

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| Executive Summary | i |
| I. Introduction..... | 1 |
| II. About FiberTower..... | 3 |
| III. Backhaul is Essential for Ubiquitous Broadband Deployment..... | 4 |
| IV. The Commission Should Ensure that Multiple-Use Backhaul Platforms Are Mapped and Accessible to All Interested Users. | 6 |
| V. The Commission Should License a Limited Number of Vacant Channels in the TV White Spaces for Fixed, Point-to-Point Use..... | 8 |
| VI. Congress Should Expand, and the Commission Should Enforce, Existing Federal Preemptions Over Burdensome Zoning and Permitting Restrictions for Fixed Wireless Antenna Placements..... | 10 |
| A. Pole Attachments and Other Utility Structures..... | 13 |
| B. Government-Controlled Rights-of-Way and Facility Siting..... | 17 |
| VII. The Commission Could Further Stimulate Broadband Deployment by Providing Terrestrial Wide-Area Wireless Licensees with the Flexibility to Make Portions of Their Licensed Spectrum Available for Satellite Use..... | 17 |
| VIII. Conclusion | 20 |

EXECUTIVE SUMMARY

No national broadband plan would be complete without strong “middle mile” and “last mile” backhaul network components. The deployment of such networks is critical to expanding access to broadband in the United States and is essential to realizing the benefits of broadband networks, whether they support carrier, enterprise, or government operations.

There currently is a lack of adequate middle mile and last mile backhaul capacity. The middle mile backhaul infrastructure in particular, which has not been upgraded in two decades, has not kept pace with other network enhancements. This lack of development has inhibited the growth, service quality, and operational efficiencies of broadband services.

To address this widening broadband backhaul and transport gap, the Commission and Congress should take a number of steps.

First, the Commission’s national broadband plan should ensure that all operators and users are able to access multiple-use backhaul platforms in a non-discriminatory manner.

Second, the Commission should license a limited number of the numerous vacant channels in the TV White Spaces for fixed, point-to-point use.

Third, the Commission should re-enforce existing federal rate, term, and condition protections with respect to facilities placement on utility structures and unreasonable state and local government deployment restrictions for fixed wireless antenna placements. It should also vigorously urge Congress to expand and clarify the related protections afforded to broadband providers.

Finally, the Commission should provide terrestrial wide-area wireless licensees with the flexibility to make portions of their licensed spectrum available for satellite use to facilitate the provision of broadband services by satellite operators.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
A National Broadband Plan for Our Future) GN Docket No. 09-51

COMMENTS OF FIBERTOWER CORPORATION

I. Introduction

FiberTower Corporation (“FiberTower”) hereby submits these Comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) April 8, 2009 Notice of Inquiry (“*NOI*”) in the above-referenced proceeding.¹ Pursuant to the American Recovery and Reinvestment Act of 2009,² the Commission must submit to Congress a national broadband plan that ensures that every American has access to broadband capability. In the *NOI*, the Commission seeks comment on whether its review of the broadband market should “encompass backbone networks” and the barriers to entry in such markets.³ As the discussion below makes clear, the answer is “yes.” No national broadband plan would be complete without a strong “middle mile”⁴ and “last mile” backhaul component. Indeed, as FiberTower and others have previously stated, ubiquitous broadband is not possible without the presence of high capacity middle mile and last mile backhaul networks. Thus, in developing the national broadband plan, the Commission must conduct a thorough review of the backhaul market and take aggressive

¹ *A National Broadband Plan for Our Future*, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (“*NOI*”).

² American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (“*Recovery Act*”).

³ *NOI* ¶ 35.

⁴ The “middle mile” is generally considered to be the portion of a broadband network that connects towns, cities, and communities to the Tier 1 Internet backbone.

action to ensure its viability and development.

To overcome middle mile and last mile backhaul and transport facility shortages, and to encourage the deployment of advanced broadband services, the Commission's national broadband plan should:

- **Ensure that multiple-use backhaul platforms, called MuniFrames®, are mapped and accessible to all users.** Mapping unserved and underserved areas will allow parties to ascertain whether and where such multi-use platforms exist. Moreover, it is important to ensure that all parties have the ability to access these platforms in a reasonably non-discriminatory manner.
- **License a limited number of the numerous vacant channels in the TV White Spaces for fixed, point-to-point use.** The lack of backhaul and transport services is particularly problematic in rural areas, where numerous vacant channels exist and high costs and great distances slow or prevent connections to carrier switch locations or the Internet. The long-range propagation characteristics of the TV White Spaces allow backhaul to be provided over the spectrum at a fraction of the infrastructure cost associated with less attractive spectrum.
- **Re-enforce existing federal protections against burdensome zoning and permitting restrictions for fixed wireless antenna placements.** Restrictions that unreasonably impair the installation of small antennas for fixed wireless service, including prohibitive access and pricing practices, should be prohibited. Zoning and permitting requirements, moreover, often add substantial delays and costs to broadband deployment.
- **Provide terrestrial wide-area wireless licensees with the flexibility to make portions of their licensed spectrum available for satellite use.** Such use can be accomplished

through mutually beneficial leasing or other private arrangements to facilitate the provision of broadband services by satellite operators.

