Crawford and Robyn Mohr, *Bringing Municipal High-Speed Internet Access to Leverett, Massachusetts*, Berkman Center for Internet & Society, Harvard University, December 2013, at 12-18 ("Leverett Paper"), available at: http://cyber.law.harvard.edu/publications/2013/internet_to_leverett; For Baltimore, Kevin Litten, "Baltimore City pushes to bolster its Internet Speed," *Baltimore Business Journal*, August 30, 2013, available at: <http://www.bizjournals.com/baltimore/print-edition/2013/08/30/baltimore-city-pushes-to-bolster-its.html?page=all>, For Syracuse, "Syracuse looks to install city-wide high-speed broadband," *LocalSYR.com*, August 13, 2014, available at: http://www.localsyr.com/story/d/story/syracuse-looks-to-install-city-wide-high-speed-bro/28182/kvn0zQ6BUkq_KOsXxo94Ww; For Seattle, "Murray: 'Seattle Must Be A National Leader in Identifying Innovative Ways to Make High Speed Internet Available and Affordable To Anyone'," Office of the Mayor, April 9, 2014, available at: <http://murray.seattle.gov/murray-seattle-must-be-a-national-leader-in-identifying-innovative-ways-to-make-high-speed-internet-available-and-affordable-to-anyone/#sthash.Tio6aol1.NqDiddru.dpbs>.

¹⁹ Litten, "Baltimore City pushes to bolster its Internet Speed," "Syracuse looks to install city-wide high-speed broadband," *LocalSYR.com*; Wilson Petition at 18; Greenlight Paper at 2, 6; Broadband at the Speed of Light Paper at 19; Holmes, "How big telecom smothers city-run broadband;" Comments of Holly Springs, NC, WC Docket Nos.14-115 and 14-116 (Aug. 27, 2014) ("Holly Springs Comments"), at 4.

Chattanooga chose to build its own network due, in part, to a lack of investment from incumbent providers.²⁰

III. LOCAL BROADBAND NETWORKS OFFER ADDITIONAL BENEFITS FOR COMMUNITIES.

Local broadband networks offer additional benefits beyond those associated with increased competition and improved broadband access. These positive externalities, which may not be immediately captured by initial competitive and economic value assessments, include improved coordination among local stakeholders, better outcomes for local education, and greater local economic investment.

A community's decision to invest in broadband infrastructure necessitates local planning and organization, a process that has value in and of itself. The resulting engagement among local leaders and a range of stakeholders, including CAIs, helps ensure that broadband projects reflect the needs and resources of the community and lays the groundwork for additional local partnerships and enhanced coordination in the future. Moreover, when the bandwidth needs of community stakeholders are met, that added capacity can lead to additional positive outcomes, such as better educational opportunities for local students, improved healthcare outcomes, or local job growth.²¹ These benefits tend to reflect situations that are not generally captured in the financial assessments that traditional ISPs make prior to building out in a community, but that can be accounted for in the multistakeholder planning processes used by communities making the investments themselves.²²

²⁰ Tom Wheeler, "Removing Barriers to Competitive Community Broadband," *Official FCC Blog*, June 10, 2014, available at <https://www.fcc.gov/blog/removing-barriers-competitive-community-broadband> "The network was partly built out of necessity. Local phone and cable companies chose to delay improvements in broadband service to the Chattanooga area market." *Id.*

²¹ For a discussion of the positive externalities that can be associated with local broadband networks, see *The Art of the Possible: An Overview of Public Broadband Options Paper* at 31-39.

²² For a model collaborative planning process of how local governments and universities could engage with their communities to promote high-speed broadband access, see Benjamin Lennett, Sarah J. Morris,

A. *Local broadband networks encourage local planning and coordination.*

Before building a network, local officials engage in rigorous planning activities. This typically includes: conversations with CAIs to assess both current and future bandwidth needs, feasibility studies and business planning to ensure the network is financially viable, and public meetings to inform and engage with area residents. Additionally, the local planning process usually involves outreach to the area incumbent broadband providers to gauge their investment plans and interest in participating in the project.²³ This careful planning and engagement ensures that a network project reflects both the resources and the needs of the community at the onset.

Commitments to cautious planning and substantial stakeholder engagement are common for local networks and are illustrated by examples in the Petitioners' filings. Leaders in Wilson conducted feasibility studies, business planning, and public hearings before proceeding with construction of the network.²⁴ The EPB petition describes how project leaders were committed to community engagement in the civic planning process for the network.²⁵

Similarly, leaders in other cities have taken concrete steps to engage with their constituencies. Leverett is a community in western Massachusetts that lacks reliable, high-speed

and Greta Byrum, *Universities as Hubs for Next-Generation Networks*, New America Foundation, April 23, 2012, available at:

http://newamerica.net/publications/policy/universities_as_hubs_for_next_generation_networks

²³ Remarks of Joanne Hovis; Broadband at the Speed of Light Paper at 19; Greenlight Paper at 2, 6; Wilson Petition at 18.

