

EXHIBIT A

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

STREAMLINING DEPLOYMENT)	
OF SMALL CELL INFRASTRUCTURE)	
BY IMPROVING WIRELESS FACILITIES)	WT Docket No. 16-421
SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	
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COMMENTS OF SMART COMMUNITIES SITING COALITION

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SUMMARY OF COMMENTS OF THE SMART COMMUNITIES SITING COALITION

The Smart Communities Siting Coalition (“Smart Communities”) is comprised of individual localities, local government associations, and local agencies responsible for roadway safety which collectively represent more than 1,800 communities and nearly 30 million residents in 10 states. Smart Communities understand the importance of deployment of advanced wireline and wireless communications technologies and are actively engaged in significant efforts to encourage broadband deployment, particularly to underserved areas. Smart Communities believe that no additional federal regulations are required, and that the Commission need not, should not and cannot grant the relief sought by Mobilitie. Smart Communities respectfully submit:

1. The shared interests of all levels of government in advanced wireless and wireline broadband infrastructure do not justify additional regulations. The Notice is focused on a particular type of wireless infrastructure, being deployed by personal wireless service providers, or companies that build facilities for those providers. Mobilitie and others argue this infrastructure is needed for 5G and Internet of Things (IoT), but there is no way of knowing, at this point, whether the infrastructure proposed by these particular service and facilities providers will prove to be best means of advancing high-speed wireless or whether, for example, the IoT is more likely to depend on different types of networks, or end user devices with different capabilities. That fact alone ought to lead to regulatory caution, as rules that favoring incumbent service or facilities providers can have significant consequences for innovation.
2. As a basic principle, the Commission should be reluctant to adopt any rules that have the effect of requiring states or local governments to subsidize the business plans of these service and facilities providers, or to assume risks that flow from their business plans. The ruling sought

by Mobilitie – or further regulatory actions by the Commission aimed at local governments – would have just that effect.

3. The placement of small cells, particularly in the rights-of-way, presents significant challenges and risks to communities including:

- Increased safety risks,
- Negative impacts on adjoining property, local businesses, other utilities, and on redevelopment projects,
- Increased costs to localities for maintenance, expansion and modernization of the public right-of-way, and
- Limitations on access by pedestrians and persons with disabilities.

The purpose of sharing these challenges is not to say that wireless infrastructure cannot be accommodated, as Smart Communities have and will continue to accommodate such necessary infrastructure, but to show that potential costs associated with the challenges and risks are real and substantial (amounting potentially to billions of dollars), and cannot be ignored. Because of the complexities associated with small cell siting, particularly in public rights-of-way, and the potential costs if local authority is further confined, the Commission should not be setting special time frames for either batch or small cell applications, or complicating siting review with additional federal regulations, should be encouraging cooperative approaches to deployment.

4. There is no need for action. Deployment of wireless facilities is proceeding apace and where there are problems with the speed of deployment, they will not be solved by additional federal regulation of local processes. Notably, the primary cause of delays in application processing continues to be the failure of applicants to submit complete applications. For example, as a routine matter, Mobilitie has submitted cookie cutter proposals for 100-120 foot

towers in the public rights-of-way, without doing any meaningful field engineering, or making any significant effort to comply with state, federal or local requirements – imposing significant cost on communities

5. The Commission could speed deployment through informal actions such as sharing information on successful deployment approaches and by examining the role its own regulations play is hindering deployments, including but not limited to:

- Reexamining the Section 6409 rules. At present, the Commission’s Section 6409 rules allow for installations in public rights-of-way to grow to sizes entirely inappropriate for many areas, including residential areas and many redeveloped historical, seaside and downtown areas. A rewrite of the Commission’s Section 6409 rules that authorizes local governments who allow small cell deployments to be able to actually keep them small in size would expedite deployments.
- Ensuring that applicants understand that both initial and modified installations must comply with guidelines for roadway safety, as implemented by state and local authorities
- Clarifying that existing Shot Clock rules regarding incompleteness do not prevent a locality from simply rejecting a defective application and/or imposing upon the applicant a charge to recover the expenses incurred in addressing such omissions. Today’s rules require detailed responses to incomplete applications actually which slows the process and add costs for everyone (community, competitors and applicant) when applicants do not make a good faith attempt to submit complete applications.
- Modernizing RF emissions standards to address the densification and proximity of small cell deployments to the public. The failure of the FCC to modernize its RF

standards creates public distrust in wireless systems, and makes it more difficult for all parties to develop creative solutions for siting.

6. As a matter of policy, however, the FCC should reject Mobilitie’s request that it regulate either the regulatory fees associated with applications to place wireless facilities, or the rents it must pay to use public property. A federal policy that allows Mobilitie or other wireless service or facilities providers to obtain permits without paying the full costs of those permit, or to use public property without paying fair market value will encourage inefficient, intrusive deployments, deter innovation and could impose billions of dollars in costs on local communities and their citizens. Any such policy will have marginal benefits, at best. It is unlikely to lead to deployment in areas that are not served today.

7. As a matter of law, the Commission cannot regulate or dictate rents charged for use of public rights-of-way or other government property or limit recovery to marginal costs as requested by Mobilitie. The Commission lacks a legal foundation for adopting any such rules:

- Mobilitie is seeking relief under Section 253 (barriers to entry) but Section 253 does not apply and provides no avenue for relief where resolution of an issue would “limit or affect” local authority over decisions regarding the placement, construction, and modification of personal wireless service –as regulation of fees and rents would.
- Even if Section 253 did apply, the Commission has limited authority to regulate charges for access to property or facilities that may be useful for placement of communications facilities, no authority to regulate rates for access to public property, and certainly no authority to limit charges to certain marginal costs, as proposed by Mobilitie. Under Section 253, a court must uphold any charge that is competitively

neutral, non-discriminatory and “fair and reasonable” and charging fair market value for use of public property inherently passes those tests.

- Mobilitie’s proposed “non-discrimination” test for Section 253 is wrong and not supported by case law, Commission precedent or the Constitution.

8. The Commission need not address debates in the Circuits or otherwise address the meaning of the effective prohibition standard in Section 332(c)(7). Participants have adjusted to the tests within their Circuits, and in many cases, reflected those standards in local laws. A new framework would create uncertainty. Moreover, the “hindrance” standard that the Notice proposed is inconsistent with pertinent case law.

9. The Notice is not the appropriate vehicle for action. While the Commission has broad authority to choose how to proceed, the Notice seems to envision precisely the sort of action that the D.C. Circuit found requires notice and comment rulemaking.

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- Exhibit 1 - Report and Declaration of Andrew Afflerbach For the Smart Communities Siting Coalition
- Exhibit 2 - The Economics of Government Right of Way Fees, Dr. Kevin Cahill, Ph.D
- Exhibit 3 - Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition
- Exhibit 4 - Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition
- Exhibit 5 - Proposal for Tower from Mobilitie to Monroe, MI, and Response of City
- Exhibit 6 - Proposal for Tower from Mobilitie to Centerville, GA., and Response of City
- Exhibit 7 - Proposal for Tower from Mobilitie to Laurel, MD
- Exhibit 8 - Deposition of Crown Castle Representative
- Exhibit 9 - Crown Castle Right of Way Use Agreement

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COMMENTS OF SMART COMMUNITIES SITING COALITION

I. INTRODUCTION

The Smart Communities Siting Coalition (“Smart Communities”) is comprised of local governments, and associations that represent them, as well as local government agencies responsible for highway safety. Collectively, the individual members and associations represent approximately 1,854 communities in 10 states, serving nearly 30 million residents.¹

¹ Individual members:

Ann Arbor, MI; Atlanta, GA; Berlin, MD; Berwyn Heights, MD; Boston, MA; Capitol Heights, MD; Cary, NC; Chesapeake Beach, MD; College Park, MD; Dallas, TX; DeSoto County, MS.; Frederick, MD; Gaithersburg, MD; Greenbelt, MD; Havre de Grace, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; McAllen, TX; Monroe, MI; Montgomery County, MD; Myrtle Beach, SC; New Carrollton, MD; Perryville, MD; Pocomoke City, MD; Poolsville, MD; Portland, OR.; Rockville, MD; Takoma Park, MD; University Park, MD; and Westminster, MD.

Organizations Representing Local Governments and Road Agencies:

Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The GVMC DAS Tower Consortium is a collaboration of over 20 Western Michigan cities, villages and townships that worked collectively with local telecommunication providers to establish a model permitting process and fee structure. The Conference of Eastern Wayne is a formal council of governments established by intergovernmental agreement consisting of the six municipalities on the eastern side of Wayne County outside of the City of Detroit. The municipalities represented are: City of Grosse Pointe, City of Grosse Pointe Farms, City of Grosse Pointe Woods, Village of Grosse Pointe Shores (a Michigan City), and the City of Harper Woods. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of Michigan cities that focuses on protection of their citizens’ governance and control over public rights-of-way. The Michigan Townships Association (“MTA”) promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging

Collectively, the Smart Communities have significant experience in addressing the placement of wireline and wireless facilities, including wireless deployments that involve very large structures and monopoles like the Mobilitie 120 foot towers, as well as relatively small wireless structures. As importantly, many of the members have devoted significant resources to undergrounding utilities or to other redevelopment projects whose job-creating success depends on balancing the needs of local businesses, utilities, residents, consumers and tourists – all while maintaining the safety and integrity of infrastructure communications and other private and public infrastructure located in their public rights-of-way. The Smart Communities thus have a good understanding of the challenges presented or that will be presented by new generation wireless deployments, and welcome the opportunity to participate in this proceeding.

In addition to these comments, several members of Smart Communities, including Montgomery County, Maryland and Cary, North Carolina are submitting separate comments to provide additional information, and several are supporting comments filed by others, including, in particular, the comments filed by the Texas Municipal League.

ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position. The Michigan Municipal League (“MML”) is a non-profit Michigan corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance. The County Road Association (CRA) of Michigan works with all 83 county road agencies on matters of common interest. County road agencies in Michigan are responsible for ensuring safe, efficient transportation on 73 percent of the road miles in Michigan and are responsible for reviewing the applications for placement of facilities along the roads to ensure, among other things, that proposed facilities do not interfere with road functions, or create safety issues. The Kitch Firm represents Monroe, Michigan, DeSoto County, Mississippi and the Michigan associations identified above. Best Best & Krieger represents the others in the Smart Communities coalition.

II. SUMMARY

Smart Communities understand the importance of deployment of advanced wireline and wireless communications technologies; many of them are engaged in significant efforts to encourage broadband deployment, particularly to underserved areas.² Based on our experience, Smart Communities believe that no additional federal regulations are required at this time, and the Commission need not, should not and cannot grant the relief sought by Mobilitie.

As we explain below:

1. The shared interests of all levels of government in advanced broadband do not justify additional regulations. The Notice states that “local land-use authorities ... are facing substantial increases in the volume of siting applications for deployment of these facilities.”³ Some members of our coalition in fact are dealing with large numbers of small cell applications, and some have received very few or none.⁴ Our experience shows that the small cell technology

² Smart Communities celebrates that our efforts permit Chairman Pai in a February 28, 2017 keynote address to the Mobile World Congress that “...98% of Americans now have access to three or more facilities-based [wireless] providers. And the United States has led the world in the deployment of 4G LTE.” Those successes are local governments’ as much as they are the industry’s. Address available at <https://www.fcc.gov/document/chairman-pais-keynote-mobile-world-congress-barcelona>

³ Notice at 1-2. The placement of these wireless facilities amount to the first significant above ground intrusion into local rights of way in many decades and therefore demands a very careful and patient approach so that all issues and stakeholders are adequately considered and protected. The last such intrusion involved the electric and wireline industries. The potential multiplication of above ground facilities is a grave concern for all local communities and their residents for reasons we explain below. Even the industry acknowledged this in a CTIA article dated May 2016, in which industry commentators strongly encouraged this wireless facility roll out using principally the millions of existing electric utility poles. See article here: <http://www.ctia.org/docs/default-source/default-document-library/enabling-the-wireless-networks-of-tomorrow.pdf>

⁴ For example, Boston has approved nearly 400 DAS/small cell installations in the rights of way with three neutral hosts companies (Crown Castle, ExteNet and American Tower). In Boston, two-thirds of the installations have or will take place on City-owned Streetlights or traffic lights and the remainder on jointly-owned Eversource-Verizon poles. The majority of these installations have been in place for about eight years, but recent interest and engagement by carriers, as well as additional neutral hosts, indicate that number could treble in the next 2 years and again in following 4 years. Atlanta has approved 257 applications (174 for Crown Castle and 83 for Mobilitie), and reports that Mobilitie has indicated a request for more than 200 sites within the city in the next months. The City of Houston has approved over 350 locations and are anticipating as many as 800 more requests as Zayo, Crown Castle, Verizon, and Mobilitie have each expressed a desire to build out entire networks, which could be as many as 200 locations for each company, or some 800 more sites. The Bureau listed the Montgomery County Maryland experience in the Notice at 2. But it is not just the larger communities that are being challenged to meet demands for

is not being deployed ubiquitously, and is not necessarily helping to close the digital divide, but does have significant consequences for areas where citizens and the communities have spent millions of dollars to attract new jobs and businesses, and to create safe infrastructure. Moreover, in many cases “small cell” applications are being submitted for placement on public property where a private deployment would obviously be available and would avoid significant safety issues. The sole purpose of such installations appears to be to avoid costs that others in the market bear, and shifting those costs onto the taxpayer via use of local community owned public rights-of-way.

It bears emphasizing that the Notice is focused on a particular type of wireless infrastructure, being deployed by personal wireless service providers, or companies that build facilities for those providers (referred to throughout as “service providers” or “facilities providers”).⁵ As a basic principle, the Commission should be reluctant to adopt any rules that have the effect of requiring states or local governments to subsidize the business plans of these service and facilities providers, or to assume risks that flow from their business plans. The ruling sought by Mobilitie – or further regulatory actions by the Commission aimed at local governments – would have just that effect. Mobilitie of course, suggests that its deployments are critical to deployment of 5G infrastructure and the Internet of Things (IoT) – by which we believe they mean the infrastructure is critical to widespread deployment of high-speed wireless service infrastructure. However, as discussed below, there is no 5G standard in place today, and there is no way of knowing, at this point, whether the infrastructure proposed by incumbent service or facilities providers will prove to be best means of advancing high-speed wireless or

rights-of-way access. Ann Arbor, Michigan, in just the last two years has dealt with more than 60 (or more than 70) applications for DAS facilities.

⁵ The former would be typified by Verizon Wireless, and the latter by Mobilitie, although we recognize that service providers may also be facilities providers.

whether, for example, the IoT is more likely to depend on different types of networks, or end user devices with different capabilities. That fact ought to lead in the direction of regulatory caution, as rules that effectively favor the incumbent service or facilities providers can have significant consequences for innovation.

Smart Communities, in both these Comments and in the expert declarations⁶ attached to this filing will outline some of the particular challenges and potential billions of dollars in external costs that may be caused by placement of “small cell” infrastructure. These costs are the result of, *inter alia* increased safety risks, negative impacts on adjoining property, local businesses, other utilities, and on redevelopment projects; increased costs to localities for maintenance, expansion and modernization of the right of way, and potential limitations on access by pedestrians and persons with disabilities, among other things. The purpose of sharing

⁶ In an effort to assist the Bureau with its data driven mandate, Smart Communities has retained experts to provide insights into the issues and challenges of siting wireless devices in the communities rights-of-way. These include:

- **Andrew Afflerbach of CTC Technology & Energy** has prepared a Report and Declaration of Andrew Afflerbach For the Smart Communities Siting Coalition (referred to herein as the CTC Declaration) – CTC’s work has been cited by the Commission and its leaders have regularly appeared before the Commission. The CTC Declaration reports on small cells and the challenges they present to communities. Perhaps the most important message of the CTC Declaration is that the small in small cell refers to the area served, not the size of the equipment. The CTC Declaration is attached as Exhibit 1.
- **Dr. Kevin Cahill, Ph.D of ECONorthwest** has prepared a report entitled The Economics of Government Right of Way Fees (referred to herein as the ECONorthwest Declaration) ECONorthwest is a nationally recognized economics firm that has been cited in prior Commission proceedings. The ECONorthwest Declaration contains an economic analysis of the effect of limiting the amounts that may be charged for use of the public rights-of-way and concludes that the rulings sought by Mobilitie will not promote economically efficient deployment of public rights-of-way and will discourage innovation. More information about ECONorthwest may be found at <http://www.econw.com/>. The ECONorthwest Declaration is attached as Exhibit 2.
- **David Burgoyne of Burgoyne Appraisal** has prepared a Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition, to highlight for the Commission the potential impacts of wireless facilities on adjoining property values (referred to herein as the Burgoyne Declaration). That declaration concludes many deployments of small cells could affect property values, with significant potential effects. Mr. Burgoyne is a licensed appraiser in Ann Arbor, Michigan. More information about Burgoyne Appraisal may be found at <https://burgoyneappraisal.com/appraisal-litigation-support/>. The Burgoyne Declaration is attached as Exhibit 3.
- **Steve Puuri, P.E., of Puuri Engineering, LLC**, has prepared a Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition (referred to herein as the Puuri Declaration) regarding the impacts of placement of wireless structures in the public rights-of-way. Mr. Puuri been involved in roadway design for 25 years. The Puuri Declaration is attached as Exhibit 4.

these challenges is not to say that wireless infrastructure cannot be accommodated, as Smart Communities have and will continue to accommodate such necessary infrastructure. Rather, Smart Communities outline these challenges to share with the Commission the complexity and competing demands presented by the sorts of applications that are now being filed by the providers of the personal wireless services or facilities. Smart Communities desire to preserve the opportunity to identify, leverage, and support other developing wireless technologies such as IoT networking sensors that will enable our communities to offer solutions related to transportation, energy, air pollution, public Wi-Fi, and other new generation services. But those goals, central to the Notice, will not be served by additional regulations governing the uniquely local siting process, or by regulating charges for use of public property and public rights-of-way. As the declarations attached to these Comments suggest, while the cost to the public and to communities from the sorts of rulings Mobilitie requests may be in the billions of dollars, the benefits to deployment would be marginal or negative.

2. In most cases, deployment is proceeding apace. Where there are problems in deployment the problems will not be solved by additional federal regulation of local processes. The problems in deployment are in many if not most cases caused by the companies seeking to place the facilities. For example, as a routine matter, Mobilitie has submitted cookie cutter proposals for 120 foot towers in the public rights-of-way to various local government departments, without doing any meaningful field engineering, or making any significant effort to comply with state, federal or local requirements. Applications of this sort take enormous time to process.

