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In the Matter of)
)
)
Accelerating Wireless Broadband) WT Docket No. 17-79
Deployment by Removing Barriers)
to Infrastructure Investment)
)

Comments of R Street Institute

I. Introduction & Summary

Accelerating the deployment of broadband infrastructure is the very best thing the Federal Communications Commission (“FCC” or “Commission”) can do right now. Other high-profile proceedings may get more attention,¹ but closing the Digital Divide and Homework Gap between rural and urban areas, and between wealthy and poor Americans, should be the FCC’s top priority. For these reasons, we applaud the Commission for putting forward this proposal seeking input on new ways to promote wireless broadband infrastructure deployment.²

¹ See e.g., Restoring Internet Freedom, *Notice of Proposed Rulemaking*, WC Docket No. 17-108 (May 23, 2017), available at <https://goo.gl/ZHUnZi>.

² Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, *Notice of Proposed Rulemaking and Notice of Inquiry*, WT Docket No. 17-79 (Apr. 21, 2017) [“NPRM”], available at <https://goo.gl/3DsTlO>.

Within its existing authority, there is much that the FCC can do to preempt certain state or local practices that unreasonably restrict broadband deployment, and to require certain other steps be undertaken that can reasonably be expected to promote broadband deployment. However, those are not the only options available at hand. The FCC's Broadband Deployment Advisory Committee ("BDAC")³ was wisely established in order to convene reasonable discussions among relevant stakeholders — including industry experts, civil society groups, and policymakers from the state and local levels⁴ — and the BDAC can play a pivotal role in dispute resolution and the promotion of broadband deployment, while avoiding costly litigation over questions of authority or process. Thus, we encourage the FCC to exercise its preemptive authority only with respect to the limited cases where states or localities have clearly run afoul of the Commission's duties under the Communications Act.

Specifically, to promote wireless infrastructure deployment, we encourage the FCC to embrace the paradigm shift to 5G and heterogeneous networks ("HetNets"), which will require orders of magnitude more cellular deployments than required by traditional macro-cellular network architectures. When states or localities apply the same approval processes and fee schedules to small-cell deployments that they use for traditional wireless infrastructure, it presents an unreasonable barrier to deployment. Historic and environmental review processes can also unreasonably restrict wireless broadband

³ See FCC Announces the Establishment of the Broadband Deployment Advisory Committee and Solicits Nominations for Membership, *Public Notice* (Jan. 31, 2017), available at <https://goo.gl/cr68zh>.

⁴ See FCC Announces the Membership and First Meeting of the Broadband Deployment Advisory Committee, *Public Notice*, GN Docket No. 17-83 (Apr. 6, 2017), available at <https://goo.gl/elhys1>.

deployment where they fail to account for the differences between 5G small cells and traditional cellular deployments.

II. Role of the BDAC

The BDAC's mission is to make "recommendations to the Commission on how to accelerate the deployment of high-speed Internet access, or 'broadband,' by reducing and/or removing regulatory barriers to infrastructure investment."⁵ The committee is a useful source of academics, industry experts, and localized knowledge that should facilitate more rapid and widespread deployment of broadband infrastructure through the resolution of differences between competing interests and the incorporation of findings into model codes that balance the legitimate concerns of all parties.

Indeed, merely developing and promulgating such model codes could boost broadband deployment greatly, as state and local policymakers conform their ordinances and procedures with the BDAC models to better serve their citizens' communications needs. This is especially the case if Commission staff continue their commendable efforts to engage citizens and stakeholders outside the Beltway. However, there are several instances where changes to Commission rules and even preemption of state and local laws may be warranted.