²⁴ Wilson Petition, 18; Wilson Petition Exhibits 2 and 3.

²⁵ EPB Petition at 18-19. During a 2012 webinar Colman Keane described some of EPB's public engagement in greater detail. EPB officials prepared a series of eight different presentations explaining their plans for the local network, with varying technical detail depending on the audience, to ensure they effectively communicate with community. In describing their commitment to engaging with residents, he remarked, "If grandma's book club wanted us to do a presentation [about our fiber network], we'd do it." See Remarks of Colman Keane, Director of Fiber Technology, EPB, "How a Municipal Network Can Help Your City," National League of Cities Webinar, September 13, 2012, available at <http://www.nlc.org/build-skills-and-networks/education-and-training/event-calendar/how-a-municipal-network-can-help-your-city> .

broadband access.²⁶ Frustrated with the status quo, local leaders began to explore the possibility of constructing a municipal network to serve residents.²⁷ Town officials held several public meetings to inform residents about their plans for building a local network, culminating with a comprehensive presentation at the annual town meeting. After the presentation, residents voted in favor of the proposal.²⁸ The network is currently under construction and expected to be completed by the end of 2014.²⁹

Other communities have surveyed local businesses and found that the bandwidth needs of those businesses were not being met. In Santa Monica, after outreach to local businesses, officials worked to expand the existing municipal network to meet the businesses' connectivity needs.³⁰ The number of similar examples is growing as more and more cities around the U.S. are now exploring the possibility of investing in their own networks. And as consolidation in communications industries continues to increase, the shift from local or regional service areas to national service areas is similarly accelerated,³¹ making it more important than ever for CAIs and residents to have access to a network that is committed to local engagement and responding to local needs.

²⁶ Leverett Paper at 7-9.

²⁷ *Id.* at 12-13.

²⁸ *Id.* at 14-16.

²⁹ *Id.* at 14; Institute for Local-Self-Reliance, Community Broadband Bits Podcast 113 – Muni Fiber in Rural Massachusetts.(Audio Podcast), August 26, 2014, available at <http://www.muninetworks.org/content/muni-fiber-rural-massachusetts-community-broadband-bits-podcast-113>

³⁰ Masha Zager “Santa Monica City Net: How to Grow a Network,” *Broadband Communities Magazine*, May/June 2011, at 44-47, available at <http://www.bbpmag.com/MuniPortal/EditorsChoice/0511editorschoice.php>.

³¹ In the Comcast – Time Warner Cable merger proceeding, the City of Los Angeles noted its concern at how Comcast's potential increase in size could impact the ability of local governments to communicate effectively with the company. *See* Comments of Office of the Mayor of the City of Los Angeles, MB Docket No. 14-57 (Aug. 25, 2014) at 8, at <http://apps.fcc.gov/ecfs/comment/view?id=6018320239>

B. Local broadband networks improve access to Community Anchor Institutions

The Commission has a responsibility to ensure that community anchor institutions have access to adequate broadband resources.³² OTI has demonstrated the critical role CAIs play in providing needed broadband access for their communities,³³ and has supported efforts to modernize the E-Rate program to ensure it can meet the 21st century bandwidth needs of schools and libraries.³⁴

Local broadband networks can offer CAIs access to high bandwidth services.³⁵ Providing high bandwidth connections to schools, libraries, and other community centers is generally a core mission of local broadband networks.³⁶ Recognizing this goal, the Commission

³² In other proceedings the Commission has adopted the following definition for community anchor institutions: “For purposes of this order, we define “community anchor institutions” to mean schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, the unemployed, and the aged. We draw upon the definition used in implementing American Recovery and Reinvestment Act of 2009.” See *Connect America Fund et al*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 ¶102, footnote 163 (rel. Nov. 18, 2011).

³³ Seeta Peña Gangadharan, Kistine Carolan, Kayshin Chan, *The KEYSLOT Model: A Home Away from Home*, Open Technology Institute, July 2013, available at http://oti.newamerica.net/sites/newamerica.net/files/articles/OTI_Field_KEYSLOT.Model_Release.pdf

³⁴ Comments of New America Foundation - Open Technology Institute and Education Policy Program, WC Docket No. 13-184 (Sept. 16, 2013); Comments of New America Foundation - Open Technology Institute and Education Policy Program, WC Docket No. 13-184 (Apr. 7, 2014).