3. If the Commission does wish to speed deployment it may be able to achieve that goal through informal action (sharing information on successful deployment approaches) or by doing the following:

a. “Small Cells” vary dramatically in size and visibility. Some proposed facilities could have significant, negative impacts on adjacent property values. There are technologies readily available that can reduce the size of the facilities. But, compounding siting issues are the Commission rules under 47 U.S. §1455(c) (colloquially, Section 6409), which allow for installations to grow to sizes entirely inappropriate for many areas, including residential areas and many redeveloped historical, seaside and downtown areas. If local governments can allow small cells and keep them small in size, localities will be in a better position to develop safe harbors and development plans that can provide a simpler path for deployment.

b. Commission rules requiring detailed responses to incomplete applications actually slow the process and add costs for everyone when applicants do not act in good faith to submit complete applications. The Commission should make it clear that its rules regarding incompleteness do not prevent a locality from simply rejecting an application and/or imposing upon the applicant a charge to recover the expenses incurred in addressing such omissions.

c. Local governments often receive public comments on RF radiation. While those comments do not affect siting decisions, they are of concern, because widespread deployment and adoption depend on public acceptance of wireless technology. Because the Commission has failed to modernize or even address RF risks in any sensible way, it

has essentially created a barrier to deployment. The agency needs to do its job and modernize those standards promptly.

4. The Commission should not regulate or attempt to regulate charges imposed by state or local governments or agencies.

The Notice actually mixes together different types of charges that may apply to a wireless provider. An applicant who wishes to obtain a *regulatory* authorization will typically pay fees that are cost-based and designed to recover costs associated with issuing the permit or authorization, and costs associated with inspecting a facility for compliance and other legal requirements.⁷ Mobilitie appears to ask the Commission to regulate the costs that can be charged to it so that it, for example, is not forced to bear the full costs associated with repeated applications, engineering, or land use reviews of its application. The Commission has no authority to regulate these charges, much less require localities to effectively subsidize Mobilitie's applications; and even had it that authority, Mobilitie's actions show why it would be wrong to do so.

In addition to these regulatory charges, a wireless service or facilities provider who wishes to use proprietary property, which may include the public rights-of-way, street lights, public buildings or other structures will typically pay a fee that is intended as a rent.⁸ Those rates are often set through negotiation and may take a variety of forms based upon the use sought. Those rents are intended to recover the fair value of the property used. As the ECONorthwest Declaration explains, a one size fits all federal standard that requires access at less than fair market value would actually deter innovation, encourage inefficiency, and could

⁷ These compliance inspections must necessarily also include annual reviews given the proximity of these facilities to busy and inherently dangerous roadway surfaces.

⁸ The rents may take the form of franchise or license fees, lease payments, occupancy fees, etc.

shift billions of dollars in value to incumbents and from resident taxpayers. As importantly, the Commission cannot dictate rents charged for proprietary property, or (consistent with the Constitution) limit recovery to marginal costs as is apparently requested by Mobilitie.

III. THE LOCAL PROCESS FOR REVIEW OF SMALL CELL APPLICATIONS

The Notice seeks information from local governmental authorities on the process for reviewing and making decisions on siting applications for small wireless facilities (including DAS and small cells), particularly the amount of time it takes to complete this process.

The Notice is in response to a Petition by Mobilitie, seeking regulations that favor particular service providers and facilities providers, and their respective business plans. The Commission has recognized, however, that the Commission's rules should "neither explicitly nor implicitly expresses a preference for one particular entry strategy....an attempt to indicate such a preference... may have unintended and undesirable results....As to success or failure, we look to the market, not to regulation, for the answer."⁹

We therefore stress, at the outset, that Smart Communities are committed to developing processes that encourage deployment of advanced wireline and wireless systems. Not only do we understand that our citizens increasingly depend on access to broadband; the efficient operation of our communities and the future economic health of our communities also depend on taking advantage of the opportunities presented by new wireline and wireless technologies. While different communities will take advantage of these technologies at different paces, local governments and road agencies recognize the powerful opportunities the IoT and wireless technologies present for delivering public services more efficiently, improving public health and

⁹ *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, 11 FCC Rcd 15499, 15508-15509 (FCC 1996)("Interconnection Order").

safety, and attracting new businesses. We are watching and adopting technologies that will permit us to, among other things, reduce energy consumption while improving street light efficiency; identify and respond to problems with sewer and water lines; and provide more efficient public transit. The City of Los Angeles, for example, was the first city in the world to deploy Philips/Ericsson SmartPole technologies, which turn street lights into hubs for existing and future wireless technologies.¹⁰ Where we depart from Mobilitie and, perhaps, from the Notice, is that we do not believe the IoT depends on the authorization of the towers Mobilitie and others seek to deploy (the CTC Declaration,¹¹ along with our own experiences, explains why it does not). Nor do we believe that regulating placement of wireless facilities or charging for use of the public rights-of-way is inconsistent with effective and efficient deployment of wireless technologies. As the expert reports explain, given the potential safety issues associated with public right-of-way deployment; the potential negative impacts on property values; and, the predictable negative economic effects that would flow from the rulings requested by Mobilitie, local review and local charges actually *encourage* efficient deployment of advanced wireless technologies.

A. Processes For Review Of Small Cell Applications

1. *The structure of a “small cell.”*

In its discussion of whether it should develop another shot clock aimed specifically at “small cell” facility applications, the Commission asks how it could define small cell for that purpose. In our view, this approach is misguided because, as we discuss below, communities distinguish between facilities based on their impacts, not their technical classification. Indeed,

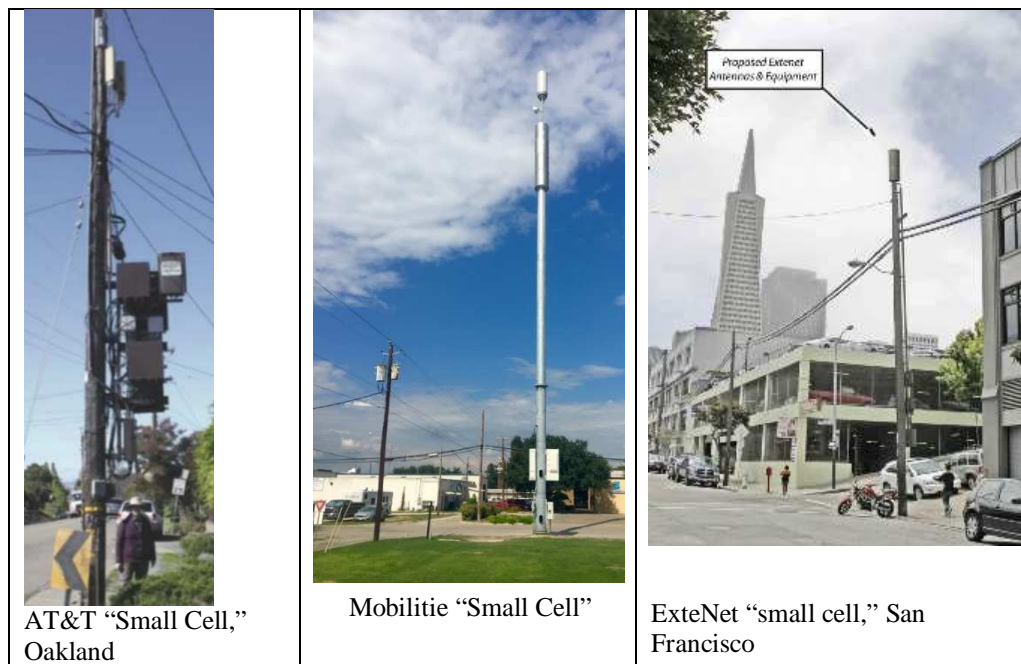
¹⁰ For more information see <https://www.ericsson.com/networks/cases/networks-cases/philips-smartpole-with-ericsson> (last accessed 3/7/2017).

¹¹ CTC Declaration at p. 15.

any technical definition would be stretched at best, since the term “small cell” has no clear technical meaning. What is clear is that there are many existing and developing technologies that allow wireless services to be provided in a way that is far less intrusive than many facilities providers like Mobilitie are proposing to deploy.¹²

¹² CTC Declaration at p. 9.

The term “small cell” is typically used to describe an installation that serves a small area – not to distinguish between facilities that are “small v. those that are large.”¹³ For purposes of this Notice, it is important to recognize that what falls within the rubric of a “small cell” at any given site can actually involve many different pieces of equipment, some of which could be quite large and quite intrusive. Thus, as CTC explains, at any given location, a “small cell” may involve a support structure (ranging in size from a Mobilitie tower to a more conventional utility pole); an antenna; radio units; power supplies/electric meters/disconnects/cabling; and potentially back-up power supplies.¹⁴ Some of these facilities may be mounted on the tower or pole; some may be placed in a vault, and some may be ground-mounted. A facility might look like any of these:



¹³ CTC Declaration at p. 2.

¹⁴ CTC Declaration atp. 6.

The CTC report includes additional examples. As CTC explains, small cell sizes may approach or exceed the size of many monopoles or macrocells.¹⁵ Indeed, many small cells may actually utilize the same equipment that is utilized on traditional macrocells, but the equipment may serve a smaller physical area because of placement or powering.

The problems presented by various “small cell” installations can vary dramatically and argue against adoption of a unique and shorter “shot clock” for these applications. The Mobilite 120 foot “small cell” shown in the photograph above will require installation of a significant foundation that could extend well below ground level and require analysis of the soil underneath the facility and the support required to prevent the tower from falling. It could also, of course, raise Section 106 Historic Preservation Act issues.¹⁶ The AT&T facility pictured on the previous page may create significant aesthetic concerns if proposed in a residential area that would not be presented if located in an industrial area. The placement of any new structure in the rights of way, whether categorized as a small cell or not, can raise significant issues for roadway engineering, safety, and coordination with other utilities.¹⁷ The time required to address these issues is not easily limited by adopting a definition of “small cell” unless small is literally defined to exclude towers and new structures altogether, to only apply to modifications of existing utility poles where there is no need for any excavation or strengthening, and where all facilities associated with a structure are in fact “small” and not capable of expansion. A more favorable shot clock for “small cells” will add complications without accurately identifying a class of facilities for which review time may logically be shortened. It is worth emphasizing that

¹⁵ CTC Declaration at pp. 6-8.

¹⁶ Exhibit 5 is a small cell proposal for a historic district in Monroe, Michigan and the City’s response to a facility 40” in diameter with a 50” base plate, and rises 100’ above ground. The tower and structure are proposed to be located very near a roadway, and with a foundation of unspecified size.

¹⁷ Puuri Declaration at p. 2.

there have been very few cases that in fact turn on a failure of a community to act in a timely way, particularly once the industry applicant acknowledges local governance rights over their public rights-of-way,¹⁸ and industry has never shown that a shorter time frame is required or would significantly to cut deployment times, given, for e.g., the time required prior to beginning construction (*e.g.*, for make-ready work).

2. *Localities Distinguish Between Facilities Based on Characteristics, Not on Their Technical Classification*

The Commission seeks information as to whether and how communities are distinguishing between small cells and macrocells in their siting review procedures. In some respects that is the wrong question. Localities either originally wrote ordinances to provide enough flexibility to distinguish among installations based on impact or are modifying or have modified ordinances to distinguish between facilities that are small and less visible, and those which are not. Land use ordinances typically identify factors (*e.g.*, whether a proposed structure is consistent with the design of a particular neighborhood; or whether a proposed structure is the least intrusive required) that would necessarily take into account the size, appearance, and physical characteristics of a proposed facility. It is certainly true that many local ordinances were originally written for macrocells, and incorporate provisions that may be appropriate for a fenced facility, but are not appropriate for a facility on a utility pole. But as a general matter, land use ordinances provide sufficient flexibility to distinguish among types of facilities based on their physical characteristics (as opposed to the technical classifications suggested by the Notice).

¹⁸ Many Smart communities have experienced stiff opposition by industry to basic state constitutional rights and obligations granted or imposed upon those local communities concerning the proper and safe management of their public rights-of-way. Such opposition is a cause of delay.

What is noteworthy is that processes and ordinances are often being revised in consultation with industry. As the CTC Declaration explains,¹⁹ many communities are working with industry to develop new approaches to deployment that take wireless into account as part of the development processes associated with new subdivisions, roadway widening, or as part of a general planning processes that is designed to provide some certainty for both localities and for providers as to what may be installed, and where. This process may take some up front time, and is distinct from the procedures that apply once an application is received under Section 332(c)(7) or Section 6409. This preliminary work may appear to result in a delay in deployment, as communities gather all industry players together to attempt to develop a cooperative solution. But the “upfront” time may translate into faster consideration of individual applications over the longer term, as providers gain a better understanding of what is required of them, and submit applications that are tailored to community requirements. This consultative process ought to be encouraged, and certainly provides no basis for additional regulations.

Regardless of these developments, where a land use approval is required, the process – whether for smaller or larger facilities – may require some form of public hearing and notice; as well as a process for appeal of decisions.

3. *Permitting Costs and Costs Associated with the Application Process are Typically Cost-Based*

The review process typically begins with the submission of an application, which may also require submission of application fees. It bears emphasizing that the Mobilitie Petition lumps together application fees, and rental fees for use of public property, although the two are

¹⁹ CTC Declaration at pp. 23-25.

legally distinct.²⁰ We discuss Mobilitie's request to limit rents *infra*. Here we discuss its complaints about fees for application to place wireless facilities.

A regulatory fee is typically cost-based and charged in connection with an applicant's voluntary decision to engage in a particular activity: the decision to build a bar, for example, may lead to the requirement to obtain certain licenses, require certain ongoing inspections, and may require certain actions on business termination. Generally, a locality may charge a reasonable regulatory fee to cover the cost of the regulation.²¹

What Mobilitie calls application fees fall into this category and thus are cost-based. The applicant bears these costs for the service. Typically, every application must be filed along with a fee amount that is approved periodically by the appropriate municipal body to recover the estimated costs associated with consideration of types of applications. The application fees are not typically refundable if an entity abandons a project, or if it files an application at Point X and then submits a renewed or revised application at Point Y.

²⁰ Localities may charge rents, license fees, or occupancy fees, for access to publicly-owned property, including public rights-of-way. Those rents include, for example, franchise fees for use of public rights-of-way by cable systems, *City of Dallas v. FCC*, 118 F.3d 393 (5th Cir. 1997), but can also include rents for the use or occupancy of rooftops, traffic lights or other structures owned by a municipality (or a municipally-owned utility). Rents may of course include provisions that recover costs, but are not limited to cost recovery. See, e.g., *City of St. Louis v. Western Union Tel.*, 148 U.S. 92, 99 (1892), *reh'g in City of St. Louis v. Western Union Tel.*, 149 U.S. 465 (1893) (establishing as a constitutional principle that the public may exact rents for use of public spaces); *Alpert v. Boise Water Corp.*, 795 P.2d 298, 306 (Id. 1990) ("the charge imposed was not a tax but was contract consideration for the franchise granted."); *City of Plant City v. Mayo*, 337 So.2d 966, 973 (Fla. 1976) ("we have absolutely no difficulty in holding that the franchise fees payable by Tampa Electric are not 'taxes....[They] are bargained for in exchange for specific property rights relinquished by the cities."); *Philadelphia v. Holmes Elec. Protective Co.*, 6 A.2d 884, 887 (Pa. 1939); *Berea College Utilities v. City of Berea*, 691 S.W.2d 235, 237 (Ky. Ct. App. 1985) ("But the consideration exacted in the ordinance is neither a tax nor a license fee; it is in the nature of an annual rental to be paid for the privilege of the use of space under the streets"); a franchise fee such as that involved is not a tax, but is instead a charge bargained for in exchange for a specific property right, i.e., rental or compensation for use of public streets.")

²¹ Cost-based fees, it should be emphasized, do not need to be based on the incremental cost of regulating a particular business, or reviewing a particular application. Inspecting a restaurant for compliance with food safety laws requires that the locality have an inspector, that the inspector have the tools required to conduct the inspection, and that the inspector have the "back room" support required to submit reports, track inspections and so on. All of those are properly recoverable, although the particular method for recovery may vary from place to place. See, e.g., *City of Tullahoma v. Bedford County*, 938 S.W.2d 408 (Tenn. 1997); *City of Paris v. Paris-Henry County Public Unity District*, 207 Tenn. 388, 340 S.W.2d 885 (Tenn. 1960) (discussing difference between fees imposed in regulatory capacity and proprietary capacity).

In addition, there will typically be fees associated with particular construction or building permits that may be required for a project, and are routine but necessary for safety and similar reasons. For example, if an electrical permit is required, there will be a fee for that permit. If a foundation is being poured, or there will be excavation in a public right-of-way, there may be a fee that applies to review the plans for installation as against existing facilities, and inspection during construction and for restoration. There may be additional fees that apply if a facility must be removed and then rebuilt. Where zoning or land use processes apply, there may be fees associated with that.

In some cases, the application fee would be a flat fee, or estimated deposit that may be partly refunded, or additional payments may be required based on actual costs. However, the fee may also be assessed on other bases. For example, to speed project deployment, some localities have set up concierge services where fees are based on the hours spent by a service team dedicated to consideration of the applicant's application(s). This process was used by some California communities when AT&T deployed facilities to roll out its U-Verse product.

Mobilitie's request to limit application fees to cost is thus misplaced. It is already paying cost-based fees. If it is complaining that it must pay multiple fees, it needs to provide the Commission more information: is it because it has been required to remove facilities it installed without authorization, and must go through another application process? Is it because an application was withdrawn or rejected? As the later discussion of Mobilitie's behavior suggests, it is incurring many fees because of its own actions. And of course, if Mobilitie is asking the Commission to set a particular formula for recovery of costs, or allow it to pay only part of the costs of reviewing an application, the request should be rejected. Allowing Mobilitie to escape

its full costs responsibilities amounts to a subsidy to Mobilitie.²² Moreover, the request runs afoul of the statute and constitution (which provide the Commission no authority to dictate how fees are recovered). The Commission is in any case not in a position to manage or oversee the manner in which localities account for or recover costs; any effort to do so would simply bog down the permitting system, and require adoption of a system of accounts far more burdensome than the system established for common carriers.

4. *Timing Depends on Completeness of Applications and What is Being Proposed for Approval.*

a. Incomplete applications continue to be a major problem.

Once an application is received, it must then be reviewed before it can be approved. The Notice asks commenters to address whether some parties' applications are granted more frequently or reviewed more expeditiously than others, and if so, why?²³ As the CTC Declaration explains, to the extent that there are "delays," most delays in processing an application are caused by incomplete applications.²⁴

Mobilitie unfortunately provides the paradigmatic example of an entity that causes its own delays – and in the course of doing so, increases the costs of regulatory review. While Mobilitie has actually deployed facilities in some of the Smart Communities, and is entering into agreements to do so in others, its record in many communities is not pretty.