II. About FiberTower

Formed in 2000, FiberTower is the nation's leading alternative carrier for middle mile and last mile backhaul.⁵ FiberTower operates a 100 percent facilities-based communications network using fiber optic and wireless assets. Its network spans more than 6,000 base stations in 13 United States markets. In addition, FiberTower's network currently covers approximately 12,000 route miles, with 7,000 miles covered using fixed wireless and another 5,000 miles using dark fiber.

FiberTower's spectrum portfolio represents one of the largest and most comprehensive collections of 24 GHz and 39 GHz wide-area millimeter wave spectrum in the United States. FiberTower's spectrum licenses extend over substantially all of the continental United States, covering a population of approximately 300 million. The portfolio includes more than 740 MHz in the top 20 metropolitan areas. In the aggregate, these channels cover approximately 1.55 billion channel pops.⁶

FiberTower offers service to mobile wireless carriers, competitive and other local exchange carriers, first responder networks, and government and enterprise customers. Through partnerships and master lease agreements, FiberTower has access to more than 100,000 towers nationwide on which it can deploy carrier-class and government-class networks. In fact, the top eight mobile carriers and several federal government agencies are among FiberTower's largest customers. Additionally, FiberTower has master service agreements with Verizon and Qwest to

⁵ Backhaul is the transport of voice, video, and data traffic from a customer location (such as a cell site) back to a switching center or to the Internet.

⁶ Calculated as the number of channels in a given area multiplied by the population, as measured in the 2000 Census.

provide fixed wireless services on the General Services Administration Network contract.

III. Backhaul is Essential for Ubiquitous Broadband Deployment

The deployment of middle mile and last mile backhaul networks is critical to expanding access to broadband services in the United States and is essential to realizing the benefits of broadband networks, whether they support carrier, enterprise, or government operations. This infrastructure connects last mile end-user networks, including those that serve first responders, municipal buildings, medical facilities, schools, and libraries, to the Internet or to network switching centers.⁷ The transport provided by these networks is often considered the “Achilles heel” to achieving ubiquitous broadband connectivity to end users, whether via mobile or fixed networks, because without such transport, ubiquitous broadband is not possible.⁸

There currently is a shortage of adequate middle mile and last mile backhaul capacity both at the wireless cell site level and regarding direct access to educational, medical, ILEC/CLEC, homeland security, public safety, municipal, business and residential structures. This shortage is a prime reason why wireless broadband providers have not yet secured a significant portion of the consumer broadband market. In the *NOI*, the Commission expressly affirms “the importance to wireless broadband services of backhaul to the PSTN and the Internet.”⁹ As 4G wireless networks are deployed, the need for robust backhaul solutions will

⁷ See FiberTower Corporation, the Rural Telecommunications Group, Inc., COMPTTEL, and Sprint Nextel Corporation, Letter and Petition for Reconsideration, GN Docket No. 09-29, at 2 (filed Mar. 25, 2009) (“Rural Broadband Letter”).

⁸ See *Ex Parte* filing by FiberTower, Sprint Nextel, RTG, and Comptel, ET Docket Nos. 04-186, 02-380, at 4 (filed Oct. 31, 2008) (“October 31 *Ex Parte*”). This is particularly true for wireless networks, which hold the most promise for delivering future broadband competition. As Commissioner McDowell has stated, “all wireless services have to be backhauled to the PSTN and the Internet via a network of some kind.” *Unlicensed Operation in the TV Broadcast Bands*, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807, Statement of Commissioner Robert M. McDowell, 2 (2008) (“*Second R&O*”).

⁹ *NOI* ¶ 45.

increase. The middle mile backhaul infrastructure in particular, which has not been upgraded in two decades, has fallen off pace just as the capabilities of wireless and wireline broadband networks — and Internet backbone facilities — have exploded. This lag in development has inhibited the growth, service quality, and operational efficiencies of broadband services.