³⁵ The National Broadband plan recognized that local networks can be a resource to meet the bandwidth needs of anchor institutions. See NBP, Recommendation 8.20, “Federal and state policies should facilitate demand aggregation and use of state, regional and local networks when that is the most cost-efficient solution for anchor institutions to meet their connectivity needs.”

³⁶ Broadband at the Speed of Light Paper at 3; Eric Lampland and Christopher Mitchell, *Santa Monica City Net, An Incremental Approach to Building a Fiber Optic Network*, Institute for Local Self-Reliance, March 2014, at ii, available at: <http://www.muninetworks.org/reports/santa-monica-city-net-case-study>; see Remarks of Joanne Hovis at 49:26.

in 2010 clarified that government and non-profit networks are eligible to receive E-rate support for broadband services.³⁷

In the recent E-rate Modernization Order, the Commission adopted school Internet access targets of 100 Mbps per 1,000 students in the short term and 1 Gbps per 1,000 students in the long term.³⁸ Several schools systems served by local broadband networks already meet or exceed these thresholds. As of 2012, EPB provided Chattanooga schools with at least 100 Mbps connections.³⁹ Wilson's Greenlight network provides all Wilson County school sites with 1 Gbps symmetrical service.⁴⁰ The local networks in Lafayette, LA, and Bristol, VA, also both provide local public school facilities with 1 Gbps, and have been for several years.⁴¹ A local network in Martin County, FL, provides area schools with 1 Gbps at a price cheaper than their previous, much slower service—a clear example of a case where having a local option has led not only to faster speeds but also to more efficient use of funding.⁴²

Petitioners' networks also provide high-speed broadband access to public computing centers in local libraries.⁴³ For example, the newly constructed community network in Holly Springs, NC, connected a local community center, which offers broadband resources to the

³⁷ *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Report and Order, FCC 10-175 (rel. Sept. 28, 2010), at ¶9.

³⁸ *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, FCC 14-99 (rel. July 23, 2014) at ¶34.

³⁹ *Broadband at the Speed of Light Paper* at 44.

⁴⁰ *Wilson Petition* at 21, footnote 43.

⁴¹ *Broadband at the Speed of Light Paper* at 3, 28-29.

⁴² Lisa Gonzalez and Christopher Mitchell, *Florida Fiber: Martin County Saves Big with Gigabit Network*, Institute for Local Self-Reliance, June 2012, at 7, available at:

<http://www.muninetworks.org/reports/florida-county-saves-millions-building-its-own-broadband-network>

⁴³ *Wilson Petition* at 21, footnote 43; EPB petition 26.

public including Wi-Fi access in the vicinity, increasing the capacity at the site from 50 Mbps to 2 Gbps.⁴⁴

C. Local networks can lead to additional economic development in communities.

Access to affordable, reliable, high-speed broadband services is critical for the ongoing success of U.S. businesses, large and small.⁴⁵ To illustrate, the EPB fiber network has had a “direct connection” to the creation of over 1,000 jobs over the last four years, providing substantial economic value to the community.⁴⁶ Similarly, the Wilson petition notes that “[e]ach of the top seven employers in the community utilize the fiber network, assisting in retention of these critical employers.”⁴⁷ Wilson’s network has been instrumental in attracting new residents and new businesses to the area,⁴⁸ which in turn has spurred additional economic activity in the community. In addition, other local networks have decided to expand after surveying local businesses and determining that their bandwidth needs were not being met by incumbent commercial providers.⁴⁹

IV. LOCAL NETWORKS SPUR BROADBAND DEPLOYMENT BY PROMOTING NEW MODELS AND PARTNERSHIPS, WHILE STATE RESTRICTIONS LIMIT LOCAL INNOVATION AND DISTORT THE PLANNING PROCESS.

⁴⁴ “Holly Springs, NC Lights First Site on New Fiber Network,” CTC Technology & Energy Blog, June 13, 2014, available at: <http://www.ctcnet.us/blog/holly-springs-nc-lights-first-site-on-new-fiber-network/>.

⁴⁵ See video testimonials of local businesses, LUSFiberLafayette YouTube page, available at: <https://www.youtube.com/user/LUSFiberLafayette/videos>

⁴⁶ EPB petition at 25; EPB Petition Exhibit 9; “Chattanooga Celebrates Fourth Anniversary of City-wide Gigabit Network by Upgrading all Service; Gigabit Service Now Available to Residents at \$69.99 a Month,” The Chattanooga Area Chamber of Commerce, Press Release; Indeed, both former and current Commission Chairmen have recognized the economic impact the EPB network has had on Chattanooga (see “*FCC Chairman Julius Genachowski Issues Gigabit City Challenge to Providers, Local, and State Governments to Bring at Least One Ultra-Fast Gigabit Internet Community to Every State in U.S. by 2015*,” News Release (Jan. 18, 2013), available at <http://www.fcc.gov/document/fcc-chairman-genachowski-issues-gigabit-city-challenge>; Wheeler, “Removing Barriers to Competitive Community Broadband”).