Mobilitie submitted applications before it had legal authority to operate, or containing false claims regarding Mobilitie's legal authority. In early 2016, several subsidiaries of Mobilitie began submitting applications to place towers in the public rights-of-

²² ECONorthwest Declaration at p. 8.

²³ Notice at 9.

²⁴ CTC Declaration at p. 20.

way in communities across the country. The applications were essentially cookie cutter applications, and were submitted initially with letters claiming that the subsidiary was certificated by the state public service commission and had the right to use the public rights-of-way. In many cases, however, the subsidiary was not even licensed to do business in the state, and had not filed an application with the public service commission at all. An example involving Centerville, Georgia is attached in Exhibit 6.²⁵

In cases where it *was* licensed to operate, Mobilitie made false claims about its rights to enter onto municipal property. For example, on December 20, 2016, the Michigan Public Service Commission ruled and granted the applications requested in two cases, U-18067 (Mobilitie Management LLC's application to provide basic local exchange services) and U-18125 (Utility Network Authority MI, LLC,'s application to provide basic local exchange

²⁵ The reader will notice that the pictures and designs are virtually identical to those contained in the Monroe application and contain no reliable site-specific engineering. The proposal is for a 120' tower on a narrow street; it is not clear the structure could even be placed at the location proposed without blocking the sidewalk. In early 2016 in Georgia, applications were received from either Network Utility Technologies of Georgia, LLC or Interstate Transport and Broadband, LLC. Neither of these companies had a CPUC certificate; Mobilitie did, but it did not even file to transfer that certificate to its subsidiaries until after filing applications with localities. Other names under which Mobilitie sought applications included names which appeared to be designed to convince localities that it was a functionary of the state:

Alaska Utility Pole Authority
Arizona Utility Pole Authority
Arkansas Utility Pole Authority
Florida Utility Pole Authority
Illinois Utility Pole Authority
Indiana Utility Pole Authority
Minnesota Utility Pole Authority
Missouri Utility Pole Authority
North Dakota Utility Pole Authority
Ohio Utility Pole Authority
Oregon Utility Pole Authority
Pennsylvania Utility Pole Authority
Rhode Island Utility Pole Authority
Vermont Utility Pole Authority
West Virginia Utility Pole Authority
Wisconsin Utility Pole Authority
Wyoming Utility Pole Authority

Even where it had obtained authority, Mobilitie caused delay and confusion by falsely claiming it had obtained rights to use rights of way in communities when it clearly had not.

services), but had to remind the applicants that a license to provide basic local exchange service does not constitute authority for providing other services, such as DAS networks, and does not circumvent the requirement to obtain the necessary permits from municipalities to access their public rights-of-way.²⁶ Nonetheless, applications submitted to localities claimed the MPSC license authorized right of way entry.

In these situations, localities must spend time and effort notifying Mobilitie that it should have authorizations to operate in a state, or it must obtain required consents. And in addition – even though the application is not remotely valid, the locality must detail other problems in the application, even where it is not clear the company will be in a position to pursue deployment.

Mobilitie submitted applications that omitted obviously required information, and that involved almost no field engineering. As a result, localities had to devote resources to reviewing proposals that had, among other things obvious safety issues, were inconsistent with the ADA (blocking handicapped access), and involved placement of new 120 foot towers in historical districts or in front of historical structures. The Centerville responses in Exhibit 6 provide a good example of the problems with the sort of applications received from Mobilitie. As suggested there, in many cases, Mobilitie applications reflect almost no real field engineering. While facilities are proposed to be placed in the public right-of-way, the drawings submitted do not show detailed foundation or pole depth specifications – facts obviously critical to public right-of-way safety.

Moreover, in many cases facilities are proposed at locations that are plainly not viable locations. In Laurel, Maryland, for example, Mobilitie proposed to install a 75-foot tower in the Laurel Historic District, in front of the Citizen’s Bank, in a 6’9” brick sidewalk near a

²⁶ The Orders are available at: <http://efile.mpsc.state.mi.us/efile/docs/18067/0026.pdf> and <http://efile.mpsc.state.mi.us/efile/docs/18125/0019.pdf>, respectively.

handicapped access ramp. The proposal required the tower to be embedded 11' underground, even though underground utilities including electrical utilities are at that location. The proposal was submitted without any structural work or surveying to determine whether it could be safely installed as proposed.



Laurel Historic District

The Laurel application is attached as Exhibit. 7. Laurel was required to spend staff time and effort to review an application that should never have been submitted for the location proposed.

Other communities have faced similar applications. As noted *supra*, in Monroe, Michigan, Mobilitie proposed to place a 100-foot tower in the verge next to a sidewalk within the Old Village Historic District (#82002854) in the National Register of Historic Places, and in front of an historically significant structure. The proposed tower was in the sight lines of St. John the Baptist Catholic Church, listed on the Michigan State Register of Historic Sites in 1998 and within one block of Memorial Place, commemorating the Kentucky soldiers that fought and

died at the Battle of the River Raisin in January 1813. The application was, like the Laurel and Centerville applications, woefully deficient.²⁷

Application deficiencies are often followed by silence. Monroe notified Mobilitie of the problems with the application, and the City has not heard back from the company. This has also been the case with De Soto County, Mississippi, Frederick, Maryland and numerous other local governments. Where there have been continued contacts, the siting process may involve what is effectively an entirely different proposal. For example, in Cary North Carolina, Mobilitie originally submitted five “applications” in 2016 for 120’ towers in the public right-of-way. Following correspondence addressing the incompleteness of the application, Mobilitie and Town staff met in October of 2016 and again on in February of 2017. While formal applications have not been filed, Mobilitie has indicated they now have plans for about twenty sites in the town at elevations far less than 120 feet.

Mobilitie often does not accurately identify the location of its proposed facilities. The applications submitted by Mobilitie typically include a set of plans that might (but often do not) accurately identify the location of the proposed deployment. In many cases, the location sought for the tower was not within the jurisdiction of the government entity receiving the application.²⁸ I

The deficiencies in the applications suggest the company made almost no real effort to comply with local requirements. In many cases, no application fee accompanied these

²⁷ The Monroe application and response letter are attached as Exhibit 5.

²⁸ Sugar Land, Texas received requests for eight sites, of which seven were located on state rights-of-way. Consent to use the rights-of-way is required prior to approval from a state agency, the Texas Department of Transportation, in addition to compliance with City requirements, requiring detailed coordination between both jurisdictions on current and proposed road construction work in the area. Another example may be found in DeKalb County, Georgia where more than half of the requested sites were in Georgia rights-of-way. Still DeKalb and Mobilitie are close to reaching an Master License Agreement on different terms from the Georgia Municipal Association Mobilitie agreement.

applications, but there was always a request for a community contact. The same application packet (or a virtually identical packet) was received across the country, regardless of local forms or any requirement that the forms be filed electronically. In many cases, communities received multiple applications, all of them incomplete.²⁹

Worse, in some cases Mobilitie built its facility without going through required federal, state or local requirements. Mobilitie installed a pole without going through this Commission's Section 106 process in a historic district in Denison, Texas, and then removed it (*see* Texas Municipal League's Comments for additional detail on Mobilitie in Denison, Texas and Section 106 issues). In Baltimore, Maryland, Mobilitie was required to remove a pole it placed in a sidewalk ramp that made the sidewalk non-ADA compliant. The cost of remediating these problems falls on local and state governments, and not just on Mobilitie, especially when important laws like the ADA are involved. And those costs incurred by local communities must be recoverable in full.

It is thus somewhat strange to see Mobilitie complain that its deployments are being unreasonably delayed. Despite the problems identified above, local governments do continue to work with Mobilitie – and notably, Mobilitie has not raised the concerns it raises here with any of them.³⁰ But in any case, the key point is that behavior like Mobilitie's adds significantly to the cost, burden and time required to process small cell applications; localities are being asked to

²⁹ In Montgomery County, MD, Mobilitie filed hundreds of applications in a single day; not one was complete. The separate comments of Montgomery County provide the detailed timeline — it took eight months before even a single complete test application was submitted. Los Angeles reports requests for 1,900 locations. In Boston, Mobilitie identified 219 locations for DAS/Small Cell installations, 204 of these on City Poles and 15 on Eversource/Verizon Poles. The City sent Mobilitie a DAS/Small Cell agreement and a Dark Fiber agreement on Feb 3rd for execution.

³⁰ See also Comments of Arlington, Texas (filed March 8, 2017) at 1-2. “[Arlington] is actively involved in negotiations with Mobilitie for placement of their small cell facilities in City rights-of-way. These discussions are progressing with a master license agreement likely entered in the near future that will serve as a template for other providers going forward. It is interesting to note that the issues raised by Mobilitie in their Petition have not been raised at the local level in our discussions.”

do work Mobilitie itself should have performed. Given the record here, the Commission's reference to local government behaviors discussed in the *2009 Declaratory Ruling* and *2014 Infrastructure Order* are particularly inapt, and cannot justify additional regulations.³¹

b. Applications for the public rights-of-way present special problems.

Setting aside the problems created by incomplete applications, the evaluation of applications for placement of “small cells” in the public rights-of-way is not simple, and does require a stringent review. The issues raised by Mobilitie are public right-of-way issues – in fact, press reports indicate its customer Sprint is abandoning existing macrocells in favor of “cheaper” towers in the streets.³² But in contrast to applications for use of private land, the public right-of-way is a shared space, which must accommodate vehicle traffic, pedestrian traffic, and a large variety of utilities. The Declaration of Steven Puuri explains some of the problems presented by adding structures to public rights-of-way, and why it is critical that proposals for placement of facilities be carefully reviewed. As discussed below, many of the areas that are most trafficked and that are particular targets for small cell deployment are also areas where the city has spent millions of dollars beautifying the area to particular design standards. While certainly not impossible, it is often more difficult to disguise facilities, particularly where agreements on design require the consent of the wireless providers, the community, and a private utility that may have an interest in infrastructure. Moreover, the use proposed – installation of vertical structures that could be (and historically have been) placed outside the the public right-of-way – is not a necessary public right-of-way use (normally public rights-of-way are dedicated to linear and transiting uses, and uses related to transportation). The placement of incongruent structures

³¹ Smart Communities would ask that the Commission examine the role of each entity in causing delays and provide a fresh look to these complaints in a post Shot Clock world.

³² <http://www.rcrwireless.com/20160125/opinion/analyst-angle-sprints-network-plan-equals-suicide>

in the public rights-of-way creates different problems, and may create legal issues depending on any limitations on uses of the public rights-of-way or associated utility easements.³³ Thus, applications for use of the public rights-of-way may require more stringent review than non public right-of-way applications – which is to say, approval of small cells of the sort that are the focus of the Notice may require as much or more time than approval of macrocells.³⁴ Those problems may be particularly significant in areas where all other utilities are underground, where the installation presents not only new safety but also aesthetic issues.

Receiving applications in batch for small cells does not necessarily speed the process either. There may be some ways to manage batches of applications to speed certain aspects of the review. For example, if the same design is used in the same zoning area, that design may be approved for the entire area, subject to certain restrictions (e.g., a design generally appropriate may not be appropriate in front of an historic landmark). But the degree to which batching is helpful may depend on the structures proposed (new v. additions to existing facilities) and the size and visibility of the installations; and on the coordination required with other utilities.

³³ See *D'Andrea v. AT&T*, 289 Mich. App. 70 (2010) See also unpublished Opinion following post-trial appeal: *D'Andrea v. AT&T*, 2014 Mich. App. Lexis 1570 (2014). As Mr. Burgoyne explains, intrusive small cell installations may affect property values; even small reductions in property values could have significant economic effects. Burgoyne Declaration at pp. 2, 8.

³⁴ The placement of a node may have significant ripple effects that are recognized in the Programmatic Agreements, are not typical of macrocells, and that are of appropriate concern in determining whether the placement should be authorized. Each node on a DAS system may require 4-6 dedicated fibers that connect to a larger fiber bundle. Placement of the fiber may require significant roadway trenching. The consideration and mitigation of those impacts may be time-consuming, particularly if each entity asserts the right to build the particular network facilities it wants, with the connectivity it desires, at the time it prefers, with no interest in collocation at any time...which is what Mobilitie is effectively asking the Commission to order. In Myrtle Beach, trenching along the Ocean Boulevard during summer could cause millions of dollars in losses to businesses and to hotels. To avoid the trenching problem, the City installed conduit in consultation with utilities to limit or avoid the need for disruption. That should speed deployment, but only does so if localities can require wireless service and facilities providers to use their assets, or otherwise act to protect against disruption.

c. Local processes do not, however, result in gaps in service.

The Commission asks: are there greater coverage gaps in specific states or localities where applications are processed more slowly or where more stringent showings are required? If so, to what extent are these gaps attributable to such factors regarding the processing and consideration of siting applications?

In Smart Communities view, there are not greater coverage gaps in specific states or localities where applications are processed “more slowly.” (The framing has of the question presumes applications are being processed “more slowly,” but we assume that the Commission is really asking whether the land use review process itself results in gaps.) As the CTC report points out, most of what industry seeks to characterize as “small cell” deployments are not designed to serve areas that lack broadband service. Many of the deployments are occurring in areas where residents have multiple options for high-speed access to the Internet, whether via licensed or unlicensed frequencies. Many of the deployments (in Montgomery County for example) are occurring in areas where hundreds of facilities have already been authorized.³⁵ The issue is usually the quality of the service, and in some cases, those concerns may have to do with the delivery of services (like video services) that are not the focus of Section 332(c)(7).

Moreover, as discussed above, in most cases “delays” in processing are due to inadequate engineering or other incomplete information or documentation by the applicant, and that is particularly true with respect to Mobilitie. But undue delay is not created generally by localities. This is perhaps well-reflected in the fact that, since the adoption of the Commission’s shot clocks, there have been almost no cases where courts have found that localities have unreasonably failed to act on a pending application for placement. In many – perhaps most cases

³⁵ Montgomery County Comments (filed March 8, 2017).

– this is because localities and providers have agreed upon a time for final action, taking into account the issues that were associated with particular applications.

Nor should the Commission be concerned by ordinance requirements which establish safe harbors for deployment. The Commission notes that some ordinances require wireless facilities to be placed a certain distance apart. That is true, but ordinances governing placement of facilities typically allow requirements to be varied for cause, and of course are subject to preemption where they actually or effectively prohibit the provision of wireless services. What standards like the distance standard do is define an acceptable set of design parameters, which then provide some certainty for a wireless provider who can design to those standards. Rather than delaying approval, such standards ease the process.

5. *The Commission's Own Rules, Which Require Localities To Go Through A Detailed Notice Process Rather Than Simply Reject Incomplete Applications As Is The Case For Other Permits Adds To The Cost.*

The Commission's own rules add to costs that otherwise apply, and as suggested above, can add to the time required for review. The 2009 Declaratory Ruling's "Shot Clocks" by pushing wireless applications to the front of the line (by establishing federal requirements above and beyond state law requirements) impose costs on localities that need to be recovered. By requiring incompleteness notices that list defects in detail (rather than requiring the applicants to do the work, as is the case with other permits, which are routinely denied or given back to the applicant if incomplete) the Commission creates additional regulatory costs that need to be recovered. Thus, the Commission's elaborate rules requiring detailed incompleteness notices in a short time frame have had the perverse effect of adding to the processing time and costs for applications, and created an incentive for applicants to file incomplete applications. This incentive may be amplified by the relationship between wireless service and facilities providers,

which the Commission should investigate as part of this Notice, should it wish to proceed further. If, for example, an infrastructure provider is paid on milestones (when an application is filed for example) there will be an additional financial incentive to file without doing the work required to prepare a complete application .

6. *Applicants who seek to use the public rights-of-way or other public property may require additional approvals.*

The Commission should recognize that the placement of facilities in the public rights-of-way or other public property may require additional or different approvals.

In addition to necessary land use approvals, an applicant who seeks to place facilities on private land will require the landowner's permission. The same is true for facilities in the public rights-of-way or other public property. The permission of the landowner or trustee for the property – which will either be the local government or the state – must be obtained. Hence, in states where the right to use the public rights-of-way is subject to local consent (whether in the form of a license or franchise) the applicant must have the authority to use the public rights-of-way. Similarly, if the applicant wishes to occupy other public property (parks, buildings, easements, etc.) it will need to have authority to use that property. The location may then affect whether additional land use requirements apply or not. There may be no additional land use approval requirements for some locations or some types of installations (a city park, or a right of way may not be subject to land use regulations in many communities). The choice to deploy on property other than privately-owned land and buildings may thus trigger other requirements that affect deployment.

B. Deployment Can Present Significant Challenges, and Those Challenges Suggest Small Cell Deployment Should Be Approached Cautiously

As suggested above, as a factual matter, the deployment of small cells in the public rights-of-way presents problems, including safety problems, that are significant, and may involve significant externalities.

Thus, as Mr. Puuri points out, the placement of new structures in the public rights-of-way creates an ongoing risk to public safety that cannot be avoided. The installation of wireless facilities can also create long-term stresses on the road bed, interfere with drainage, and make it more expensive to maintain and expand the roadway, or to improve other utilities. The cost to local governments that result from the addition of new structures to the public rights-of-way may be millions or billions of dollars annually.³⁶

Moreover, the placement of small cells – depending on their size and visibility – may affect neighboring property values. As Mr. Burgoyne explains, the literature suggests that placement of utility infrastructure aboveground does affect property values.³⁷ That impact is related to the size and visibility of the installed structures. As even a small reduction in value of homes in a neighborhood may have multi-million dollar effects – it becomes very important to minimize the impacts of proposed installations.

³⁶ The costs associated with using the rights of way can be significant. Mr. Puuri's Declaration includes simple example of costs associated with making a roadbed and roadside safe for a single small cell installation where there are almost no competing utilities; the road is a rural road, and the design of the facility will not affect the roadway itself in any way; and no special construction is required for the facility. The costs listed are costs associated with modifying the roadside, and do not include costs associated with reviewing plans and developing specifications for the site; do not include costs associated with inspecting the installation during construction or periodically thereafter. The estimates do not include joint and common costs associated with maintaining the road and the roadside areas so that those are safe for all users, and it does not include special costs that may arise when the roadway or other utilities need to be moved. It does not reflect costs associated with responding to emergencies involving the structure. What it does suggest is that the cost limits proposed by Mobilite are not in any respect realistic, and that use of the rights of way involves significant costs that will be taxed to the public unless fully borne by service or facilities providers. *See also* CTC Declaration at p. 16.

³⁷ Burgoyne Declaration at p. 3.