III. Ensuring Just and Reasonable Access to Public Rights of Way to Promote Deployment of Small-Cell Infrastructure

For incumbent Internet service providers ("ISPs") to upgrade their existing networks, or for new entrants to deploy competing broadband networks, they must obtain

⁵ *Id.* at 1.

access to public rights of way. The FCC is empowered with the authority and duty to ensure that the “rates, terms, and conditions” of access to public rights of way are “just and reasonable”⁶ and “nondiscriminatory[.]”⁷ This authority covers both utility poles and plastic conduits⁸ (which are particularly relevant going forward, as new and more recent housing developments often have buried utility lines), but currently governs only slightly more than half the country, as twenty states and the District of Columbia have now reverse-preempted the FCC’s pole attachment regime.⁹

It is arguable that the Commission could require more of the U.S. states and territories that have opted to do so and revoke their certifications under Section 224(c).¹⁰ Specifically, the Commission might argue that to “regulate”¹¹ pole attachments in an “effective”¹² way means ensuring nondiscriminatory and efficient access to public rights of way, and charging access rates that are no higher than the costs incurred by government in maintaining them. These arguments deserve careful consideration, but they may ultimately be of little concern if the BDAC can be effective in its work developing model codes, and policymakers at all levels can be pushed to conform to the models most likely to accelerate broadband infrastructure deployment. Nevertheless, the Commission should reexamine its

⁶ See 47 U.S.C. § 224(b)(1).

⁷ See 47 U.S.C. § 224(f)(1).

⁸ See 47 U.S.C. § 224(a)(4).

⁹ NPRM at ¶ 4 n. 9.

¹⁰ *Id.* at ¶ 108.

¹¹ 47 U.S.C. ¶ 224(c)(2).

¹² 47 U.S.C. ¶ 224(c)(3)(A).

pole attachment regime in earnest, and give due consideration to whether any legal interventions or changes to its rules are warranted.

In the context of wireless broadband, the paradigm shift in wireless technology to 5G requires a parallel shift in policy. Densifying 4G networks and preparing for the rollout of 5G HetNets will require the deployment of thousands upon thousands of small cells, either as collocations on existing structures, or as new standalone ones. Fee schedules and approval frameworks that were perfectly reasonable in the past may quickly become unreasonable barriers to deployment when applied to the small cells necessary for 5G. Thus, the Commission should use its authority to preempt any state or local practices — including excessive fees, unreasonable conditions, and deployment moratoria — that present unreasonable barriers to wireless infrastructure deployment.¹³

A. Excessive Fees

Local governments and utilities have a monopoly over access to public rights of way and thus effective competition to discipline access pricing is impossible. This makes it incumbent upon government to ensure that the rates, terms, and conditions of rights-of-way access are just, reasonable, and nondiscriminatory.¹⁴ In light of this, it is entirely reasonable for localities to recover the costs of evaluating and approving applications to deploy new infrastructure, as well as the costs of maintaining the public rights of way. However, charging higher fees than are essential to this process imposes real costs on

¹³ See, e.g., 47 U.S.C. §§ 224(b), 253, 257, 332(c)(3).

¹⁴ See 47 U.S.C. § 224(b), (f).

consumers in the form of slower broadband deployment, reduced connectivity, and higher prices.

Recently, some localities have begun charging “market-based” access fees that are significantly higher than necessary to recover their actual costs. Examples of such unreasonable fees were well-documented in the petition for declaratory ruling filed by Mobilitie late last year,¹⁵ and in comments filed in response to said petition.¹⁶ However, real-world examples abound of local governments charging unreasonable fees for access to public rights of way.

To allow government and government-granted monopolies to set their own rates in the name of “market pricing” would be disastrous for broadband deployment. Basic economics dictate that a pure monopoly, created and protected by government, will result in higher prices and lower output when compared to a competitive market, creating deadweight loss. Cost-based pricing tries to mimic the perfectly competitive result in which prices equal marginal cost. While the exact magnitudes of the relevant opportunity costs are difficult to calculate, localities should use cost-based pricing in order to better approximate an optimal result. The Commission should consider any fees above what is

¹⁵ See Promoting Broadband for All Americans by Prohibiting Excessive Charges for Access to Public Rights of Way, *Petition for Declaratory Ruling* (Nov. 15, 2016) [“Mobilitie Petition”], available at <https://goo.gl/Ypng4T>; see also Comment Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling, *Public Notice*, WT Docket No. 16-421 (Dec. 22, 2016), available at <https://goo.gl/1Rg5rN>.

¹⁶ See, e.g., Comment Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling, *Comments of TechFreedom*, WT Docket No. 16-421 (Mar. 8, 2017), available at <https://goo.gl/pGmzT5>.

reasonable to cover the cost of granting access for broadband deployment to be excessive. Accordingly, it should preempt localities that engage in such practices.