⁴⁷ Wilson Petition at 21

⁴⁸ Wilson Petition at 21-22; Remarks of Will Aycock at 47:30, 52:00.

⁴⁹ Zager, “Santa Monica City Net: How to Grow a Network.”

A. *State restrictions limit the potential for local innovation and can impact different projects in different ways.*

Upgrading the nation's broadband infrastructure is a huge challenge. Communities have, and will continue, to experiment with different deployment models and partnerships with the private sector to improve broadband access. However, state restrictions on local broadband networks limit innovation and undermine local decision-making. Each municipal broadband network is unique, reflecting the needs and resources of the community. State-wide restrictions on municipal broadband projects therefore impact different communities in different ways.

Holly Springs, NC, completed construction of a local broadband network that is restricted to serving only local government sites, and as a consequence the network does not serve local businesses or residents. Local officials report that they have received requests from local businesses for service and have had to decline due to state restrictions, although they otherwise would have investigated the feasibility.⁵⁰

Harmful state laws can also discourage potential additional private sector investment and participation in local broadband projects. Officials from Boulder, CO, have noted that restrictions on local broadband projects discouraged Google Fiber from selecting the city as a potential location,⁵¹ demonstrating the ways in which laws that were meant to limit municipal

⁵⁰ Institute for Local-Self-Reliance, Community Broadband Bits Podcast 107 – Holly Springs Finds Savings with Muni Fiber, (Audio Podcast), July 15, 2014, available at <http://www.muninetworks.org/content/holly-springs-finds-savings-muni-fiber-community-broadband-bits-episode-107>; In their comments Holly Springs state their network planning efforts “are severely hampered in being able to consider a full range of strategies,” Holly Springs Comments at 2.

⁵¹ Jeremy Meyer, “Meyer: Colorado law hinders cities’ efforts to expand broadband networks,” *Denver Post*, August 8, 2014, available at http://www.denverpost.com/opinion/ci_26300274/meyer-colorado-law-hinders-cities-efforts-expand-broadband; Erica Meltzer, “Boulder seeks authority to create citywide broadband network,” *Boulder Daily Camera*, June 12, 2014, available at: http://www.dailycamera.com/news/boulder/ci_25949336;

broadband networks can also negatively impact the planning for potential public-private partnership network models.

B. Local networks represent a range of different deployment models.

Local broadband networks follow a range of different models.⁵² While the most famous are those, like the Petitioners, who have constructed a FTTH networks and offer competitive retail broadband and video products to their residents, a host of other models exist. Many other communities, including Martin County, FL, and Santa Monica, CA, have invested in local internal networks, sometimes known as ‘I-Nets,’ that provide service to local CAIs and other institutions but not to residents directly. There is much variation within the models for I-Nets, with some serving businesses and others serving public sector sites. I-Nets are often structured as public-private partnerships, where the local government invests in some infrastructure and also seeks a private partner to match an investment or to utilize newly constructed conduit or dark fiber. Communities are even experimenting with traditional cooperative models for infrastructure, with some rural electrical cooperatives investing in broadband infrastructure and offering their members ultra-fast speeds.⁵³

V. CONCLUSION

The Commission has many important challenges before it, including the need to promote competition for broadband service; to encourage investment in network infrastructure so that all American have access to broadband; and to ensure that community anchor institutions, especially

⁵² For a more in depth discussion of different models of municipal broadband networks, see *The Art of the Possible: An Overview of Public Broadband Options Paper* at 7-13.

⁵³ Residents of small communities in rural Missouri, including California, MO (population 4,278), have access to 1 Gbps broadband speeds thanks to the infrastructure investments of the area electrical cooperative, Co-Mo Electric. See “Co-Mo Connect Announces Gigabit Pricing, Free Speed Upgrades,” Co-Mo Electric Cooperative, Press Release, December 19, 2013, available at <http://www.co-mo.coop/news/newsdetail.aspx?itemID=256>; “Co-Mo Connect signups begin in Versailles; gigabit Internet near,” *Lake News Online*, August 18, 2014, available at: <http://www.lakewsonline.com/article/20140818/Business/140819220>.

schools and libraries, have access to broadband services that meet their growing needs. Local broadband networks are part of the solution to these policy challenges. They help improve the competitive landscape within and around communities and connect those communities that are underserved. In addition, they serve an important role as local partners, and can help ensure that community anchor institutions are provisioned for current and future needs. By removing the state laws that the Petitioners have identified as barriers to investment, the Commission will promote local choice and allow local leaders to innovate and find their own solutions to meet their communities' needs.

Respectfully Submitted,

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