This is particularly so since, as the CTC Declaration points out, providers often do have alternative placement options, and technology may permit provision of advanced services without the negative impacts.³⁸ Indeed, if localities can respond to the potential problems by establishing placement requirements, that may reward innovators who can design networks that minimize impacts. Rather than discouraging deployment, strong local standards may encourage companies who have traditionally designed and built municipal infrastructure to develop innovative designs for deployment of next generation wireless.³⁹

The stakes are enormous. Smart Communities call on the Commission to recognize that actions with a singular focus on facilitating deployment without any consideration of the community context could have enormous, and negative economic effects, affecting millions (if not billions) of dollars in community investments made not just for aesthetic reasons, but for financial and health and safety reasons.

To provide one example: Myrtle Beach is one of the nation's most popular tourist destinations, and the most popular destination in South Carolina, attracting more than 17 million visitors per year to a city with a permanent population of roughly 30,000. That tourism – primarily driven by the area's beaches, golf courses and attractions – has been the engine for tremendous growth in the City and the nearby entire Grand Strand, in both Horry County and Georgetown County. Myrtle Beach's unemployment rate is below the national average, while the metropolitan area growth rate is the second fastest in the nation (2014-2015 Census estimate).⁴⁰

³⁸ CTC Declaration at p. 16.

³⁹ CTC Declaration at p. 22; ECONorthwest Declaration at p. 5.

⁴⁰ See <http://www.myrtlebeachonline.com/news/local/article67886402.html>.

Myrtle Beach accounted for nearly four percent (3.94 percent) of the state's 2014 retail sales. Tourism is South Carolina's main industry, and the Grand Strand is the engine behind it. Negative impacts on tourism in Myrtle Beach have a ripple effect across state government and state coffers, since Horry County and Myrtle Beach are "donor" locations within the state, providing state funds for other locations that do not have that tourism base. Conversely, positive impacts on tourism generate jobs, sales tax, accommodation taxes, hospitality taxes and economic stability both locally and statewide. The economic impact is astounding. In 2015, tourism generated \$20.2 billion in economic activity statewide, a 6.1 percent increase over 2014, and the fourth straight year of growth. 'Tourism is South Carolina's largest industry, supporting one in 10 jobs and generating \$1.5 billion in state and local tax revenues.⁴¹

Maintaining and responding to that growth is a challenge. The City competes nationally with Las Vegas and Orlando at convention center level; but as it attracts most of its non-convention visitors from the East Coast, including the Midwest and Canada, it must compete with other coastal destinations along the east coast shoreline.⁴² To compete, the City has developed a comprehensive and holistic approach to enhance its tourism economy that has steadily grown since the 1950s. The public investment includes more than \$80 million in the Myrtle Beach Convention Center, the Convention Center Hotel and the Myrtle Beach Sports Center. The City has planned, financed and worked hard to develop the 10 mile commercialized Ocean Boulevard, its public beaches and Boardwalk, investing more than \$100 million in public improvements to streets, sidewalks, the boardwalk, underground utilities, deep-water ocean outfalls, public parks, new streets and new recreational spaces. The City of Myrtle Beach partnered with the local electric utility, Santee Cooper, to fund the removal of overhead utility

⁴¹ <http://www.newsobserver.com/news/business/article134436159.html#storylink=cpy>

⁴² <http://www.myrtlebeachareachamber.com/research/docs/24theditionstatisticalabstract.pdf>

lines from major public streets and thoroughfares, spending more than \$30 million on that effort since 1999. The City has aggressively incorporated this holistic approach to growing its tourism economy through long-range capital improvement plans and budgets. The City incorporates aesthetic requirements into every development agreement, every Municipal Improvement District, every Tax Increment Financing District and every approval process. How Myrtle Beach looks is a key determinant of how well its economy will function and grow.

Moreover, and on a practical level, such a holistic approach is required for public safety. The area is subject to hurricanes, so it seeks to avoid preventable damage and limit repair time through strict building codes and adherence to FEMA's and other agencies guidelines. An obvious goal is to limit the number of structures that can create hazards to the public and to property during high winds. Moving utilities underground was part of those efforts.

Most of the tourists who visit Myrtle Beach arrive by automobile, but they rightly expect to walk and bicycle through the central beach areas and residential districts, which means that the City has a significant interest in minimizing obstructions in the public rights-of-way. Looking ahead, the City has identified as much as \$2 billion of required road improvements,⁴³ while facing significant reductions in available state and federal funding – additional infrastructure that may make improvements more difficult simply adds to those costs.

Indeed, understanding these future growth issues, the City met with all interested utilities during the underground conversion discussion to ensure that the underground infrastructure would include sufficient conduit and other structures to avoid future trenching, road blockages or other retrofitting.

⁴³ <http://www.myrtlebeachonline.com/news/local/article67886402.html>

The City is now receiving requests that it allow installation of above-ground towers on its beach public right-of-way. Installation in the public right-of-way is *not* needed to provide service. The beachfront is lined with multi-story buildings and private parking lots (with lighting structures) that could easily support placement of wireless facilities. In fact, off-road placement on private property may lead to more coverage, as it would enable a provider to better serve the hotels that line the beach. The main reason providers wish to use the public property appears to be cost – the idea that it will be cheaper for them to place facilities in the public’s public rights-of-way, rather than to secure appropriate private property, even if the impact on surrounding businesses, tourism and employment could have long-term negative consequences that are far greater than the cost of negotiating to use private property.

Based on that City’s experiences, those costs could be significant. Nonetheless, the City is currently working with providers of infrastructure and services to create a development guide that would allow placement of some facilities in the public rights-of-way – the goal being to try develop safe harbors to which all providers may design rather than dealing with applications on a case-by-case basis. This may involve (1) use of street lights or other structures that can be used to hide facilities; (2) limiting placement in the public right-of-way in sensitive areas to facilities that meet stringent design requirements, and otherwise requiring facilities to be first placed in locations where they are not going to create harms; and (3) limiting new facilities that are permitted, and limiting the height and placement to avoid risks to vehicles, pedestrians, and roadbeds.

Even this process is not simple. The use of street lights for placement of wireless facilities is not as simple as one may imagine. Street lights themselves are evolving, and may incorporate sensors and other infrastructure for government and public use. It is important that

use by wireless providers not foreclose those other important uses. Moreover, the replacement of one street light structure with another, heavier structure may create maintenance, replacement and safety issues that did not exist before. And, as street lights are often installed and maintained pursuant to complex tariffs that, among other things, effectively require separate metering for each powered user.

Myrtle Beach's experience, the experience of the other Smart Communities and the expert declarations indicate:

First, placement of wireless facilities has significant initial and ongoing impacts on the public rights-of-way. The impact may be focused on the antennas, but it is not limited to the antennas; for example, 120-foot poles could block the public right-of-way, create permanent obstructions for placement of other utilities by virtue of the foundations required to support that structure, and create hazards that do not otherwise exist.

Second, the problems can and are being addressed, but addressing the problems may require a coordination with other utilities and stakeholders that does require some time. Additional rules will not speed the process.

Third, the Commission should recognize its own rules may be a barrier to creative solutions to deal with redeveloped areas, historical areas and residential areas (particularly underground areas). It ought to encourage approaches that allow for creation of safe harbors for conforming providers to place facilities in the public rights-of-way, while limiting the ability for those who place within the safe harbors to expand those facilities.

Before adopting any new rules, particularly rules of the sort proposed by Mobilitie, the Commission needs to carefully consider the negative cost and impact of all those rules, and if the data is not clear, study those impacts in detail. *See also* Part VI, *infra*.

IV. OVERALL, THE LOCAL PROCESS IS WORKING WELL

While there are challenges that need to be addressed, deployment is in fact proceeding at a fairly rapid pace. While the Notice ostensibly seeks “updated information” to evaluate whether “further action” in addition to that taken in the *2009 Declaratory Ruling*⁴⁴ and *2014 Infrastructure Order*⁴⁵ is warranted – the questions that are posed are heavily skewed to seeking data to show local governments are hindering deployments.⁴⁶ For instance, the Bureau unduly limits its inquiry to “whether and to what extent the process of local land-use authorities’ review is hindering, or is likely to hinder, the deployment of wireless infrastructure....”⁴⁷ In this post Shot Clock order era, perhaps the most telling empirical data for the timely actions of local governments can be found in the *lack* of Shot Clock violations being alleged in courts around the country. One reason for this is the existing rules give the applicant and the locality the flexibility to address timing issues by agreement.

Despite the challenges and uncertainties, small cell deployments are being made in large numbers. Verizon is deploying 400 small cells in San Francisco.⁴⁸ Smart Communities members have already met significant requests from numerous wireless providers and DAS companies for access to public rights-of-way. Boston has approved nearly 400 DAS/small cell installations in

⁴⁴ *Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd 13994 (2009).

⁴⁵ *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, Report and Order, 29 FCC Rcd 12865 (2014).

⁴⁶ The Notice at p. 9 asks:

- Do the concerns that motivated the Commission to take action in 2009 and 2014 still exist?
- Have they become less or more salient?
- Which, if any, local government actions (or inaction) have the effect of hindering the introduction of new services, obstructing efforts to improve existing services or make networks more robust, or deterring prospective service providers from entering markets?
- Commenters should provide specific information and detailed explanations and, to the extent possible, should quantify any such effects. We will accord greater weight to systematic data than merely anecdotal evidence.

⁴⁷ *Id.*

⁴⁸ <http://www.fiercewireless.com/wireless/verizon-to-deploy-400-small-cells-san-francisco>

the public rights-of-way with three neutral host companies.⁴⁹ Atlanta has approved 257 applications⁵⁰ and Houston has approved over 350 locations.⁵¹ Demand is not expected to slow down. Houston, for example, believes that they will receive requests for as many as 800 additional locations in the not so distant future.⁵² But it is not just the larger communities that are being challenged to meet demands for public rights-of-way access. Ann Arbor, Michigan, in just the last two years has dealt with more than 70 applications for small cell facilities.⁵³

This is a case, in other words, where the Commission should encourage additional cooperation, and not create additional disincentives to solutions. As the CTC Declaration explains, deployment is most efficient when localities work with service and facilities providers to develop solutions for the problems presented by small cell deployment and particularly, small cell deployment in the rights of way.⁵⁴ Additional rules will at best complicate existing powers and at worst will discourage cooperative approaches.⁵⁵

⁴⁹ Boston has agreements with Crown Castle, ExteNet and American Tower that provide that two-thirds of the installations will take place on City-owned Streetlights or traffic lights and the remainder on jointly-owned Eversource-Verizon) poles. The majority of these installations have been in place for about eight years, but recent interest and engagement by carriers, as well as additional neutral hosts, indicate that number could treble in the next 2 years and again in 4 years.

⁵⁰ These approvals break down as 174 for Crown Castle and 83 for Mobilitie. Atlanta reports that Mobilitie has indicated a request for more than 200 sites within the city.

⁵¹ Houston explains that in addition to the 350 locations already approved, they are anticipating as many as 800 more requests as Zayo, Crown Castle, Verizon, and Mobilitie each have expressed a desire to build out an entire network, which could be as many as 200 locations for each company.

⁵² The City of Los Angeles reports that it has approved nearly 100 Mobilitie sites alone.

⁵³ Between 2015 and 2016, ACD.net filed application for 29 locations with Ann Arbor, only to withdraw each of those applications and submit 18 new applications in late 2016 and early 2017. One day, when an individual at ACD.net tried resubmitting its applications with the required detailed drawings for each location and got a bounce because of the email and attachment size, the individual at ACD.net resubmitted the same email and drawings two more times, crashing the Ann Arbor engineer's mailbox, and causing the engineer's computer to be down for all purposes for approximately six hours.

⁵⁴ CTC Declaration at pp. 22-23.

⁵⁵ As we have pointed out in this filing, and as CTC explains, the Commission's 6409 rules are often a barrier to solutions in sensitive areas like residential areas because they permit small installations to grow in a manner that will be significant to residents. *See also* Burgoyne Declaration.

V. REGULATING THE PRICES CHARGED FOR ACCESS TO THE PUBLIC RIGHTS-OF-WAY OR OTHER GOVERNMENT PROPERTY IS BAD POLICY

A. Fees for Use of Government Property Should Be Priced At Fair Market Value

1. *As a basic economic principle, if local governments are forced to give away property at less than fair market value, it will encourage inefficient deployment.*

While Mobilitie complains that it is subject to high and multiple fees, it is unclear exactly what it is stating.⁵⁶ However, Mobilitie admits in its Petition that its desire to use of the public rights-of-way “for backhaul and transport” is driven by a desire to take advantage of lower transaction costs as compared to use of private property.⁵⁷ That is consistent with press reports stating Mobilitie wants to be in the public rights-of-way solely to save costs now being paid to private landlords.⁵⁸ To this end, Mobilitie has filed countless applications for structures 60 to 120 feet tall which the company calls “utility poles” with no plans for stringing wires on them. These facilities will not use the public rights-of-way for backhaul and transport but rather will use point-to-point microwave antennas. These can only accurately be described as monopole towers in the public rights-of-way. Unlike pipelines, electrical, and fiber facilities, there is no logical reason these facilities have to be placed in the public rights-of-way. And it is solely that Mobilitie hopes to gain financial benefits by coopting this public property and obtaining access at marginal costs.

But as the ECONorthwest Declaration points out, the public rights-of-way and other state and local property are scarce resources. Allowing Mobilitie to install and pay less than fair market value simply encourages economically inefficient deployment and may discourage

⁵⁶ Notice at 7, Mobilitie Petition at 14, 16 and 17

⁵⁷ Petition at 7-8.

⁵⁸ *See, supra*, fn. 32.

innovation.⁵⁹ Mobilitie installs at the cost of public safety and the value of nearby homes. Even a small devaluation of homes would result in costs to society far greater than Mobilitie/Sprint is bearing now. Long term harm to roadbeds, and hazards will predictably result in billions of dollars of loss to the economy.⁶⁰ Ironically, Mobilitie quotes with approval from an article that states a level playing field is where all firms “pay for the actual costs they cause”⁶¹ yet the company’s business plan counts on *not* paying any such costs.

2. *As a basic economic principle, pricing to reflect the value and impacts will lead to innovation, and reward companies that devote research to new technology and means of deployment.*

As a basic economic principle, pricing property at less than fair market value encourages users to overuse that resource, and effectively requires others (whether taxpayers or neighboring property owners) to subsidize that use. As ECONorthwest explains:

if a municipality is forced to sell access to its ROW at a below-market rate, then users will not fully consider the cost of accessing the ROW and will over utilize it. One form in which this overutilization could manifest itself is that existing ROW could become overcrowded, and be unable to accommodate new, innovative technologies.⁶²

Indeed, one would expect that if a locality can charge fair value for use of the public rights-of-way, entrepreneurs will be incentivized to minimize unnecessary use – and will not shift a facility from one location to another for the sole purpose of avoiding rent, as appears to be a primary driver for Sprint. While (as CTC explains) public right-of-way costs are not likely to be the determinative factor in making a decision to deploy in rural versus urban areas, subsidizing use by wireless providers will not promote efficient deployment within communities

⁵⁹ ECONorthwest Declaration at p. 13.

⁶⁰ Burgoyne Declaration at pp. 8-10; Puuri Declaration Declaration at p. 3.

⁶¹ Mobilitie Petition at 30.

⁶² ECONorthwest Declaration at p. 5.

that are deployment targets, and in the long term may delay development of innovative schemes for deployment of the next generation of networks.⁶³

3. *As a basic economic principle, underpricing property will not lead to deployment in underserved areas; it will exacerbate existing marketplace inequities.*

As local governments explained in response to the Commission's 2011 Right-of-Way Notice of Inquiry,⁶⁴ many underserved areas (not surprisingly) seek to attract providers by charging nothing for use of public property or public rights-of-way. As they also pointed out, consumers often have more choice, and better services, in areas which do charge for use of the public rights-of-way. The same factors that make property valuable in those areas also make the areas more profitable to serve. As a basic economic principle, firms will first deploy in the areas that are most profitable. Further, the areas that are most profitable under a system with market-based prices will, when public rights-of-way are underpriced, likely remain among the most profitable areas (albeit more profitable due to lower costs). Underpricing public rights-of-way, therefore, is *unlikely* to lead to increased deployment in underserved areas. Montgomery County sees that pattern in the applications it has received, which focus on some of the wealthier residential areas in the County, and not on its more rural areas.

This is not a case where the Commission need step in because providers face monopolistic pricing. Communities can and do compete with one another for businesses and services, and have in fact vigorously competed for deployment of advanced infrastructure.⁶⁵ Nor is this a case where a subsidy would be consistent with the purposes of the *Communications*

⁶³ CTC Declaration at p. 14; ECONorthwest Declaration at p. 5.

⁶⁴ Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WT Docket Nos. 13-238, 13-32; WC Docket No. 11-59 (Apr. 7, 2011).

⁶⁵ CTC Declaration at p. 19.

Act specifically or generally; while the goal of the *Communications Act* is to promote competition, it is focused on doing so through adherence to market principles, which include requiring market participants to pay market rates for resources used. Those rates, as ECONorthwest explains, are not limited to out-of-pocket cost, much less the subset of costs that Mobilitie asks the Commission to adopt.⁶⁶ Fair market value is the proper standard for pricing access to public right-of-way and other public property.

VI. GIVEN THE BILLIONS IN POTENTIAL HARMS, AND THE LIMITED POTENTIAL BENEFIT, THERE IS EVERY REASON FOR THE COMMISSION TO EXERCISE RESTRAINT, AND TO ALLOW SMART COMMUNITIES TO MOVE FORWARD WITH CREATIVE SOLUTIONS

A. Before It Adopts Any New Rules, the Commission Should Consider the Costs and Not Assume the Benefits.

In this filing, Smart Communities have shown that there are significant costs associated with adopting additional regulations restricting local siting authority, and that restricting police power fees or regulating rents could have significant negative effects on communities and on wireless deployment. By contrast, there is little evidence that wireless deployment will be prohibited if new regulations are not adopted, and every reason, based on the deployments that have already occurred, to expect it will move forward. At the very least, before adopting new regulations, the Commission must carefully examine and quantify the negative impacts of proposed deployments like the Mobilitie 120-foot towers in public rights-of-way, both on communities and on innovators who may wish to enter the market.

B. The Red Herrings: Ubiquitous Broadband and 5G Do Not Justify Additional Regulation

As we have already explained, there is no reason to believe new rules will lead to ubiquitous broadband deployment. According to CTC, small cell systems do not provide a

⁶⁶ ECONorthwest Declaration at pp. 7-12.

particularly useful vehicle for providing services where there is none now (with certain limited exceptions small cells may overcome topographical barriers).⁶⁷ Small cells are not necessarily the most efficient or cost-effective means of providing service in many locations. They are unlikely to be deployed in sparsely populated, rural areas despite Mobilitie’s unsupported claim to the contrary.⁶⁸ Even where small cells make sense, there are often ways to place facilities on buildings or rooftops which avoid the hazards and harms associated with placement in the public rights-of-way.