Insufficient backhaul is particularly problematic in rural areas because of the often great distances between a local network and an Internet connection.¹⁰ In the *NOI*, the Commission asks whether backhaul costs are an impediment to further broadband deployments.¹¹ The answer is “yes.” The longer the transport distance, the greater the expense. The high cost of middle mile and last mile backhaul — particularly in rural areas — is a major barrier to affordable, universal broadband.¹²

The good news is that a single wireless backhaul system, such as the type deployed routinely by FiberTower, facilitates Internet and telecommunications connections of buildings and cell sites employed by multiple carriers, public safety entities, and government and private enterprise users. Indeed, because of the importance of middle mile and last mile backhaul facilities, Congress explicitly envisioned that broadband-related economic stimulus funds could be used to support the deployment and use of such infrastructure.¹³ The Commission should honor and enhance Congress’s economic stimulus funding mandates and incorporate a vigorous middle mile and last mile backhaul network deployment strategy into its national broadband plan.

¹⁰ See, e.g., Comments of Verizon and Verizon Wireless, GN Docket No. 09-29, at 11 (filed Mar. 25, 2009).

¹¹ *NOI* ¶ 50.

¹² See, e.g., Comments of New America Foundation, GN Docket No. 09-29, at 5 (Mar. 25, 2009) (stating that “increasingly [limited] access to the high-speed middle mile links that carry Internet traffic to the backbone, and the escalating costs associated with transporting traffic among networks, have become fundamental barriers to spreading connectivity, promoting broadband competition, improving speeds and lowering prices”) (“New America Comments”).

¹³ H.R. Rep. No. 111-16, at 774-75 (2009) (Cong. Rep.), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_reports&docid=f:hr016.111.pdf.

As recognized by numerous parties filing comments on broadband-related matters, no community or network is “an island.” The escalating costs of carrying Internet-bound traffic to the backbone and transporting traffic among networks have become roadblocks to broadband connectivity and competition — and the benefits of enhanced speeds, scalability, functionality, and lower prices.¹⁴ But better (faster and more scalable) and more middle mile and last mile backhaul would increase the number of interconnection points, routes, and broadband competitors. Scalability is particularly critical: without it “rural networks will hit a wall in terms of speed and pricing as the capacity costs associated with increased traffic to the backbone will grow faster than profits.”¹⁵

IV. The Commission Should Ensure that Multiple-Use Backhaul Platforms Are Mapped and Accessible to All Interested Users.

The Commission should encourage the installation of multiple-use backhaul platforms, called MuniFrames®, as part of its national broadband plan. It is essential to the national broadband plan to map whether and where these multiple-use platforms exist. In addition, the Commission should ensure that all providers of broadband have equal, non-discriminatory access to these platforms.

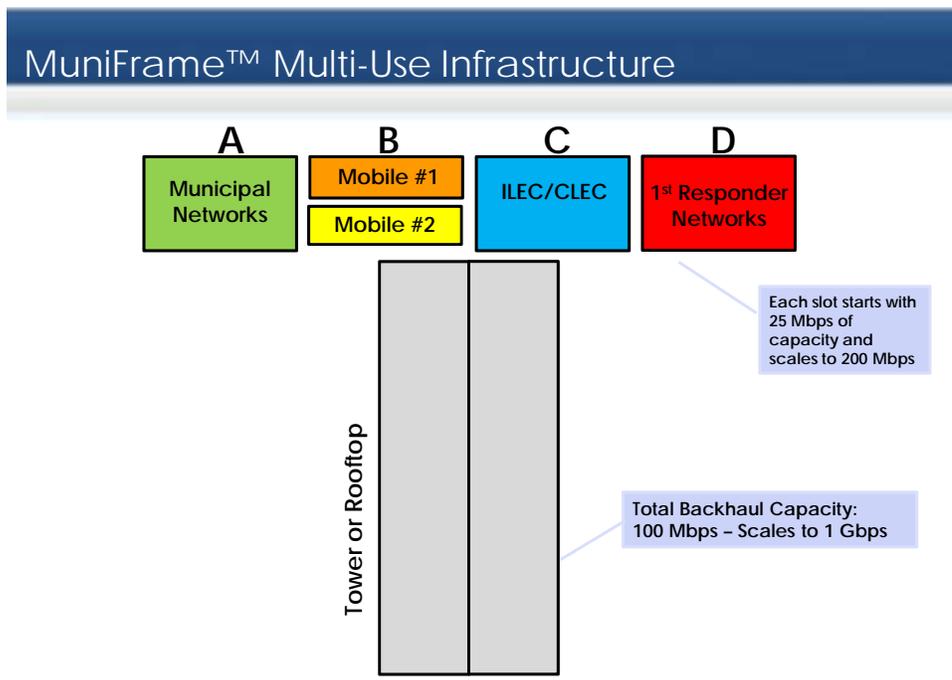
MuniFrames® provide unserved and underserved areas, including rural areas, with all the benefits of a municipal network. For example, these platforms in broadband-enabled municipal areas can be used to provide backhaul for mobile wireless carriers, wireline carriers, schools, libraries, first responder networks, and local, state, and municipal government users.