In particular, since 5G HetNets require smaller cells and denser deployments, assessing siting or pole attachment fees on the same schedule used for traditional macro cells is patently unreasonable.¹⁷ These unreasonably high fees, multiplied by the vastly greater number of deployment sites required by 5G, present an unreasonable barrier to deployment that the FCC should use its authority to preempt and declare unlawful.¹⁸

B. Unreasonable Conditions

One of the most significant barriers to wireless infrastructure deployment is simply time. Providers often stand ready to build new infrastructure, but end up waiting in limbo for their applications to be approved or denied by local governments. This denies consumers the economic and civic benefits that flow from increased connectivity. The Commission has already taken significant steps to streamline local approval processes for wireless infrastructure siting,¹⁹ and the courts have upheld the FCC's authority to preempt

¹⁷ For example, a fee schedule that charges \$1,000 per cell may be reasonable when a city is covered by only a handful of macro cells, but decidedly unreasonable when the same city requires hundreds or thousands of small cells to enable 5G coverage.

¹⁸ See 47 U.S.C. §§ 224(b), 253, 257, 332(c)(3).

¹⁹ See, e.g., Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, *Declaratory Ruling*, WT Docket No. 08-165 (Nov. 18, 2009) ["2009 Declaratory Ruling"], available at <https://goo.gl/92Sq8C> (adopting shot clocks for processing of siting applications); Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, *Report and Order*, WT Docket No. 13-238 (Oct. 21, 2014) ["2014 Wireless Infrastructure Order"], available at <https://goo.gl/v63tHl> (categorically excluding certain wireless collocations from historic and environmental review).

state or local practices that pose unreasonable barriers to deployment,²⁰ but there is more that can be done to further the Commission's various statutory goals and duties.²¹

In particular, we support the Commission's proposal to adopt a "deemed granted" remedy for all wireless facilities when state or local governments fail to respond to a siting application within the applicable shot clock.²² Of the three proposed ways the Commission might go about adopting a "deemed granted" remedy,²³ the first and third seem to be the most reasonable. The second proposal — to remove all state and local government authority over siting applications if they fail to meet the applicable deadlines²⁴ — would be effective, and perhaps legal, but supplanting the authority of state and local governments to manage access to their lands and rights of way raises significant federalism concerns. Therefore, we encourage the FCC to pursue less-restrictive alternatives.

Alternatively, the first²⁵ and third²⁶ proposals would also be effective, and would do less to upset the balance between federal and state or local control. It is for these reasons that we encourage the Commission to pursue one of these two proposals. In our opinion, the FCC has authority to adopt a "deemed granted" remedy through an interpretive order

²⁰ See, e.g., *City of Arlington, Tex. v. FCC*, 133 S. Ct. 1863 (2013).

²¹ See, e.g., 47 U.S.C. § 151, 160, 253, 257, 332, 1302.

²² See NPRM ¶¶ 8–9.

²³ *Id.* ¶¶ 10–16.

²⁴ *Id.* ¶ 14.

²⁵ *Id.* ¶ 10–13.

²⁶ *Id.* ¶ 15–16.

or through rulemaking, and the two approaches have different benefits and drawbacks.²⁷ We trust the Commission can use its experience and judgment to determine which of these two approaches would be most suitable.

Finally, we encourage the Commission to address deployment moratoria, which are the most extreme form of barrier to infrastructure deployment.²⁸ Reasonable minds can disagree over what constitutes “reasonable periods of time” for processing siting applications, but there is no adequate justification for an outright ban on new broadband deployment. Nevertheless, this practice is unfortunately all too common.²⁹ Moratoria protect incumbent providers from new competition, allowing them to rest on their laurels and forego network upgrades or price competition in response to pressure from new entrants. The end result is slower deployment, reduced service, and higher prices for consumers. We therefore urge the FCC to use its authority to outlaw these harmful moratoria.

IV. Handling Historic Sites and Environmental Concerns

The paradigm shift to 5G HetNets also necessitates a parallel shift in both the historic and environmental review processes. The Commission has already taken significant action to boost wireless deployment in this respect by categorically excluding collocations of small cells and distributed antenna systems (“DAS”) from historic and

²⁷ Namely, interpretive orders are more flexible and easily amended down the line than rules, but rules provide greater clarity and guidance for regulated entities.