The Commission bases its notice in part on the conclusion that “...small wireless facilities are the kinds of technologies the Commission envisions needing to enable 5G network in those bands.”⁶⁹

As an initial matter, this statement means less than at first appears. There is of course, no existing 5G standard, and no true 5G equipment.⁷⁰ And it is not obvious that the best way to take advantage of the potential of 5G is via the sorts of large structures that some providers propose to put in the public right-of-way. Indeed, as the CTC Declaration explains, there are alternative ways to deploy 5G networks that may not require the sorts of structures proposed by Mobilitie, or even the large small cell and DAS installations that have been installed by some companies. There are different technologies, with quite different form factors that allow for facilities to be disguised (C-RAN etc.) – and no doubt others that can or will be developed.⁷¹

There are non-licensed technologies that are being used to provide wireless services that can free up licensed frequencies, and may actually reduce costs associated with wireless services.

⁶⁷ CTC Declaration at p. 16.

⁶⁸ Petition at p. 6.

⁶⁹ Notice at p. 4.

⁷⁰ CTC Declaration at p. 15.

⁷¹ CTC Declaration at p. 9.

For example, cable operators routinely provide modems in home with two bands, one which provides a private and one a public Wi-Fi capacity.⁷² They install strand-mounted, low-powered Wi-Fi devices. These “in-home” facilities, combined with service provided from larger structures may provide more than adequate coverage.

Deployment of the “small cell” networks — or at least, the particular networks proposed by Mobilitie and other incumbent service and facilities providers may not advance the development of smart communities. As we pointed out,⁷³ many of the Smart Communities are already deploying facilities that support advanced wireless services. Autonomous vehicles (AV) may need to communicate with one another; and may eventually rely on information from infrastructure (traffic signal information and so on), but V2V and V2I create significant security risks for vehicles; AV dependence on a network for information controlled by a private company with no clear obligation to serve may make autonomous vehicles *less* reliable. In this respect, it is notable that a Crown Castle representative has testified that it is a real estate company. The Commission should be reluctant to allow a real estate company to capture a public resource (particularly at a subsidized rate); that may actually deter development of innovative solutions.

C. The Notice Fails To Establish A Predicate For Action Against Local Governments.

While Smart Communities are heartened by the Bureau’s claim that it seeks to “develop a factual record”⁷⁴ on the deployment of small cell infrastructure, we expect that record to be based on more solid evidence than that which was presented in Mobilitie’s Petition or the Notice.

⁷² <http://www.pcworld.com/article/2363389/to-xfinity-wifi-were-all-hotspots-but-you-dont-have-to-be.html>

⁷³ *Supra*, p. 9.

⁷⁴ See Exhibit 8, Excerpt from Deposition of Mark Reudink, Complaint of Crown Castle NG Central LLC, SOAH Docket No. 473-16-3891 PUC Docket No. 45470 (October 12, 2016); Notice at 2.

The absence of specifics in the Mobilitie Petition is notable. Moreover, the Notice seeks to suggest it is an uncontested fact that there are unacceptable delays in wireless siting and concerns about costs but of the five documents on which the Notice relies to establish a predicate for action, not a single one cites any empirical data, and some are nothing more than advocacy filings for the industry.

- A Fierce Wireless article⁷⁵ is referred to as proof of unacceptable delay: “According to some firms, it frequently takes two years or more from small cell site acquisition to completion.”⁷⁶ Regardless of whether the statement were true, the regulatory approval is but a single component of this period, and the only component that has a shot clock to ensure timely compliance.⁷⁷
- An industry advocacy piece authored by MD7⁷⁸ is cited for the claim “Many municipalities reportedly review small cells the way they review macrocells.”⁷⁹ A review of the MD7 article supports no such claim. MD7 does explain “Some municipalities have specific, well written guidelines which define small cells, approval timelines, and preferred site locations. Others are altogether silent on small cells and may not even be

⁷⁵Colin Gibbs, Small Cells: Still Plenty of Potential despite Big Challenges, (Sept. 1, 2016) <http://www.fiercewireless.com/wireless/small-cells-still-plenty-potential-despite-big-challenges> (“Fierce Wireless”)

⁷⁶ Notice at 7.

⁷⁷ It is interesting to note that the Bureau did not cite the Fierce Wireless article for this statement about a local government solution: “We previously noted how the planning commission in San Francisco voted in favor of a code amendment to deal with the proliferation of small cells better and insure their ability to force operators to clean-up shoddy work by requiring permit renewals after 10 years. We suspect that trend to continue in other towns and cities throughout America.” Nor did the Bureau cite the article for the recognition of industry player contributions to delay. “Many markets face incremental challenges driven by the backlash from the aggressive tactics of Mobilitie...And to be clear, Mobilitie shouldn’t shoulder all of the blame....As we continue to peel the onion, we are finding examples where Crown Castle’s siting practices are aggravating local communities as well....” Fierce Wireless

⁷⁸ Sean Maddox and Daniel Shaughnessy, Regulatory Challenges with Small Cells, (Jun. 23, 2016) <http://www.md7.com/2016/06/the-challenges-in-developing-regulatory-framework-to-accelerate-small-cell-deployments/>

⁷⁹ Notice at 7.

familiar with the concept, which is no surprise given the new technology and the difficulties in updating municipal codes.”

- A Small Cell Forum⁸⁰ is cited to assert that “applicants are required to contend with a long and costly process.” Yet, there is no analysis as to cost or time for applications in the United States. There is a very comprehensive study of costs and time for small cell deployed in Europe⁸¹ but there is no comparable chart or explanation for the United States.
- Two industry assertions⁸² of “exorbitant fees” are provided; an *ex parte* letter, and the Mobilitie petition.⁸³ But neither provides any empirical evidence of the claims made.

The Commission cannot rely upon claims made without empirical data. As these Comments highlight, and as some of the industry experts acknowledge⁸⁴ local governments of all shapes and sizes *are* making efforts to address small cell deployments changes.

The Notice utterly fails to inquire as to whether and to what extent delays in the permitting process are the result of the actions of the applicants, and without that investigation, it is hard to justify additional regulations based on alleged local failures – particularly given the potential societal costs of limiting local authority.

⁸⁰ Small Cell Forum, Small Cell Siting: Streamlining Administrative Processes and Procedures at 7 (Oct.

2016) [http://scf.io/en/documents/190 -
Small_cell_siting_Streamlining_administrative_processes_and_procedures.php](http://scf.io/en/documents/190_-_Small_cell_siting_Streamlining_administrative_processes_and_procedures.php)

⁸¹ See Figure 8.1 on p. 17.

⁸² See Notice at 7, fn 47 and 48.

⁸³ Mobilitie complains that some fees are set at 5% of gross revenues. As we explain *infra*, the 5% fee is a favored model proposed by Crown Castle in many communities, and the Commission cannot assume a model prepared by industry is “exorbitant.”

⁸⁴ See Fierce Wireless and MD7 entries.

D. The Issues With Small Cell Deployments Actually Suggest The Commission Needs to Loosen Some of the Restrictions In Existing Rules

Under Commission rules implementing Section 6409, with certain important exceptions, if a locality approves placement of a wireless facility in the public rights-of-way that has no concealment elements, that facility can grow at least ten feet in height; any number of six foot appurtenances can be added to the structure; and if any ground cabinet is authorized at a wireless facility, more can be added, even if (as is now being proposed) the wireless facilities are in someone's front yard. The Commission would have benefited from the advice of the Harvard Business Review,⁸⁵ or pitching great Bob Feller⁸⁶: "More is not always better." Many local governments are struggling to evaluate the impacts of so-called small cell deployments within the public rights-of-way that can grow unchallenged by such mass. The Commission needs to recognize this, and also address the fact that its rules implementing Section 6409 undermine the premise that deployment of small cell wireless infrastructure in public rights-of-way will be unobtrusive and insignificant. As the Burgoyne Declaration explains, there is no reason to believe that the impacts of the sort of large deployments allowed by Commission rules (and shown in pictures, *supra* at pp. 9-10) are inconsequential.⁸⁷

Particularly for residential areas, and for areas where all other utilities are underground, the Commission should recognize that a change from a truly small facility to one that is substantially more massive *is* significant. If local governments can allow small cells and yet keep them small, the initial approval process is simpler. One way for the Commission to address

⁸⁵ <https://hbr.org/2006/06/more-isnt-always-better>

⁸⁶ While not nearly as quoted as Yogi Berra, legendary Indian pitcher Bob Feller is credited with "The difference between relief pitching when I did it, and today is simple, there is too much of it. It's one of those cases *where more is not necessarily better*." (emphasis added) The Athlete's Way: Training Your Mind and Body to Experience the Joy of Exercise (Christopher Bergland, St. Martin's Griffin Publishing, 06/10/2008, Page 290).

⁸⁷ Burgoyne Declaration at pp. 9-10.

the matter is to recognize that in particular areas, any changes beyond a small percentage change in any component is significant, as is the addition of ground cabinets. Given the examples we now have of the size of some “small cells,” this is actually critical to ensuring the Commission’s rules comport with the statute. But it also is important for the Commission to interpret Section 6409 in a way that makes it possible for localities to create and enforce safe harbors for dense deployment of wireless facilities. As the CTC Declaration explains, many communities are working to create development processes that allow for more straightforward deployment of wireless facilities, but the viability of those processes depends on being able to enforce adopted design standards for an area.⁸⁸

Similarly, the Commission should allow more flexibility to respond to incomplete applications, so that focus may be on applicants who are working seriously on deployment.

Finally, the Commission should make it clear that among conditions enforceable against an applicant under its Section 6409 rules are not merely adopted safety codes, but also practices and guidelines for road deployments. Absent that reassurance, the problems created by the sorts of facilities being proposed for the public right-of-way become even more troubling.

E. The Commission Should Not Be Setting Shorter Time Frames For Either Batch Or Small Cell Applications

Without citing to any research or documentation, the Bureau asserts “[t]he presumptive timeframes established in the 2009 Declaratory Ruling *may be longer than necessary* and reasonable to review a small cell siting request.”⁸⁹ With this prejudgment hanging in the air, the

⁸⁸ CTC Declaration at p. 23.

⁸⁹ Notice at 11 (*emphasis added*).

Bureau next asks whether when “applications are filed dozens at a time, those presumptive timeframes may not be long enough.”⁹⁰

Smart Communities would offer that while we have some concerns that more time is actually required, at least the Commission’s current time frames allow the parties, and ultimately the courts to assess the reasonableness of the time taken under the circumstances. We doubt the Commission can come up with a rational rule that harmonizes the time required to review 400 applications submitted in one day with submission of 2, nor should it attempt to.

Smart Communities believe that applications can be more easily considered in batches if localities can create “safe harbors” that allow entities to design to specifications created by the community, at least if the specifications are enforceable. But batch applications often exceed the capacity of a locality to handle with existing staff, since in many cases, each site has to be independently evaluated and considered , and because modifications to one part of the batch (if, for example, installations are proposed in an historically protected area) may require changes to other proposed sites.⁹¹

There are additional costs and additional time associated with consideration of batch applications that can potentially be addressed through local permitting fee mechanisms that permit speedier review, i.e. the applicant pays for the additional costs to the community (additional staff, for example) required to review the application.⁹² But federal rules here will not be very helpful, since the process is most easily worked out cooperatively at the local level for particular projects.

⁹⁰ Notice at 11.

⁹¹ CTC Declaration at p. 21.

⁹² CTC Declaration at p. 21. The City of Los Angeles for instance affords applicants the opportunity to pay an additional fee to receive expedited service.

F. The Commission Could Enhance Deployment By Its Own Actions

1. *The Commission Could Enhance Smart Communities' Responses To Applications By Updating Its RF Regulations And Educational Information.*

Smart Communities and other local governments routinely receive public comments expressing RF radiation concerns about wireless applications. As small cell deployments anticipate many more installations in public rights-of-way much closer to the public in many more locations, Smart Communities anticipate increased public awareness and concern. Smart Communities cannot act on that basis of RF concerns, but we also recognize that successful deployment requires adoption; and the public is reluctant to accept deployments that it knows, and the Commission knows, are tied to outdated standards. The Commission should therefore modernize its radiofrequency, or “RF” standards and bring to a close a proceeding that has been lingering for years.⁹³ The Commission’s inaction is inexplicable given the Commission’s insistence that deployment should and must occur rapidly.

2. *The Commission Can Support the Myriad Other Initiatives Already Underway to Address Common Issues with Small Cell Deployments*

Smart Communities are disappointed that the Notice only “seeks comments on ways in which the Commission could promote wireless infrastructure deployment by issuing a declaratory ruling....”⁹⁴ The singular focus of the Notice is troubling in another sense – there is no reference to requests or suggestions for partnerships in developing model ordinances, model master license agreements, model public right-of-way franchises, best practices for responding to

⁹³ Proposed Changes in Commission Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields, Report and Order (Order) and a Further Notice of Proposed Rulemaking (Further Notice) in ET Docket No. 03-137; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies, Notice of Inquiry (Inquiry) in a new docket, ET Docket No. 13-84.

⁹⁴ Notice at 1.

common challenges,⁹⁵ nor preferred deployment methodologies. Unlike the Notice, these are many of the goals that Chairman Pai outlined in his vision for the Broadband Deployment Advisory Committee (BDAC).⁹⁶ There was also the twenty-one page report to the Commission by the Federal Communications Commission's Intergovernmental Advisory Committee (IAC) delivered in June of 2016 addressing challenges and possible solutions to siting wireless communications facilities.⁹⁷ Oddly, this local government work effort is not referenced in the Notice, but an industry letter to IAC is.⁹⁸

Moreover, the recent robust response of local elected and appointed officials to Chairman Pai's call to serve on BDAC is further evidence that we understand the need for such non-regulatory responses.⁹⁹ The failure of the Notice to encourage commenters to explore, let alone, promote partnership opportunities to examine the challenges being faced by all concerned with small cell and DAS deployments is therefore disappointing.

⁹⁵ See e.g. Comments of the Georgia Municipal Association ("GMA") filed February 28, 2017. GMA shared with the Bureau a copy of a model master license agreement, a model wireless access to the rights of way ordinance and a model agreement for placement equipment that the association negotiated with Mobilitie. While Smart Communities does not necessarily endorse the products, it is important to note that given time and lack of interference from parties such as the FCC, local governments and industry can reach agreements as we have a common goal of ensuring the residents of a community are connected.

⁹⁶ The BDAC "is intended to provide an effective means for stakeholders with interests in this area to exchange ideas and develop recommendations to the Commission on broadband deployment... Issues to be considered by the Committee may include, but are not limited to, drafting for the Commission's consideration a model code covering local franchising, zoning, permitting, and rights-of-ways regulations; recommending further reforms of the Commission's pole attachment rules; identifying unreasonable regulatory barriers to broadband deployment; and recommending further reform within the scope of the Commission's authority (to include, but not limited to, sections 253 and 332(c)(7) of the Communications Act and section 6409 of the Spectrum Act." FCC Announces the Establishment of the Broadband Deployment Advisory Committee and Solicits Nominations for Membership, Public Notice, DA 17-110 (rel. Jan. 31, 2017).

⁹⁷ Report on Siting Wireless Communications Facilities available at <https://transition.fcc.gov/statelocal/IAC-Report-Wireless-Tower-siting.pdf>

⁹⁸ Notice at 7, fn 47.

⁹⁹ Smart Communities nominated no less than five official and appointed officials and supported the nominations of several others to serve on the BDAC. In addition, Smart Communities are represented on the FCC Intergovernmental Advisory Council.

VII. THE COMMISSION LACKS A LEGAL FOUNDATION FOR ADOPTING ANY NEW RULES GOVERNING USE OF PUBLIC RIGHTS-OF-WAY OR OTHER GOVERNMENT PROPERTY

The Commission's Notice and Mobilitie's Petition rely on only two provisions of law, 47 USC §332(c)(7) and 47 USC §253.¹⁰⁰ The first, along with Section 6409, define the Commission's authority with respect to wireless siting decisions. The second more generally preempts local and state legal requirements that prohibit, or have the effect of prohibiting the ability of any entity to provide telecommunications services. However, the Commission's discussion of what declaratory rulings it might make pursuant to those provisions greatly strays from its very limited legal authority under Section 332(c)(7) and Section 253.

We begin, with two observations:

1. The protections afforded by Section 332(c)(7) apply only to "personal wireless service facilities," and that term refers to facilities used for common carrier services.¹⁰¹ It does not include the construction of buildings, towers or other structures that might someday be used in connection with the provision of these services. It is far from clear that the facilities Mobilitie proposes to put in the public rights-of-way are "personal wireless facilities" used in the provision of common carrier services. When applying for local approvals and permits Mobilitie calls its towers "utility poles" (though it does not propose to put telephone lines on them), the company may have no customers or proposed wireless facilities included in the application -- thus no one really knows what these so-called "utility poles" might be used for, if anything. Mobilitie's cover letters typically suggest all sorts of possible uses including for example, as locations for

¹⁰⁰ There is a limited reference to Section 706 in a footnote in the Mobilitie petition but only for the proposition that wireless access is required for all Americans. The Notice does not mention Section 706 at all, and the Commission would need more, specific findings to rely on Section 706, if Section 706 even provides the Commission any preemptive power at all.

¹⁰¹ 47 U.S.C. § 332(c)(7)(C).

placement of DSRC devices.¹⁰² But it is not clear they will ever be used for personal wireless services or qualify for Section 332(c)(7) protections.

Likewise, Section 253 only permits preemption of local requirements to the extent that they prohibit or effectively prohibit the ability of any entity to provide telecommunications services – which by definition, are common carrier services.¹⁰³ It would be wise for the Commission to examine the contracts governing use of facilities being installed by facility providers before proceeding to analyze the protections afforded by sections that may not apply to Mobilitie (or to some of the other participants in this proceeding). Assuming that the sections are relevant at all, however, the relief requested exceeds the Commission’s authority.

2. What are at issue legally are prohibitions and effective prohibitions, and not hindrances, as the Commission seems to suggest in its Notice. The term “prohibit” is not defined in the Act, but it has an ordinary meaning: to formally forbid (something) by law, rule, or other authority; or to “prevent, stop, rule out, preclude, make impossible.” A mere “hindrance” “is simply not in accord with the ordinary and fair meaning” of the term prohibit,¹⁰⁴ and can provide no basis for additional Commission intrusions on local authority over wireless facilities. Much of what Mobilitie complains about is a “hindrance” at most (and usually a hindrance magnified by its own actions).