MuniFrames® are also scalable, as users begin with 25 Mbps of capacity and can increase bandwidth to 200 Mbps for each site.

¹⁴ New America Comments at 5.

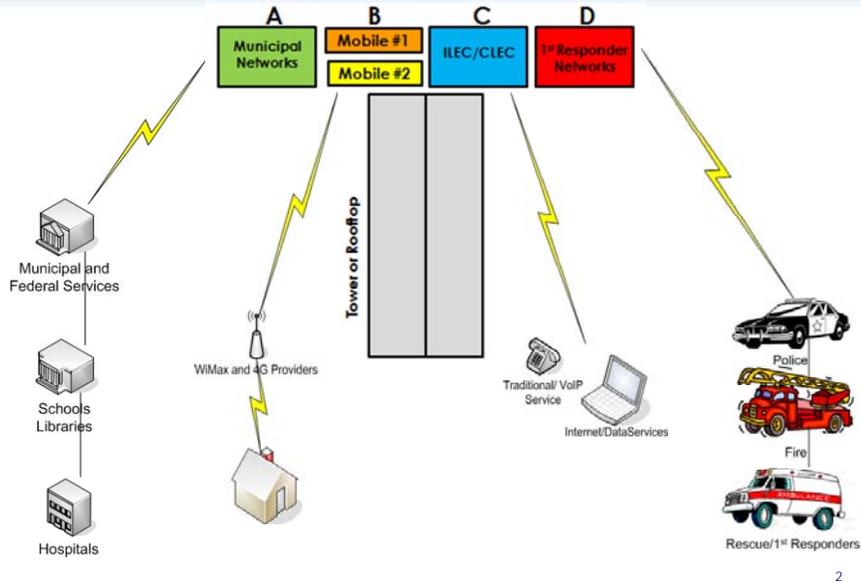
¹⁵ *Id.*

By connecting communities and enabling broadband service to a diverse cross-section of users, these platforms also further Congress’s directive that the Commission use its national broadband plan to advance a series of important public policy goals.¹⁶ By promoting the deployment of these platforms, the Commission would also be advancing consumer welfare, community development, job creation, economic growth, private sector investment, and entrepreneurial activity through lower costs, increased connectivity, and expanded broadband availability. By providing solutions that meet government and first responder service requirements, the Commission would also be advancing important public safety and homeland security goals.



¹⁶ NOI ¶¶ 63-105; Recovery Act § 6001(k)(2)(D).

Multi-use Infrastructure - Detail



Supporting equal, non-discriminatory access to MuniFrames® truly facilitates nationwide broadband deployment while greatly reducing network build-out costs. Moreover, the widespread deployment of these backhaul platforms would help “ensure that all people of the United States have access to broadband capability.”¹⁷

V. The Commission Should License a Limited Number of Vacant Channels in the TV White Spaces for Fixed, Point-to-Point Use.

In view of the importance of middle mile and last mile backhaul to the successful development of a ubiquitous broadband infrastructure, a key component of the Commission’s national broadband plan should focus on expanding the amount of licensed spectrum that can be used for middle mile and last mile backhaul. As the *NOI* suggests, this goal can be furthered by granting the petition for reconsideration filed by FiberTower, the Rural Telecommunications

¹⁷ *NOI* ¶¶ 13-23; Recovery Act § 6001(k)(2).

Group, COMPTTEL, and Sprint Nextel in the TV White Spaces proceeding¹⁸ and developing rules for operating new licensed wireless services in unused portions of the TV bands.¹⁹

In the *Second R&O* in the TV White Spaces proceeding, the Commission adopted rules that permit the operation of unlicensed devices in the White Spaces.²⁰ Although the Commission correctly determined that it should authorize more extensive use of the White Spaces for broadband and other services, it erred in failing to dedicate at least some spectrum for fixed, licensed services, including critical middle mile and last mile backhaul services, based on the proceeding record. As discussed above, middle mile and last mile backhaul is an essential input for all broadband networks, whether they are licensed or unlicensed.²¹ Moreover, to ensure the reliability and quality-of-service needed to deliver viable backhaul solutions, wireless providers need to utilize *licensed* spectrum, with its attendant higher power, interference protection, and other benefits. Wireless backhaul for commercial mobile providers or first responder networks, and transport connectivity to government or medical buildings, typically requires rigorous service-level standards for signal availability and other service quality reasons. Due to the mission-critical nature of their operations, those consumers of backhaul and transport almost always insist on licensed spectrum for their wireless connections. Additional benefits of licensed use of the White Spaces include the spectrum's exceptional propagation characteristics (which, as discussed above, are ideal for lower-cost backhaul over much longer distances), the promotion

¹⁸ See Petition for Reconsideration of FiberTower, RTG, COMPTTEL and Sprint Nextel, ET Dockets No. 04-186 and 02-380 (Mar. 19, 2009).