²⁸ *Id.* ¶ 22.

²⁹ *See, e.g.,* Mobilitie Petition, at 13.

environmental review.³⁰ However, there is more that can be done to promote wireless infrastructure deployment by further reducing such burdens.

A. Historic Sites

Many communities have legitimate interests in preserving historic sites, and they have reasonable concerns about the impact that dramatic expansions to the number of cell deployments could have on their local aesthetics. The Commission should take these concerns seriously and facilitate dialogue between localities and broadband providers to find creative ways to preserve historic sites, while also supporting the deployment of 5G wireless infrastructure.

Efforts to accommodate concerns over historic preservation are already underway, and wireless carriers are finding new ways to work with these sites without harming the buildings themselves or local aesthetics.³¹ For example, faux bricks made of radio-frequency friendly material can seamlessly integrate small cells into the existing landscape.³² Other methods of camouflage can match cellular deployments with the shape and color of their surroundings.³³ Continued collaboration will help further the development of innovative solutions on this issue. Specifically, the BDAC could serve as an

³⁰ See 2009 Declaratory Ruling, ¶¶ 35–105.

³¹ See, e.g., Celltech, *About Us* (last visited June 15th, 2017), available at <https://goo.gl/u6J0TI> (“Celltech is helping to transform unattractive cell towers into part of the scenery. Camouflaging cell towers and equipment helps keep both the neighbors and the cell users happy.”).

³² *Id.*

³³ *Id.*

excellent forum for developing and sharing new ideas related to historic review and aesthetic concerns.

Localities should also seek to balance the benefits of preservation with the opportunity cost of delaying or obstructing deployment. It is not always obvious that the benefit of preserving historic sites is worth the denial of access to next-generation connectivity. Communities should conduct benefit-cost analyses to guide a municipality in deciding whether the benefits of leaving an historic site untouched would exceed the costs (both monetary and non-monetary) associated with a lack of service in the area. Additionally, with regard to small-cell deployments, a system of application batching could significantly expedite the historic review process.³⁴ However, imposing mandatory batching requirements may give undue respect to local concerns over historic preservation. Accordingly, we encourage the Commission to adopt a voluntary batching system instead; one that would ideally be developed through the BDAC.

B. Environmental Concerns

While 5G HetNets will require vastly more cells than exist today, their smaller size and range means diminished environmental impact for each one. Most collocations are already categorically exempt from environmental review,³⁵ and we support extending this exemption for all small-cell and DAS collocations.³⁶ In some cases, particularly in areas with buried utilities, new poles will be necessary, but these deployments are more akin to new telephone poles than to traditional macro-cell towers. Accordingly, they present reduced

³⁴ See NPRM ¶ 62–63.

³⁵ See 2014 Infrastructure Order, ¶¶ 35–69.

³⁶ NPRM ¶ 65.

concern with respect to environmental impact. The Commission's environmental review processes should account for the significant differences in 5G-infrastructure deployment, as compared to its more cumbersome predecessors, and use either more categorical exclusions or abbreviated timelines to make environmental review more efficient.

V. Conclusion

In order for the United States to be a global leader in 5G, the FCC must take significant steps to improve the siting and deployment of new wireless broadband infrastructure. Some of those steps include changes to Commission rules or even preemption of state or local practices that run afoul of the Communications Act, but many others simply require leadership and thorough consideration of the interests of all parties.

When state and local governments work together with broadband providers, they can achieve tremendous results, as evidenced by the wireless network recently deployed by Microsoft and the Mid-Atlantic Broadband Communities Corporation to provide broadband service to K-12 students in rural Virginia.³⁷ The Commission needs to champion initiatives like this, and encourage policymakers at all levels of government to work collaboratively with broadband providers in order to promote infrastructure deployment, close the Digital Divide, and deliver next-generation communications services to all Americans.

We thank the Commission for taking up this important and timely issue, and we urge it to take the suggested actions as quickly as possible.

³⁷ See Microsoft News Center, *Mid-Atlantic Broadband Communities and Microsoft Launch New Homework Network to Bring Thousands of Students Online in Rural Virginia* (May 23, 2017), available at <https://goo.gl/TGNVIY>.

Respectfully submitted,

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