A. Section 253 Does Not Apply Where A Challenge Involves Matters That are the Subject to Section 332(c)(7)

Both Section 332(c)(7) and Section 253 are preemptive statutes. They define the circumstances under which the Commission may preempt local laws governing

¹⁰² Exhibit 6 (Centerville application). We can find no evidence that Mobilitie has applied for, or has obtained rights to install DSRC devices, or that it proposed 120 foot tower is even a likely location for such a device.

¹⁰³ 47 U.S.C. § 152.

¹⁰⁴ *AT&T v. Iowa Utilities Board*, 525 U.S. 366 (1999).

telecommunications services (Section 253) or personal wireless service facilities (Section 332(c)(7)). What is clear is that where Section 332(c)(7) applies, Section 253 cannot. Section 332(c)(7)(A) declares resoundingly that, except for four limitations at (7)(B),

nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.¹⁰⁵

And if there was any additional doubt as to the inconsistency Section 332(c)(7) and Section 253 the two provisions, the Conference Report explained:

It is the intent of the conferees that other than under section 332(c)(7)(B)(iv) . . . the courts shall have exclusive jurisdiction over all other disputes arising under this section.¹⁰⁶

Section 253(d), by contrast, permits the Commission to decide cases where it is claimed that a local requirement prohibits or effectively prohibits the provision of wireless services. Section 332(c)(7) precludes Commission review of such complaints.

In this case, it is clear that, while Mobilitie seeks rulings under Section 253, many if not most of Mobilitie's complaints relate to matters which are subject to Section 332(c)(7). The Commission cannot and should not take action under Section 253 with respect to such matters. For example, Mobilitie complains that it is required to pay regulatory fees in connection with processing applications it submits to localities for the placement of structures which (if they are subject to Section 253 or 332(c)(7) at all) are wireless facilities. Regulating regulatory fees would "limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service

¹⁰⁵ The declaration is reinforced by Section 601(c) of the Act, stating that "the amendments made by this Act shall not be construed to modify, impair, or supersede Federal, State or local law unless expressly so provided"

¹⁰⁶ H.R. Report No. 104-458, at 208.

facilities”¹⁰⁷ since it would effectively prevent a locality from addressing the issues that could be examined as part of an application review. Hence, Mobilitie can obtain no relief under Section 253 with respect to regulatory fees.

Other Mobilitie complaints relate to rents in agreements it may enter into with localities with respect to use of proprietary property. However, in its *Section 6409 Order*, the Commission noted:

Like private property owners, local governments enter into lease and license agreements to allow parties to place antennas and other wireless service facilities on local-government property, and we find no basis for applying Section 6409(a) in those circumstances. We find that this conclusion is consistent with judicial decisions holding that Sections 253 and 332(c)(7) of the Communications Act do not preempt “non regulatory decisions of a state or locality acting in its proprietary capacity.”¹⁰⁸

The proprietary regulatory distinction is consistent with constitutional principles. Any regulation of state property is, after all, an intrusion on important aspects of state sovereignty: the federal government cannot deprive a state (or its authorized subdivisions) of the power to control the property within its own borders without infringing upon the state’s sovereignty.¹⁰⁹ However, here the proprietary regulatory distinction is compelled not just by constitutional preemption principles, but by the plain language of Section 332(c)(7)(A) which protects not just decisions, but anything that could “limit or affect” the “authority” to make decisions. The choice to charge rent, and what rent to charge is critical in making any decision to provide access to property for siting. At least with respect to wireless facilities, those choices are protected from preemption or complaint under any provision of the Acts.

¹⁰⁷ 47 U.S.C. § 332(c)(7)(A).

¹⁰⁸ Section 6409 Order at ¶ 239.

¹⁰⁹ *United States v. Alaska*, 521 U.S. 1, 4 (1997) (ownership of lands is an essential attribute of sovereignty); *Pollard v. Hagan*, 44 U.S. 212, 224 (1845) (federal government’s exercise of a power of municipal sovereignty over lands within a state would be “repugnant to the Constitution”).

Mobilitie also asks the Commission to address the meaning of the phrase “competitively neutral and nondiscriminatory basis,” which appears in Section 253(c). But Section 332(c)(7) has its own “antidiscrimination provision,” Section 332(c)(7)(B)(i)(I), which provides that a state or local government may not “unreasonably discriminate among providers of functionally equivalent services.” Thus, Mobilitie is asking the Commission to interpret a provision of law (in Section 253(c)) that is different from the applicable provisions of Section 332(c)(7). Mobilitie provides no evidence that an interpretation of this section is necessary, and no evidence that any locality is unreasonably discriminating against it, as compared to “providers of functionally equivalent services.”¹¹⁰ What is shown by these comments, and by the separate comments of Montgomery County and the Texas Municipal League, is that differences in the treatment of Mobilitie relate to its own failures, and its decision to propose large towers for the public rights-of-way. There is no need for any declaratory ruling with respect to Section 332(c)(7)(B)(i)(I), much less Section 253(c).

To be sure, the Petition and Notice do raise some specific questions regarding Section 332(c)(7) and its application that we have answered in the preceding comments, or answer below. But there is an easy and obvious explanation for the fact noted in the Notice that the Commission has never used its authority under Section 253(d) to issue a preemption order to preempt any state or local action (or inaction) involving wireless facilities siting – the Commission simply has no authority to do so under that Section.¹¹¹ It also has very limited authority to regulate local siting processes or siting decisions under Section 332(c)(7) – its

¹¹⁰ Several courts have considered the meaning of the term, and those definitions are not consistent with Mobilitie’s definition. Those courts have recognized that siting decisions may distinguish between even functionally equivalent services where justified by, *e.g.*, differences in the facilities proposed. *Sprint Spectrum, L.P. v. Willoth*, 176 F.3d 630, 639 (2d Cir. 1999).

¹¹¹ Notice at FN 33.

authority is limited to adopting rules that define ambiguous provisions of the four requirements under Section 332(c)(7)(B). It does not have authority to establish uniform federal standards for permitting or permitting costs, or to decide how permitting (much less proprietary charges) should be established.¹¹²

B. Even if Section 253 Did Apply, the Commission Should Not Adopt the Interpretations Urged By Mobilitie, And Lacks the Authority To Do So.

1. *The Petition and Notice Miss a Critical Step in the Section 253 Process.*

Even if Section 253 did apply, the Mobilitie Petition and the Notice omit a critical part of the statute. The provision that is the focus of the Notice, Section 253(c), is a safe harbor. Local government actions that fall within that safe harbor (or the safe harbor or Section 253(b)) cannot be preempted regardless of circumstances.¹¹³ However, before any “State or local statute or regulation, or other State or local legal requirement” may be preempted, an entity challenging a provision must show that it has been prohibited, or effectively prohibited from providing any intrastate or interstate telecommunications service. Hence, the fact that there are charges imposed on Mobilitie is of no moment unless there is a reason to believe that the charges are prohibitory. The record before the Commission in this proceeding shows that thousands of small cells have been deployed across the country; based on that record, there is no reason to find either a direct or effective prohibition, or even the possibility of a prohibition.¹¹⁴

¹¹² The language of Section 332(c)(7) was added by Section 704 of the Telecommunications Act of 1996 (“TCA”). It was fashioned in a conference of the House and Senate. The conferees decided against adopting the House proposal to empower the Commission “to develop a uniform policy for the siting of wireless tower sites.” In some respects, this is what Mobilitie is asking the Commission to do.

¹¹³ *BellSouth Telecomns., Inc. v. Town of Palm Beach*, 252 F.3d 1169, 1188 (11th Cir. 2001) (“it is clear that (b) and (c) are exceptions to (a), rather than separate limitations on state and local authority in addition to those in (a).”); citing *In re Missouri Municipal League*, 16 FCC Rcd. 1157, (2001); *In re Minnesota*, 14 FCC Rcd. 21,697, 21,730 (1999); *In re American Communications Servs., Inc.*, 14 FCC Rcd. 21,579, 21,587-88 (1999); *In re Cal. Payphone Ass’n*, 12 FCC Rcd. 14,191, 14,203 (1997).

¹¹⁴ *Level 3 Comms. LLC v. City of St. Louis*, 540 F.3d 794 (8th Cir. 2008) defined standards for prohibition and effective prohibition which are now being applied by the courts. That first step is important - a management

2. *The Commission Has Limited Authority To Regulate Access To Property Or Facilities That May Be Useful For Placement Of Communications Facilities*

There is an important distinction between a *legitimate and factual based* plea to eliminate regulatory barriers versus a “candid demand to invade” the recognized property rights of another.¹¹⁵ Mobilite Petition requests the latter, but under Section 253(c) the Commission has no given authority to set prices or formulae for regulatory fees, or for the use of proprietary property.

That omission is important, and the power cannot be implied. It is notable that Section 253(d) prevents the Commission from resolving cases that require resolution of issues that arise under Section 253(c). Authority to set prices was left with local governments, a result consistent with the basic structure of the *Communications Act*.

The Commission was created fundamentally for the purpose of “regulating interstate and foreign commerce in communication by wire and radio.”¹¹⁶ As a general matter, the Commission regulates *communications*; it does *not* have authority to regulate rates for access to public or private *property or facilities* that may be useful for communications, except where specifically granted.

An example of a specific and limited grant to regulate certain private property is in the *Pole Attachment Act of 1978*, codified as 47 U.S.C. § 224. The legislative history of the *Pole Attachment Act of 1978* provides an insightful and pertinent reminder of the limitations of Commission authority over any property or facilities that may be useful for placement of

practice could be discriminatory or unreasonable and still be lawful under Section 253—provided that it does not have a prohibitory “effect.” Such a fee is easy to imagine. Suppose a local government charged a \$1 fee for a permit application written in black ink, and a \$2 fee for an application written in blue ink. This might not be justified on any basis; it might be discriminatory; but it would not be prohibitory.

¹¹⁵ Property Rights, Federalism, and the Public Rights-of-Way, Volume 26, Seattle Law Review (2003).

¹¹⁶ 47 USC § 151.

communications facilities. The whole reason Congress adopted the *Pole Attachment Act of 1978* was due to the fact that the Commission itself clearly recognized its fundamental jurisdictional limitations. As the legislative history explains:

... the Federal Communications Commission has recently decided that it has no jurisdiction under the Communications Act of 1934, as amended, to regulate pole attachment and conduit rental arrangements between CATV systems and nontelephone or telephone utilities. (*California Water and Telephone Co., et al.*, 40 R.R. 2d 419 (1977).) This decision was the result of over 10 years of proceedings in which the Commission examined the extent and nature of its jurisdiction over CATV pole attachments. *The Commission's decision noted that, while the Communications Act conferred upon it expansive powers to regulate all forms of electrical communication, whether by telephone, telegraph, cable or radio, CATV pole attachment arrangements do not constitute "communication by wire or radio," and are thus beyond the scope of FCC authority. The Commission reasoned:*

The fact that cable operators have found in-place facilities convenient or even necessary for their businesses is not sufficient basis for finding that the leasing of those facilities is wire or radio communications. If such were the case, we might be called upon to regulate access and charges for use of public and private roads and right-of-ways essential for the laying of wire, or even access and rents for antenna sites.¹¹⁷

This Commission reasoning remains as valid today as it did nearly 40 years ago. For while there have been legislative amendments since that time, none has granted Commission authority to regulate “*access and charges for use of public and private roads and right-of-ways*” and it is incumbent upon the Commission to stay within the confines of its delineated authority. Section 224 does give the Commission rate-setting authority over some rights-of-way, but by definition not those that would be owned by a local government or a cooperative.¹¹⁸

¹¹⁷ See Senate Report 95-580, 95th Congress (1st Session) November 2, 1977 at p. 14 (*emphasis added*).

¹¹⁸ Section 224 authorizes fees charged for access to certain property of a utility. The term “utility” is defined narrowly, and specifically “does not include any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.” The term “state” is further defined broadly to cover “any State,

Thus, when the Notice asks whether federal pole attachment rules may be of some relevance defining what is “fair and reasonable” compensation under Section 253, it misses the point – the authority granted by Section 224 to set rates is explicitly missing from Section 253, and forbidden by virtue of the definitions in Section 224.¹¹⁹ To the extent it provides any guidance at all, Section 224 is notable in that it defers to *state established* formulas in certain circumstances. Here, it is noteworthy that several state constitutions require that localities obtain fair market value in return for providing access to public property.¹²⁰

3. *To the Extent It Applies, a Rate Set At Fair Market Value Would Be “Fair and Reasonable” Within the Meaning of Section 253.*

Because the Commission has no authority to regulate the rates charged for public property, its powers (and the powers of a court) would at most be limited to preempting where the rates fall outside the broad bounds of what is “fair and reasonable” or are not levied on a “competitively neutral and nondiscriminatory basis,”¹²¹ and where the charges actually prohibit or effectively prohibit the provision of competitive services.

territory, or possession of the United States, the District of Columbia, or any political subdivision, agency, or instrumentality thereof.” Notably, Section 224 reaches only utility rights-of-way.

¹¹⁹ Notice at 14. Setting aside legal objections, none of the formulas or concepts developed by the Commission to regulate rates charged by private utilities for use of their poles, ducts and rights-of-way are particularly helpful for structures as complex as the rights of way. And a formula like the notoriously complex pole attachment formula would be incredibly expensive to put into place for every right-of-way nationwide, given the diverse and evolving usage of that right-of-way.

¹²⁰ For example, Michigan local communities have a Constitutional right and obligation to their taxpayer residents to seek and obtain franchise support for the substantial cost of public right-of-way development, preservation and maintenance from those who wish to utilize this precious and limited resource for the purpose of doing business with our residents. Mich. Const. Art VII Sec. 21 prohibits localities from using tax revenues for non-public purposes (such as subsidizing Mobilitie) and even public utilities must obtain consents and accede to appropriate conditions as a condition of public right-of-way use, Mich Const. Art. VII Sec 29. See also Tex. Const. art. III, §52; Comments of Arlington, Texas; Comments of Texas Municipal League (filed March 8, 2017) (Texas Constitution prohibits a municipality from granting any public funds or thing of value to an individual, association or corporation.)

¹²¹ The rates for compensation are textually in addition to rates that may be charged in connection with the management of the rights of way.

The latter point is critical to grasp: Section 253 was focused on preempting State and local regulatory systems that granted or had the effect of granting telephone monopolies:

Congress apparently feared that some states and municipalities might prefer to maintain monopoly status of certain providers, on the belief that a single regulated provider would provide better or more universal service. Section 253(a) takes that choice away from them, thus preventing state and local governments from standing in the way of Congress's new free market vision.¹²²

Charging a fair market value for use of public property is in fact, consistent with free markets, by definition. As ECONorthwest explains, prohibiting local governments from charging rents based on property values is likely to lead to a number of negative results, and encourage inefficient use of the public rights-of-way, and create market distortions.¹²³ As one court recognized, Section 253(a) is not concerned with franchise fees, but with local government actions that keep entities out of the market: “[A] municipality’s assessment of a fee for franchise rights, and the franchisee’s rights being conditioned on the payment of this fee ‘cannot ‘be described as a prohibition within the meaning of section 253(a)’”¹²⁴ Certainly, in context it is hard to imagine 253(a) as being read to command that property be provided at less than fair market value.

Nor (contrary to the suggestion of *Mobilitie*) is there a serious conflict among the courts as to the rights of states or localities to obtain fair market value for use of property. For well over a century, it has been understood that when telecommunications providers occupy their property, local governments are entitled to “compensation, which is in the nature of rental.”¹²⁵

Courts interpreting Section 253 have not read that section to limit localities to cost recovery. As

¹²² *Cablevision of Boston, Inc. v. Pub. Improvement Comm’n*, 184 F.3d 88, 97-98 (1st Cir. 1999) (citation omitted).

¹²³ ECONorthwest Declaration at pp. 7, 8, 10.

¹²⁴ *City of New Orleans v. BellSouth Telecomms. Inc.*, 2011 U.S. Dist. LEXIS 60925 at *20 (E.D. La. 2011) (quoting *TCG Detroit v. City of Dearborn*, 206 F.3d 618, 624 (6th Cir. 2000)).

¹²⁵ *City of St. Louis v. Western Union Tel. Co.*, 148 U.S. 92, 99 (1893), opinion on rehearing, 149 U.S. 465 (1893).

noted in *City of Portland*,¹²⁶ Congress chose the term compensation, rather than cost, with the intention that local municipalities be permitted to recoup revenue in exchange for a telecommunications provider's use of the public streets.¹²⁷ The court states that it is inconceivable that Congress intended to strip the City of its right to compensation for use of its public rights-of-way.¹²⁸ Neither the terms of section 253(c), the legislative history, or relevant case law require that the fee charged by the City be restricted by the municipality's cost of maintaining the public rights-of-way. Nor does it require absolute parity among providers and utilities in setting compensation levels.

The legislative history of Section 253(c) supports those conclusions. Congressman Barton, one of the key architects of what became Section 253(c) noted:

[The amendment] explicitly guarantees that cities and local governments have the right to not only control access within their city limits, but also to set the compensation level for the use of that right-of-way. . . . The Chairman's [Manager's] amendment has tried to address this problem. It goes part of the way, but not the entire way. The Federal Government has absolutely no business telling State and local governments how to price access to their local public right-of-way.¹²⁹

The amendment was proposed as an alternative that would have required localities to charge the same rate to every provider – the so-called “parity” amendment. That amendment was resoundingly rejected. But even the Barton-Stupak amendment's opponents indicated that they did not intend to limit localities to recovery of costs. For example, Representative Schaefer

¹²⁶ *City of Portland v. Elec. Lightwave, Inc.*, 452 F. Supp. 2d 1049, 1062 (D. Or. 2005).

¹²⁷ *Id.* at 1072.

¹²⁸ *Id.*

¹²⁹ 141 Conf. Rec. H8460 (1995). Representative Stupak later added, “[W]e have heard a lot from the other side about gross revenues.... The other side is trying to tell us what is best for our local units of government. Let local units of government decide this issue.” 141 Cong. Rec. H8461 (daily ed. August 4, 1995)(Statement of Rep. Stupak).

acknowledged that local governments were already entitled to freely charge for rent; the parity amendment, he suggested, merely required them to charge each provider on an equal basis:

The bill philosophy on this issue is simple: *Cities may charge as much or as little as they wanted* in franchise fees. As long as they charge all competitors equal, the [Barton-Stupak] amendment eliminates that yet critical requirement.¹³⁰

Representative Bliley echoed: “What we say is *charge what you will*, but do not discriminate. If you charge the cable company 8 percent, charge the phone company 8 percent, but do not discriminate.”¹³¹

There are, to be sure, cases where localities have adopted compensation schemes that exceeded their authority under state law, or that seemed to bear no relation to rights granted for use of the public rights-of-way. But courts have also recognized that a variety of formulae, including gross revenues-based fees, may be used to obtain reasonable compensation for public right-of-way use.¹³²

Mobilitie argues that courts have said that localities may use their “monopoly control” over public rights-of-way to exact artificially high rents, and claims this is precisely what is happening now.¹³³ However, the company provides no evidence to support this claim other than the fact that different communities charge different rates for different services and applications and use of different types of property. This is precisely what one would expect in a free market. And it fails to explain how it could ever be charged a monopoly rent, given that it has private

¹³⁰ *Id.* (Statement of Rep. Schaefer.) (emphasis added).