¹⁹ See *NOI* ¶ 45.

²⁰ *Second R&O*.

²¹ See, e.g., October 31 *Ex Parte* at 4, 10; *Ex Parte* filing by RTG, NTCA, and RICA, ET Docket Nos. 04-186, 02-380 (filed Oct. 24, 2008); *Ex Parte* filing by COMPTTEL, ET Docket Nos. 04-186, 02-380 (filed May 9, 2008); *Ex Parte* filing by Sprint Nextel and T-Mobile USA, Inc., ET Docket Nos. 04-186, 02-380 (filed Jan. 3, 2008); "Optimizing the TV Bands White Spaces: A Licensed, Fixed-Use Model for Interference-Free Television and Increased Broadband Deployment in Rural and Urban Areas," *Ex Parte* filing by FiberTower and RTG, ET Docket Nos. 04-186, 02-380 (filed Oct. 2, 2007).

of build-out in rural areas, and the enhanced protection of incumbents through greater regulatory certainty and accountability, as well as the off-the-shelf availability of fixed, point-to-point backhaul equipment and the speed with which this equipment can be deployed. In addition, fixed, licensed use does not create interference concerns with either existing TV bands operations or with any proposed unlicensed operations.²²

The Commission's failure thus far to authorize fixed, licensed services in at least a small portion of the TV White Spaces compromises the significant benefits of expanded use of the White Spaces and the goals of ubiquitous broadband deployment. Most TV White Space lies fallow in unserved, and some underserved, areas, and ample spectrum exists in those areas to accommodate middle mile and last mile backhaul. Accordingly, as part of its national broadband strategy, the Commission should reconsider its decision in the TV White Spaces proceeding expeditiously and dedicate a portion of the White Spaces for fixed, licensed use to support middle mile and last mile backhaul infrastructure.

VI. Congress Should Expand, and the Commission Should Enforce, Existing Federal Preemptions Over Burdensome Zoning and Permitting Restrictions for Fixed Wireless Antenna Placements.

In the *NOI*, the Commission seeks comment on the extent to which tower siting, pole attachments, and rights of way issues, “stand as impediments to further broadband deployments where such deployments would be made by market participants”²³ In truth, access to utility infrastructure on reasonable rates, terms, and conditions, and speedy and principled local government approval for use of public rights-of-way, are critical to expanding broadband deployment.

²² See, e.g., Rural Broadband Letter at 2.

²³ *NOI* ¶ 50.

A generation ago, when the cable television industry was seeking to build out the first alternative wire-based networks to the ILECs and the first home-delivered electronic entertainment alternatives to broadcast networks, prompt access to public rights-of-way, facility construction permitting and poles for aerial plant was a major obstacle to cable's early deployment. Fortunately, Congress addressed these utility and government impediments and helped unleash cable's potential when it passed the Pole Attachment Act in 1978 and the Cable Communications Policy Act in 1984.²⁴ These major amendments to the Communications Act facilitated the growth of entire industries. They were instrumental in liberating electronic communications from the dreary black rotary "One System One Policy" monopoly to the vibrant, ever-innovating competitive bazaar it is today. But the Commission and Congress must refocus and refine its last-generation pro-competitive milestones for today's and tomorrow's broadband world.

This is not to say that there have been no updates. The 1978 Pole Act was amended in 1996 to sweep non-ILEC telecommunications carriers (which the Supreme Court subsequently found could include carriers that seek to place wireless devices on utility poles) under its protections.²⁵ The 1996 Act also sought to prevent local and state governments from imposing unreasonable entry barriers on telecommunications carriers.²⁶ The Act attempted to place limits on local governments' ability to restrict new tower siting and construction.²⁷ On balance, these amendments helped promote the deployment of additional alternative networks in the post-1996 world. For example, the subsequent FCC OTARD implementation rules place the burden on the

²⁴ 47 U.S.C. §§ 224, 521 *et seq.*

²⁵ *See National Cable & Telecomm. Ass'n v. Gulf Power Co.*, 534 U.S. 327 (2002) ("*Gulf Power*").

²⁶ *See, e.g.*, 47 U.S.C. § 253.

²⁷ *Id.* § 332(c)(7).

entity seeking to restrict or slow a wireless device deployment (through zoning, permitting or other means).