¹³¹ *Id.* (Statement of Rep. Bliley.) (emphasis added).

¹³² *TCG Detroit v. City of Dearborn*, 206 F.3d 618, 624-25 (6th Cir. 2000); *City of Portland v. Elec. Lightwave, Inc.*, 452 F. Supp. 2d 1049 (D. Or. 2005). *See also Qwest Corp. v. City of Santa Fe*, 224 F. Supp. 2d 1305 (D.N.M. 2002), *aff’d in part, Qwest v. City of Santa Fe*, 380 F.3d 1258 (10th Cir. 2004) (not limiting fees to costs, but finding City failed to show its appraisal methodology was reasonable). The Commission has itself set fees based on gross revenues, and thus cannot argue that there is something inherently unfair or unreasonable about such fees. *In re Telephone Number Portability*, 13 FCC Rcd. 11701 ¶ 109 n.354 (1998).

¹³³ Mobilitie Petition at p. 15.

property alternatives for placement of its facilities.¹³⁴ Particularly with respect to wireless facilities, but also because of the broad municipal interest in encouraging broadband deployment, localities lack monopoly power, and have no incentive to misuse such market power as they may have.¹³⁵

Whatever Mobilitie’s unsubstantiated fears with respect to “monopoly power” that fear cannot justify limiting fees to out-of-pocket costs, which by definition, do not fully cover local costs, and by definition, cannot be the outer bounds of a “reasonable” rate.¹³⁶ One of Congress’s principal purposes in adopting Section 253(c) was to ensure that Section 253 did not constitute an unfunded mandate.¹³⁷ Fair market value is by definition fair – it is the normal measure of “just compensation” under the Fifth Amendment’s Takings Clause.¹³⁸

4. *While the Commission Need Not Address It, Mobilitie’s Proposed “Non-Discrimination” Test for Section 253 Does Not Comport With the Law*

The Commission seeks comment on Mobilitie’s proposed interpretation of the term “competitively neutral and nondiscriminatory” in Section 253(c) and whether the proposed definition is an appropriate or the best definition of the statutory language. The simple answers are that no, the proposed definition is not appropriate under the law, inconsistent with the clear

¹³⁴ See also ECONorthwest Declaration at p. 14.

¹³⁵ ECONorthwest Declaration at p. 14; CTC Declaration at p. 19.

¹³⁶ ECONorthwest Declaration at pp. 7-12.

¹³⁷ 141 Cong. Rec. H8460 (daily ed. August 4, 1995)(statement of Rep. Stupak) (“It is ironic that one of the first bills we passed in this House was to end unfunded Federal mandates. But this bill, with the management’s amendment, mandates that local units of government make public property available to whoever wants it without a fair and reasonable compensation. The manager’s amendment is a \$100 billion mandate, an unfunded Federal mandate. Our amendment is supported by the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the National Conference of State Legislatures and the National Governors Association. The Senator from Texas on the Senate side has placed our language exactly as written in the Senate bill. Say no to unfunded mandates, say no to the idea that Washington knows best. Support the Stupak-Barton amendment.”).

¹³⁸ *United States v. 50 Acres*, 469 U.S. 24, 25 (1984).

legislative intent behind Section 253, and runs afoul of Congress's express intent to preserve local powers over the control of its public right-of-way.

Mobilitie proposes an interpretation that “fees imposed on a provider for access to public rights-of-way may not exceed the charges that were imposed on other providers for similar access to the public rights-of-way.”¹³⁹ As explained above, prior versions of Section 253 contained such parity provisions that contained provisions almost identical to those now proposed by Mobilitie, and those were resoundingly rejected. As ECONorthwest explains, a variety of factors must be considered in determining whether a rate is “competitively neutral and nondiscriminatory,” including, among other things, when a use was authorized (timing) and the unique impacts a particular structure may have on property.¹⁴⁰ It is fair to consider, in pricing access to property for a 120 foot tower, not only the amount of the property occupied, but also the impact on other uses. It would not be surprising, then, if Mobilitie were charged more for a structure that substantially blocked a sidewalk than would be charged to someone who proposed a use that was less intrusive.

This approach is consistent with the way the Commission has approached “competitive neutrality” in other circumstances. In setting interconnection rates, for example, the Commission devised a formula under which common costs were shared by formula, while the costs created by a particular user were borne by that user. That is another way of saying: charging one entity based on the uses it intends to make of property and the attendant impact is neutral.¹⁴¹ Every difference in treatment does not tip the competitive scales, or rise to the level of

¹³⁹ Mobilitie Petition at 32. We understand Mobilitie to mean that if its towers occupy 4 sq. ft. of space, it should be charged the identical rate charged for someone else who is authorized to use 4 sq. ft. of space. That would be true even if, *e.g.*, the impacts of the facilities on the surrounding properties and structures in the rights of way were quite different.

¹⁴⁰ ECONorthwest Declaration at p. 12.

¹⁴¹ *Interconnection Order*, *supra*.

discrimination.¹⁴² Indeed, as the ECONorthwest Declaration suggests, failure to discriminate between different uses and situations may have significant negative impacts – the Mobilitie placement of towers in the public rights-of-way being a prime example of a bad idea driven by a desire to benefit from free or low-cost public property.¹⁴³

Consistent with the foregoing, Courts that have applied the “competitive neutrality” and “nondiscrimination” principles have rightly concluded that the safe harbor does not require precise parity of treatment. Local governments “may, of course, make distinctions that result in the de facto application of different rules to different service providers so long as the distinctions are based on valid considerations.”¹⁴⁴ Indeed, because rents can take many forms, “a city can negotiate different agreements with different service providers; thus, a city could enter into competitively neutral agreements where one service provider would provide the city with below-market-rate telecommunications services and another service provider would have to pay a larger franchise fee, provided the effect is a rough parity between competitors.”¹⁴⁵

Adoption of the Mobilitie definition would not be consistent with the statute, and there is little reason for the Commission to adopt guidance beyond that already provided by court decisions. Indeed, as a practical matter, localities find that providers themselves (each having different business plans) often ask that localities agree to different approaches for compensation for use of the public rights-of-way. Crown Castle’s model contract for access to the public

¹⁴² The FCC has clearly recognized this principle in carrier discrimination cases. *In re Development of Operational, Technical and Spectrum Requirements*, 15 FCC Rcd. 16,720 at ¶ 23 (2000) (recognizing it is not unlawful discrimination to “differentiate among users so long as there is a valid reason for doing so”); *see also Competitive Telecommunications Ass’n v. F.C.C.*, 998 F.2d 1058, 1064 (D.C. Cir. 1993).

¹⁴³ ECONorthwest Declaration at pp. 7, 8, 10, 13.

¹⁴⁴ *New Jersey Payphone Ass’n v. Town of W. N.Y.*, 299 F.3d 235, 247 (3d Cir. 2002); *TCG N.Y. v. City of White Plains*, 305 F.3d 67, 79 (2d Cir. 2002).

¹⁴⁵ *Id.* at 80.

rights-of-way in New York proposes to pay 5% of gross revenues for such access.¹⁴⁶ Other companies may prefer a per site charge. Some providers may prefer to offer conduit or fiber in lieu of rental fees.

In the experience of Smart Communities, there is variation in pricing formulas because providers want to take on different risks. Crown Castle clearly wanted a 5% of gross revenues standard. Other companies want a fixed rent that applies from Day 1. There is no particular reason to require that the *same formula* be applied to every telecommunications service provider. The relevant question under Section 253 is whether the differences are actually unreasonable, and of course, whether they actually have a prohibitory effect.

5. *The Interpretation of Section 253 Proposed By Mobilitie Is Inconsistent with the Constitution.*

Limiting localities to recovery of out-of-pocket costs would raise a variety of constitutional issues, most notably Fifth Amendment issues.¹⁴⁷ The Supreme Court has construed the Fifth Amendment's Takings Clause to protect the property of State and local governments from uncompensated taking under federal law,¹⁴⁸ and held that it "requires that the United States pay 'just compensation' normally measured by fair market value."¹⁴⁹ If the federal government were to require a local government to place a wire or an antenna on its property without compensation, it would constitute an unlawful taking under the Fifth Amendment.¹⁵⁰ The

¹⁴⁶ Exhibit 9.

¹⁴⁷ Because the supersession of state authority also directly implicates state control of its own properties, it raises significant federalism concerns, including Tenth Amendment concerns.

¹⁴⁸ *United States v. 50 Acres*, 469 U.S. 24, 31 (1984).

¹⁴⁹ *Id.* at 25 (citing *United States v. Miller*, 317 U.S. 369, 374 (1943)).

¹⁵⁰ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 433 (1982) (state law requiring property owner to permit access to cable company to install lines on private property constituted a taking).

Supreme Court has clearly recognized a local government’s “right to exact compensation” for such property uses:

[W]hile permission to a telegraph company to occupy the streets is not technically a lease, and does not in terms create the relation of landlord and tenant, yet it is the giving of the exclusive use of real estate, for which the giver has a right to exact compensation, which is in the nature of rental.¹⁵¹

And the Court has also held that like private property owners, local governments have the same right to fair market value compensation for the federal government’s taking of property as private property owners.¹⁵² It matters not that the intrusion may be relatively slight:

[P]ermanent occupations of land by such installations as telegraph and telephone lines, rails, and underground pipes or wires are takings even if they occupy only relatively insubstantial amounts of space and do not seriously interfere with the landowner’s use of the rest of his land.¹⁵³

Reading the Communications Act to allow local governments to recover fair market value for property avoids most Fifth Amendment concerns. But reading the Act to both compel the government to provide access and to allow the Commission to limit compensation would create significant takings issues.¹⁵⁴

C. The Commission Need Not Address Debates in the Circuits as to the Meaning of the Effective Prohibition Standard In Section 332(c)(7), Or Otherwise Address the Meaning of the Provision.

The Commission asks whether it needs to clarify the apparent conflict in approach among the circuits as to what “prohibits or has the effect of prohibiting” the provision of personal wireless services. We do not think the desire for uniformity justifies Commission action. First,

¹⁵¹ *City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92, 99 (1893), *op. on rehrg.*, 149 U.S. 465 (1893); *see also Cities of Dallas and Laredo v. FCC*, 118 F.3d 393, 397-98 (5th Cir. 1997) (“Franchise fees are . . . essentially a form of rent: the price paid to rent use of the public rights-of-ways.”).

¹⁵² *United States v. 50 Acres of Land*, 469 U.S. 24 (1984).

¹⁵³ *Loretto*, 458 U.S. at 430.

¹⁵⁴ *FCC v. Florida Power Corp.*, 480 U.S. 245 (1987).

it is not obvious that, as a practical matter, the legal differences lead to different results in comparable cases. Even more importantly, localities and providers have adjusted to the tests within their circuits, and in many cases, reflected those standards in local laws. Announcing a new framework simply creates more uncertainty. We do caution, as noted above, that the term that the Notice uses — “hindrance” — is not the same as the standard adopted by any court, much less an apt standard for “effective prohibition, and would not provide a basis for any interpretation of either Section 253 or Section 332(c)(7).

Likewise, when the Commission asks whether actions that prevent a technology upgrade “have the effect of prohibiting” the provision of service it in some ways begs the statutory questions that are relevant. The relevant question is whether a denial (assuming it occurs – in many cases localities will not even regulate the changeouts) results in a prohibition of personal wireless services as defined. If Mobilitie upgrades its facilities, but the upgrade is not for the provision of personal wireless services, the proposed upgrade is not protected by Section 332(c)(7). If the upgrade simply improves personal wireless services, so that there is no prohibition whether granted or denied, Section 332(c)(7) does not apply; if the regulation simply prevents an intrusive upgrade where a less intrusive one will do, that also is not a prohibition. In other words, the Commission could not fairly conclude that simply because something is labeled an “upgrade,” it must be permitted. Indeed, that would mean expanding Section 332(c)(7) in a manner seems inconsistent with the limits established by Section 6409. It bears emphasizing that no locality prohibits upgrades *per se* – what is affected is the ability to add new poles, increase sizes in particular locations and so on, without regard to whether the cause is a system upgrade or downgrade.

D. The Notice is Not A Proper Vehicle for Action

Setting aside the fact that the declaratory rulings here are improperly sought under Section 253, this notice is not a proper vehicle for any final Commission action.

The Bureau, in teeing up the question of whether the Commission should impose declaratory rulings, ignores the fact that the statute, in Section 253(d), defines precisely how and under what circumstances the Commission may entertain a “prohibition” challenge under Section 253(a). Section 253(d) envisions a case-by-case, tailored determination: the Commission must provide “notice and an opportunity for public comment” and then may only preempt “such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.” In a 1997 decision, the Commission explicitly rejected an argument that Section 253 preempts on a *per se* basis, and correctly ruled that the statute requires a factual showing:

We cannot agree that the City’s exercise of its contracting authority as a location provider constitutes, *per se*, a situation proscribed by section 253(a). The City’s contracting conduct would implicate section 253(a) only if it materially inhibited or limited the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment in the market for payphone services in the Central Business District. In other words, the City’s contracting conduct would have to *actually prohibit or effectively prohibit* the ability of a payphone service provider to provide service outdoors on the public rights-of-way in the Central Business District. As described above, the present record does not permit us to conclude that the City’s contracting conduct has caused such results. If we are presented in the future with additional record evidence indicating that the City may be exercising its contracting authority in a manner that arguably “prohibits or has the effect of prohibiting” the ability of payphone service providers other than Pacific Bell to install payphones outdoors on the public rights-of-way in the Central Business District, we will revisit the issue at that time.¹⁵⁵

The Commission later reinforced the point:

¹⁵⁵ *In re Cal. Payphone Ass’n*, 12 FCC Rcd. 14191, 14209 (July 16, 1997) at ¶ 38 (emphasis added).

With respect to a particular ordinance or other legal requirement, it is up to those seeking preemption to demonstrate to the Commission that the challenged ordinance or legal requirement prohibits or has the effect of prohibiting potential providers ability to provide an interstate or intrastate telecommunications service under section 253(a). Parties seeking preemption of a local legal requirement such as the Troy Telecommunications Ordinance must supply us with *credible and probative evidence* that the challenged requirement falls within the proscription of section 253(a) without meeting the requirements of section 253(b) and/or (c).¹⁵⁶

Since neither the Notice, nor Mobilitie¹⁵⁷ have identified *any* particular ordinance, or even the communities that allegedly adopted invalid statutes or regulations, it is hard to imagine how these requisites could be satisfied. Without particular facts the Commission is certainly not in a position to preempt only “to the extent necessary,” as the statute requires, to prevent a prohibition (particularly since there is no prohibition shown).

As importantly, the issues raised in the Notice are of the sort that should be addressed through notice and comment rulemaking. Here, we have a petition for relief untethered from any specific facts or circumstances, and which appears to seek relief under a section that does not even apply. The Notice seeks a broad range of information, appears to contemplate adoption of rules that would affect every state agency and subdivision, but provides no notice of what those rules might be. While the agency has broad authority to choose how to proceed, the Notice seems to envision precisely the sort of action that the D.C. Circuit found requires notice and comment rulemaking.¹⁵⁸

¹⁵⁶ *In the Matter of TCI Cablevision of Oakland County, Inc., Memorandum Opinion and Order*, FCC 97-331, 12 FCC Rcd. 21,396 (September 19, 1997).

¹⁵⁷ The Notice at 13 defines Mobilitie’s complaints of excessive and unfair fees for use of public rights-of-way as a nationwide issue, not the fact specific standard required by the statute.

¹⁵⁸ *American Mining Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1108-09 (D.C. Cir. 1993); *General Motors Corporation v. Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (en banc) (quoting *Noel v. Chapman*, 508 F.2d 1023, 1030 (2d Cir. 1975)).

VIII. CONCLUSIONS

For the reasons discussed above, and in the expert declarations, the Commission should not grant Mobilitie the relief it seeks, or adopt additional rules or shot clocks for “small cell” deployments.

It should clarify its rules to ensure that service and facilities providers are not incentivized to file incomplete applications; should clarify its Section 6409 rules so that small cells remain small and subject to safety guidelines applicable to roads; and should move forward to update its rules governing RF emissions.

Respectfully submitted,

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Coalition

March 8, 2017

EXHIBIT B

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

In the Matter of)	
)	
Comment Sought on Streamlining)	
Deployment of Small Cell Infrastructure by	)	WT Docket No. 16-421
Improving Wireless Facilities Siting Policies;)	
)	
Mobilitie, LLC Petition for Declaratory)	
Ruling)	
)	
Notice of Inquiry, Reassessment of	)	ET Docket No. 13-84
Federal Communications Commission)	
Radiofrequency Exposure Limits and Policies)	ET Docket No. 03-137

SUPPLEMENTAL COMMENTS OF MONTGOMERY COUNTY, MARYLAND

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March 8, 2017

SUMMARY

Montgomery County, Maryland (the “County”), as part of the Smart Communities Siting Coalition, by its counsel filed comments in WT Docket 16-421.¹ The County files these additional comments to provide the Commission Montgomery County-specific systematic data gathered since 1996. This data reflects the substantial number of wireless facilities applications that Montgomery County has reviewed.

- The County has reviewed 2,900 applications in 20 years, and currently has 1,121 wireless facilities deployed at 534 unique locations throughout the County.
- The County has received approximately 250 Distributed Antenna System (“DAS”) and small cell siting applications in the past nine months, and anticipates an additional 500 DAS, small cell, and 5G-related siting applications over the next eighteen months.
- In comparison to these technology-related requests, the County notes that our Department of Permitting Services processes over 60,000 permits and conducts more than 157,000 inspections annually.

Additional declaratory rulings regulating local actions are not required in order to streamline our processes. Commission action to clarify some existing rules² and to update its RF emissions standards would be helpful.

¹Comments of Smart Communities Siting Coalition (filed Mar. 8, 2017) (“Smart Communities Comments”).

² The County supports the clarifications of the Section 6409 rules suggested in the Smart Communities Comments. In our experience, those rules, particularly as applied in residential

The County also presents information demonstrating that Mobilitie has not put forth a reasonable effort to utilize the County’s telecommunications siting process. Significant County resources have been expended to help Mobilitie use the County’s siting process. Out of the 141 applications received, Mobilitie has submitted only one complete application. In the same time period that the County has been working with Mobilitie, the County has issued seventy-seven (77) other recommendations for approval of wireless siting applications. Furthermore, Mobilitie has submitted applications to install facilities in urban and suburban areas – only one of its applications would install a facility at the edge of a rural area within the County.