But as markets have developed in the 13 years *since* the 1996 Act (and the 25 and 30 years since the Cable and Pole Attachment Acts respectively), and as so much policy focus now appropriately falls on under- and unserved areas and wireless broadband solutions, the gaping and growing “real world” holes in the statutory and regulatory construction are too big to ignore any longer.

Although time-to-market and cost considerations are critical, the tribunals empowered to ensure just and reasonable access to poles, conduits, and rights-of-way, and that local and state governments are not unreasonably impeding deployment, often lack both the capacity and the authority to efficiently and fully facilitate access. A “shot clock” setting a deadline by which a government entity or an infrastructure owner must accord physical access — and suffer stern consequences if the deadline is not met — is particularly important as both government and infrastructure-owning entities expand beyond merely owning and controlling the critical middle mile and last mile corridors, to competing directly with private companies like FiberTower. Swift dispute resolution and enforcement procedures — *e.g.*, “rocket dockets” — are also essential.

The statutory and regulatory gaps affecting both pole owners and state and local governments are fundamental and include major jurisdictional holes. Federal pole attachment regulations do not cover government-owned or cooperative-owned entities.²⁸ Only cable operators and certain telecommunications carriers — with all the legacy baggage that this term implies — are full beneficiaries of federal pole attachment regulation. As for proscriptions

²⁸ *See id.* § 224(a)(1).

against state and local governments under Section 253 of the Communications Act,²⁹ only entry barrier restrictions relating to telecommunications and telecommunications carriers fall under the provision's purview. That narrow, dated definition needs to change.

A. Pole Attachments and Other Utility Structures

At the outset, the Commission should reaffirm that it is committed to reasonable rates, terms, and conditions for wireless facilities, and not just wireline facilities. That is the starting point for greater broadband availability. But it is only the starting point.

Markets where FiberTower has spectrum include areas where poles and other utility support structures are owned by cooperatives or government-owned utilities. Although FiberTower and others are encouraging the Commission to take some helpful measures in the pending pole attachment docket,³⁰ at the moment the Commission's authority goes only so far. Thus, Congress needs to address some fundamental gaps in the existing regime.

In its national broadband plan, the Commission should use its *Gulf Power II* authority to memorialize the broader definition of wireless facilities that are entitled to pole attachment protections.³¹ The Commission could dialogue with Congress to refresh Section 224 in accordance with the Supreme Court ruling. For example, the protections should not be limited only to the attachments of cable television systems or non-ILEC "telecommunications carriers to provide telecommunications services," but also to non-ILEC providers of "lawful electronic communications services."³² Section 224 also should be clarified to apply expressly to wireless attachments, along with electric transmission structures (to the extent that they are not already covered). Expanding the scope of protected facilities would ease the way for additional

²⁹ *Id.* § 253.

³⁰ *See Implementation of Section 224 of the Act*, Notice of Proposed Rulemaking, 22 FCC Rcd 20195 (2008).

³¹ *See Gulf Power*, 534 U.S. 327.

³² *See, e.g.*, 47 U.S.C. §§ 224(d)(3), (e)(1), (f).

broadband infrastructure and service providers to deploy new facilities across the country. If covered by Section 224's protections, such providers could expand their networks more rapidly and at more reasonable costs.

In addition, the current exemption for government-owned utilities and cooperatives should either be expanded to include all facilities-based carriers or eliminated,³³ especially because it is likely that stimulus grants and loans will put more of these pole-owning exempt entities into direct competition with private companies. The Recovery Act identifies the National Telecommunications and Information Administration and the Rural Utilities Service ("RUS") as the federal distributing agencies for the broadband stimulus funds.³⁴ The law is clear that applicants for the RUS funds who have received prior RUS grants or loans will have a preference over those that have not.³⁵ History shows that the temptation of a competing pole owner (*i.e.*, one that provides communications services) to favor itself or its affiliate and to deny reasonable access to others is too great to resist absent oversight or regulation.

Cooperatives present a particular challenge because they tend to be located in rural or exurban areas—the very places where middle mile and last mile gaps are most obvious. Municipalities and municipally owned electric systems present a similar, but somewhat different challenge. Municipal electric companies, like cooperatives, are not subject to pole attachment regulation, but they should be. While many smaller cities and towns have their own electric distribution systems, the poles of which are exempt from pole regulation, municipal electric ownership by no means is limited to small towns. Seattle, Los Angeles, San Antonio, and

³³ *See id.* § 224(a)(1).

³⁴ *See* Recovery Act, Title I (Rural Utilities Service), Title II (National Telecommunications and Information Administration).

³⁵ *See* Recovery Act, Title I (Rural Utilities Service, Distance Learning, Telemedicine, and Broadband Program) (stating that "priority shall be given for project applications from borrowers or former borrowers under title II of the Rural Electrification Act of 1936 and for project applications that include such borrowers or former borrowers").

Jacksonville all own the local electric company and the overwhelming majority of the poles. Moreover, at least some of these municipal utilities have attempted to reserve for themselves (and to use their poles toward that end) pockets of the broadband market that private-sector competitors seek to serve. It seems that we are entering a period where this impulse will only grow stronger.

Moreover, cooperatives, municipalities, and investor-owned utilities (which today are subject to regulation under Section 224) in many locations are racing to deploy so-called “Smart-Grid” facilities and applications. A staple of certain Smart Grid systems is fiber, fixed wireless, and other broadband technologies that can be put to other uses, such as addressing middle mile and last mile deficiencies. That is why regulatory coverage for cooperatives and government-owned (municipal) utilities, shot clocks, rocket dockets, and enforcement should be part of any national broadband plan.

Specifically, Congress should amend Section 224 to provide for an access shot clock that starts from the date that written application is made for utility structure access. If actual physical access is not provided within that period, then swift, effective enforcement is needed. Section 224 should also be expanded to require that the Commission (and state commissions certified to regulate pole attachment matters) impose forfeitures, penalties, and other sanctions on utility infrastructure owners that fail to meet shot clock deadlines or otherwise violate reasonable rates, terms, and conditions.

Enforcement of these rules will be key. Time-sensitive access cases should be placed on an abbreviated rocket docket like that currently in place under the Commission’s Section 208 enforcement regime,³⁶ but which is not available for FCC pole attachment complaints.³⁷

³⁶ See 47 C.F.R. § 1.730 (The Enforcement Bureau’s Accelerated Docket); see also 47 C.F.R. §§ 1.720-1.736.

Similarly, Section 224 should be amended to require the Commission and certifying state commissions to resolve support structure right-of-way access disputes with state and local governments within a specific statutory period after the filing of a complaint (FiberTower recommends a 180-day period).

One area that has been subject to considerable controversy — controversy that is bound to increase as pole owners seek to install communications facilities of their own — relates to pole capacity and pole changeouts. Section 224 allows pole owners to deny access if they determine that there is insufficient capacity on the pole.³⁸ Telephone companies regulated under Section 224, on the other hand, enjoy no such power—and for good reasons: (1) the obviously competitive posture that they have with the entities subject to statutory protection; and (2) the fact that, in all but the most extreme cases, any concerns about “insufficient capacity” can be readily addressed by either rearranging existing facilities or changing the existing pole out to a taller pole. Because the standard — and the tradition — is for the party requesting access to pay for the pole rearrangement or replacement, putative “insufficient capacity” on poles is largely a fiction, notwithstanding judicial efforts to bring clarity to the issue.³⁹ Removing the reference to “insufficient capacity” in Section 224(f)(2) to bring utility pole regulations into a posture similar to telephone poles would help to resolve the problem.

³⁷ Notwithstanding the absence of such a formal procedure today in pole attachment enforcement, FCC staff in the Markets Disputes Resolution Division of the Enforcement Bureau have proven to be skilled and knowledgeable mediators. But mediation is voluntary; no party can be compelled to participate. Moreover, not all mediations result in resolution. Fast-track pole attachment enforcement, however, not only would address the need to resolve quickly the difficult outlier cases, but also might encourage otherwise reluctant parties to mediate.

³⁸ 47 U.S.C. § 224(f)(2).

³⁹ See, e.g., *Alabama Power Co. v. FCC*, 311 F.3d 1357 (11th Cir. 2002), *cert. denied*, 540 U.S. 937 (2003); *Florida Cable Telecommunications Association, Inc.; Comcast Cablevision of Panama City, Inc.; Mediacom Southeast, L.L.C.; and Cox Communications Gulf, L.L.C. v. Gulf Power Company*, Initial Decision of Chief Administrative Law Judge Richard L. Sippel, 22 FCC Rcd 1997 (2007).

B. Government-Controlled Rights-of-Way and Facility Siting

The Commission should encourage and expedite broadband deployment further by making specific right-of-way and siting recommendations to Congress as part of its national broadband plan. Specifically, Section 253 of the Act should be expanded to bar entry barriers to all qualified providers of “lawful electronic communications services,” including those provided by “wireless” facilities.⁴⁰ Section 253 should also be amended to limit explicitly state and local fees, taxes and other assessments on wireless communications providers for use of the public rights-of-way.⁴¹

In addition, Congress should expand Section 253 to require the FCC to resolve right-of-way access disputes between those seeking access and state and local governments within a specific statutory period (180 days). Congress should also expand Section 253 to include specific, swift shot clock access and rocket docket dispute resolution procedures like those outlined above with respect to pole attachment access. The installation of FiberTower’s facilities on existing structures, for example, should not invoke local zoning processes because these facilities have no environmental, esthetic, or other impact on the structures or surrounding areas, and, to the extent that zoning considerations were initially necessary for the structures at issue (*e.g.*, a cell tower), approvals have already been secured.

VII. The Commission Could Further Stimulate Broadband Deployment by Providing Terrestrial Wide-Area Wireless Licensees with the Flexibility to Make Portions of Their Licensed Spectrum Available for Satellite Use.

Many terrestrial carriers hold wide-area licenses, which can be used for offering broadband services. These include, among others, the 24 GHz, LMDS (28-31 GHz), and 38.6-40.0 (39 GHz) bands. FiberTower holds terrestrial wireless licenses to operate in the 24 GHz

⁴⁰ See 47 U.S.C. § 253(a).

⁴¹ See *id.* §§ 253(b)-(c).

and 39 GHz bands. As discussed above, FiberTower uses these licenses to provide middle mile and last mile backhaul and other transport services to carriers, government users, healthcare providers, and other important customers. For example, the 24.25–24.45 GHz portion of the 24 GHz band licensed to FiberTower is allocated on a co-primary basis for fixed terrestrial services, while the 25.05–25.25 GHz portion of the band is allocated on a co-primary basis for fixed terrestrial services as well as certain fixed satellite service uplinks (Earth-to-space).⁴²

The *NOI* acknowledges the important role that satellite providers can play in expanding broadband access, especially in rural areas. Indeed, it notes that “[i]n implementing the Broadcasting – Satellite Service (“BSS”) in the 17/24 GHz band, the Commission has created the potential for a new generation of broadband services to the public.”⁴³ It also refers to the fact that, in other bands, satellite operators have been granted the authority to provide ancillary terrestrial component services, including wireless broadband, over their satellite spectrum.⁴⁴

As the *NOI* points out, the Commission’s *17/24 GHz Report & Order* adopted processing and service rules for 17/24 GHz BSS.⁴⁵ Although under the rules BSS feeder link earth stations may operate on a co-primary basis in a portion of the 24 GHz band allocated for terrestrial wireless services, the Commission presumed that these fixed satellite earth stations would be located outside the license areas of terrestrial 24 GHz licensees. Indeed, the Commission stated that it “[did] not intend to license 17/24 GHz BSS feeder links to operate in an existing 24 GHz

⁴² 47 C.F.R. § 2.106.

⁴³ *NOI* ¶ 46.

⁴⁴ *Id.*

⁴⁵ *Id.*, citing *The Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 8842 (2007) (the “*17/24 GHz Report & Order*”).

fixed service license area.”⁴⁶ Although the Commission did not originally envision satellite use of the 24 GHz band in areas licensed to terrestrial licensees, a detailed long-term internal business and engineering plan from a terrestrial licensee may result in creating an option to meet some satellite operators’ broadband-related needs. For example, a satellite operator interested in providing broadband might need additional spectrum, whether in one or both of the uplink/downlink transmission paths.

In light of these potential uses, the Commission should consider giving terrestrial wide-area wireless licensees the flexibility to make portions of their licensed spectrum available for satellite use under mutually beneficial leasing or other commercial arrangements. Under such an approach, FiberTower might, for example, ascertain whether it is possible to segment or migrate its facilities to create customized bandwidths for satellite broadband operations, while ensuring that its terrestrial operations do not experience harmful interference. In order to provide this flexibility, the Commission would have to either amend its current rules or grant selected waivers of such rules, where consistent with the public interest. It should be stressed, however, that given the current use of the wide-area licensed millimeter wave bands for middle mile and last mile backhaul and other important terrestrial operations, it would not be appropriate for the Commission to reallocate the bands for exclusive satellite use. Instead, the Commission should consider modifying its rules to allow existing terrestrial wireless licensees the flexibility to consider thoughtfully whether certain satellite operations can be accommodated within their licensed spectrum.

⁴⁶ *17/24 GHz Report & Order* ¶ 126.

VIII. Conclusion

For the foregoing reasons, the Commission should: (1) ensure that all providers of broadband can access multiple-use backhaul platforms in a non-discriminatory manner; (2) license a limited number of the numerous vacant channels in the TV White Spaces for fixed, point-to-point use; (3) re-enforce existing federal protections with respect to facility placement on utility structures and unreasonable state and local government deployment restrictions; and (4) provide terrestrial wide-area wireless licensees with the flexibility to make portions of their licensed spectrum available for satellite use.

Respectfully submitted,

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June 8, 2009