Additional empirical evidence from the County’s historical database of telecommunications siting applications supports the following conclusions:

- The Commission’s *2009 Declaratory Ruling*³ and *2014 Infrastructure Order*⁴ have not improved deployment, nor resulted in increased service to rural areas within the County.
- Deployment continues to be driven by market economics.
- Carriers will build facilities where they can serve the most people.

Lastly, the County requests that the Commission refocus its attention on completing its *2013 RF NOI*⁵ proceeding to update the radio frequency (RF) emissions rules by December of

neighborhoods, or neighborhoods where all utilities are underground, create unnecessary barriers to developing creative local solutions for wireless deployments.

³ *Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd 13994 (2009) (“2009 Declaratory Ruling”).

⁴ *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, Report and Order, 29 FCC Rcd 12865 (2014) (“2014 Infrastructure Order”).

⁵ *In the Matter of Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies and Proposed Changes in Commissions Rules Regarding Human*

this year. Montgomery County does not make siting decisions on the basis of health concerns about RF emissions. But the staleness of the Commission's 1996 rules, coupled with significant changes to mobile technology in the past 20 years, adds to the public's anxiety about RF emissions closer to homes as 5G densification pushes deeper into neighborhoods.

Exposure to Radiofrequency Electromagnetic Fields, Notice of Proposed Rulemaking, ET Docket No. 13-84 and ET Docket No. 03-137 (March 29, 2013).

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SUPPLEMENTAL COMMENTS OF MONTGOMERY COUNTY, MARYLAND

Montgomery County, Maryland (the “County”), by its counsel, filed comments in WT Docket 16-421 as part of the Smart Communities Siting Coalition.⁶ The County files these Supplemental Comments to provide Montgomery County-specific systematic data gathered since 1996 that reflects the substantial number of wireless facilities applications that Montgomery County has reviewed. Against this systematic documentation of timely siting decisions, the County will provide its experience in dealing with 141 incomplete applications from Mobilitie. The County believes that this empirical data, when married with the legal and policy discussions in the Smart Communities Comments,⁷ will demonstrate that there is no predicate for action to further expedite treatment for the deployment of next generation wireless infrastructure – by

⁶Comments of Smart Communities Siting Coalition (filed Mar. 8, 2017)(“Smart Communities Comments”).

⁷ *Id.*

further restricting local authority over siting, fees for permitting, or use of the rights-of-way – let alone to do so by means of a declaratory ruling.⁸

The County also believes that the systematic data in these Supplemental Comments will demonstrate:

1. The Commission’s “shot clock” and Section 6409 Orders⁹ have not made any meaningful difference in bringing wireless service to rural areas within the County.
2. Mobilitie’s unsubstantiated claim that “many citizens who lack access to robust wireless broadband reside in urban areas”¹⁰ is not supported by the facts in Montgomery County.
3. Mobilitie’s applications demonstrate that it intends to deepen the divide between urban and rural households – only one of Mobilitie’s 141 applications is positioned at the edge of the 29 percent of the County set aside as a rural Agricultural Reserve (93,000 acres or 145 sq. miles).

⁸ *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)(“*Public Notice*”).

⁹ *See, Petition for Declaratory Ruling to Clarify Provision of Section 332(c)(7) to Ensure Timing Siting Review*, Declaratory Ruling, 24 FCC Rcd 13994 (2009) (“*2009 Declaratory Ruling*”), *aff’d City of Arlington v FCC*, 668 F.3d 229 (5th Cir. 2012), *aff’d*, 133 S.Ct. 1863 (2013); *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Process*, Report and Order, 299 FCC Rcd 12865 (2014)(“*2014 Infrastructure Order*”), erratum, 30 FCC Rcd (2015), *aff’d Montgomery County v FCC*, 811 F.3d 121 (4th Cir, 2015). Montgomery was party to appeals of both Orders.

¹⁰ *Promoting Broadband for All Americans by Prohibiting Excessive Charges for Access to Public Rights of Way*, Mobilitie, LLC Petition for Declaratory Ruling, (filed Nov. 15, 2016) (“*Mobilitie Petition*”) at p. 3. Mobilitie cites data regarding small cells at Footnote 6, but provides no citation for the claim that urban areas lack broadband.

Finally, as the County explained in a recent *ex parte*,¹¹ the Commission must refocus its attention on completing its *2013 RF NOI* proceeding¹² to update the radio reference (RF) emissions rules. Montgomery County residents are deeply concerned about the health effects of RF Emissions.¹³ The staleness of the Commission's 1996 rules, coupled with significant changes to mobile technology in the past 20 years, creates a wireless siting challenge that will only grow in time.¹⁴ Moreover, the continuing lack of Commission action may also create the impression that RF emissions is a complex issue for which the Commission does not have a viable resolution. In the absence of leadership by the Commission, residents' concerns about the health effects of RF emissions will continue to grow, and with it, public opposition to 5G

¹¹ *2013 RF NOI*, Letter from Montgomery County Executive Isiah Leggett to FCC Chairman Tom Wheeler, re: Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies (Jan. 17, 2017). See Exhibit A.

¹² *In re Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies and Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, First Report and Order, Further Notice of Proposed Rulemaking, and Notice of Inquiry, ET Docket No. 13-84, ET Docket No. 03-137 (March 29, 2013) ("*2013 RF NOI*").

¹³ See e.g., Informational Public Meeting on Cell Towers, October 26, 2016, available at <https://www.youtube.com/watch?v=6t2AkvI9q54>.

¹⁴ The Commission has exclusive jurisdiction to regulate RF emissions. 47 USC § 332(c)(7)(B)(iv): "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." The federal standards are designed to be enforced at the state and local level. The Commission's failure to periodically update the federal rules upsets this balanced approach and undermines public confidence that government regulations will protect the public from harmful impacts of wireless devices. It is unreasonable that the Commission leaves it to local government to explain to constituents why the Commission has not updated its RF emission standards in 20 years, nor completed its work in four years on the *2013 RF NOI* it opened to address this very issue, while simultaneously finding time at the request of industry to consider whether more preemption of local decision-making for small cell deployments is necessary.

deployments deeper into neighborhoods. The County respectfully asks the Commission to exercise leadership on this issue and complete the *2013 RF NOI* by December of this year.

I. MONTGOMERY COUNTY HAS APPROVED THE VAST MAJORITY OF WIRELESS SITING APPLICATIONS IN A TIMELY MANNER

Montgomery County strongly supports the Commission's plan to "accord greater weight to systematic data" versus "merely anecdotal evidence."¹⁵ Too often federal action is focused on creating new rules to address unnamed bad apples, with little attention paid to helping communities that want to encourage access to advanced wireless services for residents and Smart City/Smart County initiatives.¹⁶

In the late 1990's, in response to increased requests for deployment of telecommunications towers and antennas, the County created the Transmission Facilities Coordinating Group (TFCG) "to promote the appropriate and efficient location and co-location

¹⁵ Public Notice at 9.

¹⁶ The County also objects to Mobilitie cherry-picking the facts. The Commission should request systematic data from Mobilitie, presenting all deployments and all costs. The County can point to one lease in which the County pays over \$15,000 per month to lease space for public safety antennas, and two for which it pays over \$10,000 per month; but these costs are not representative of all of the County's telecommunications leases. Similarly, the Commission states: "According to Mobilitie, the phenomenon of excessive and unfair fees for use of rights of way 'is not confined to a few outlier localities – it exists nationwide.'" Public Notice at 13, citing Mobilitie Petition at 15. The County requests that the Commission require a complete accounting of where Mobilitie has been asked to pay regulatory fees, franchise or similar fees, and fees for use of property owned by municipalities (*e.g.*, streetlights and buildings), and the number of sites in each municipality before placing any reliance on Mobilitie's cherry-picked evidence.

of transmission facilities.”¹⁷ Since then, the TFCG has maintained a database of all wireless siting applications.¹⁸

A. Montgomery County Wireless Recommendations by the Numbers

The TFCG historical database captures the community’s 20-year record of new sites, collocations and minor modifications. Systematic data shows that Montgomery County has reviewed 2,900 applications over 21 years, carefully balancing the community’s interest in obtaining access to wireless services, with the necessity to protect public health and safety. The County has never faced a lawsuit claiming it has failed to act within the shot clocks specified in federal laws and regulations once a complete application is submitted. Many applications are handled relatively quickly, and those that require longer consideration are handled within the federal deadlines, or in periods agreed to with carriers.

Today, the County has 1,121 wireless facilities¹⁹ deployed at 534 unique locations. The County’s vast “Agricultural Reserve” has 76 locations where wireless facilities are deployed, and the other 458 are deployed in suburban and urban areas of the County. On average, there is one wireless facility site every 0.76 sq. miles in urban and suburban areas, and one wireless facility is deployed every 1.91 sq. miles in the County’s rural areas.

¹⁷ Section 2-53E(b)(3), Montgomery County Code (2014), as amended.

¹⁸ This database is publicly available on the TFCG website and on the County’s Open Data platform, found at <https://www.montgomerycountymd.gov/Towers>.

¹⁹ This figure excludes previous deployments that have been replaced with newer equipment.

A deeper review, presented in TABLE 1 also demonstrates that the County’s proactive efforts to encourage collocation have resulted in a super majority – 70 percent – of sites supporting more than one carrier.

TABLE 1: COLLOCATIONS

Percentage of Sites	Number of Carriers Supported by Site
30%	1 Carrier
29%	2 Carriers
22%	3 Carriers
19%	4 or More Carriers

Transparent application review requirements have also allowed applicants to seek siting in ways that conform to community use standards. By working cooperatively to ensure that collocation options are considered, and property setbacks and use standards for specifically zoned areas are met, Montgomery County has been able to recommend 99 percent of completed applications for approval.²⁰

²⁰ 2,382 were recommended for approval while 20 were not recommended for approval.

TABLE 2: APPLICATION DISPOSITION

APPLICATION ACTION	NUMBER
Recommended	2,382
Not Recommended	20
Pending	152
Incomplete	141
Miscellaneous Disposition ²¹	8
Withdrawn ²²	197

Furthermore, the County has been able to recommend hundreds of deployments for each of the four major carriers – AT&T, Sprint, T-Mobile and Verizon²³ – whose combined facilities represent seventy-nine (79) percent of all facilities currently deployed in the County.²⁴

TABLE 3 FACILITIES OF MAJOR CARRIERS

Current Facilities of Major Carriers	AT&T	Sprint	T-Mobile	Verizon
Total Facilities Deployed	193	246	245	204
Oldest Deployment Approval Date	10/11/1996	4/1/1998	10/11/2000	1/5/1997
Newest Deployment Approval Date	1/4/2017	1/4/2017	2/1/2017	2/1/2017

TABLE 4, below, also provides two insights into wireless siting in the County. First, the number of sites the County has authorized on an annual basis has gradually increased over the

²¹ Decommissioned tower (1), Duplicate Application (1), Informational Review (5), Required Review Without Approval (1).

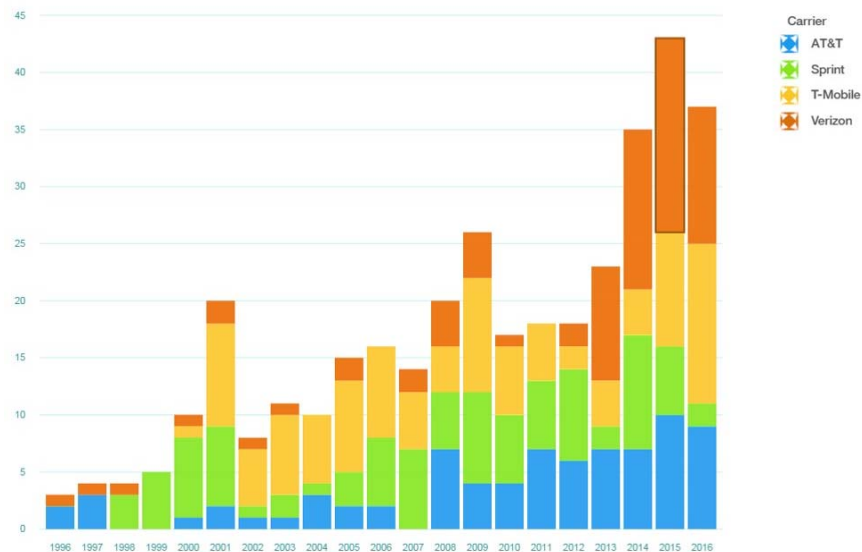
²² The majority of these applicants never obtained legal permission from the landlord to occupy the property.

²³ This includes their various predecessors, partners, and acquisitions, such as Bell Atlantic, Singular, Nextel, etc.

²⁴ 888 of 1,121 current wireless facilities.

years. Second, there are surges of applications by carriers in given years as carriers seek to upgrade or densify their respective networks.

TABLE 4: MAJOR CARRIER APPLICATIONS APPROVED BY YEAR



While the surge in applications presents challenges, the County believes that it will be able to process the applications in a timely manner, working with applicants to set mutually agreeable timetables for staging and action on applications when necessary. The surge may, however, require additional resources, which will need to be recouped in either fees for applications, or in the time allotted for action on the applications.

B. The County Handles More Than 60,000 Non-Telecommunications Permits Per Year

For wireless facilities applications that meet zoning standards, upon receiving a TFCG Recommendation, the applicants are treated as any other entity that wants to perform construction within the County – *i.e.*, the applicant must be issued a building permit. In general, permitting regulatory review serves an important public safety purpose. Montgomery County has

a long history of safe construction – whether it is commercial buildings, residential decks, or telecommunications structures – because the County requires all construction to meet established safety codes. Note, as demonstrated by TABLE 3 above, once installed, telecommunications facilities may remain in use for decades. The permitting review process is essential to protect the public welfare. But permitting is also the gateway to growth within the community. Thus, the County seeks a balance between ensuring safety and ensuring a prompt review process.

Mobilitie, and to some extent the Commission, seem to view permitting as a unique requirement applicable to solely telecommunications facilities, or suggest that local governments will not be able to handle new demand for 5G building permits. This is not the case. In 2016, the Montgomery County Department of Permitting Services processed *60,543 permits*, assisted *128,489 customers* in person, reviewed *97,971 plans*, and performed *157,831 inspections*. As reflected in Table 5 below, 2016 is not an anomaly.

TABLE 5 MONTGOMERY COUNTY PERMIT PROCESSING BY YEAR

Fiscal Year	Total Permits Processed	Customers Served at DPS Counters	Information Requests	Plans Reviews	Inspections
2016	60,543	128,489	5,182	97,971	157,831
2015	55,670	110,303	4,684	92,308	157,359
2014	52,826	94,272	4,374	88,317	158,837
2013	50,744	66,600	4,376	84,728	141,443
2012	45,649	59,047	3,260	76,268	113,888
2011	46,481	60,422	2,958	70,656	102,730
2010	46,314	55,974	2,272	64,046	102,889
2009	37,566	55,291	2,290	54,477	103,974
2008	43,048	58,984	2,519	65,491	113,793
2007	43,117	55,988	2,497	63,816	114,692
2006	48,419	56,364	2,884	67,028	135,610

In comparison, in 2016, excluding Mobilitie, the TFCG assisted *a total of nine (9)* telecommunications providers with a total of *265 applications*.

Both the Commission and Mobilitie need to place telecommunications siting in the context of the total development occurring daily in America. Communities like Montgomery County have been handling permitting for 50 to 150 years. There is nothing in the record to suggest that in addition to the more than 60,000 permits the County will issue in 2017, we cannot efficiently handle a few hundred more from telecommunications providers without further regulation from the Commission. If anything, additional regulation may add to the cost of the review process, while bringing no tangible benefits.

C. Batching Creates a Strain on Resources

The County's experience supports the statements in the Smart Communities Comments that receiving hundreds of applications at one time creates challenges for local government review of wireless siting requests.²⁵ In response to the Commission's *2011 ROW NOI*, the County submitted the information presented below in Table 6 and Table 7 about the cyclical and clustered nature of application filings.²⁶

²⁵ See Smart Communities Comments, Declaration Andrew Afflerbach, at 23.

²⁶ *In the Matter of Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting*, Notice of Inquiry, Montgomery County Reply Comments, WC Docket No. 11-59, at pp. 14-15 (Oct. 2, 2011)(“*2011 ROW NOI*”).

TABLE 6: APPLICATIONS RECEIVED BY QUARTER (2007-2011)

Number of Applications Received by Quarter					
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	TOTAL
FY 2007	44	36	28	47	155
FY 2008	21	12	32	48	113
FY 2009	79	32	26	128	265
FY 2010	42	37	18	26	123
FY 2011	61	36	15	80	192
TOTAL	247	153	119	329	

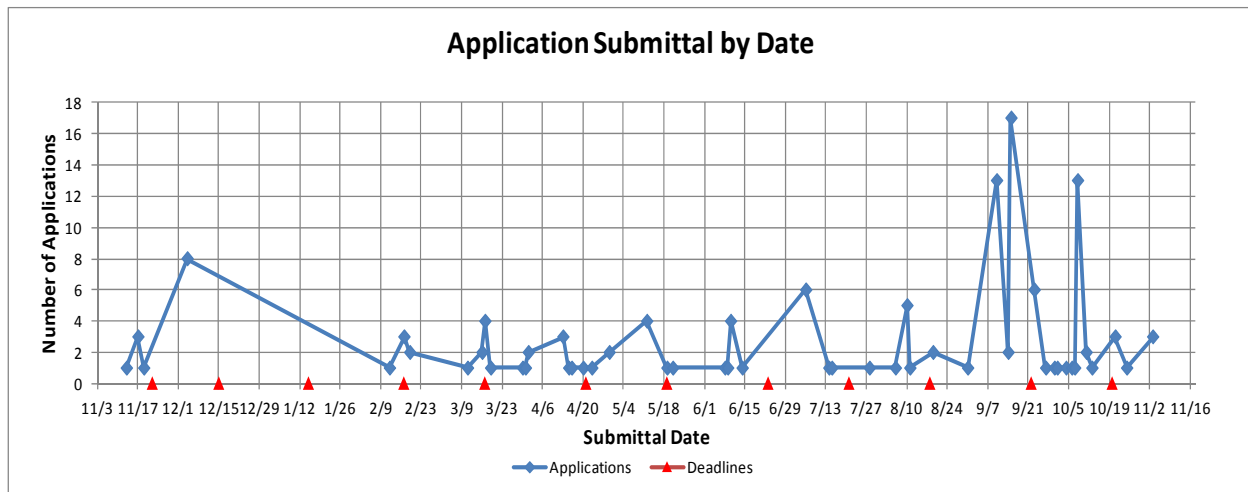
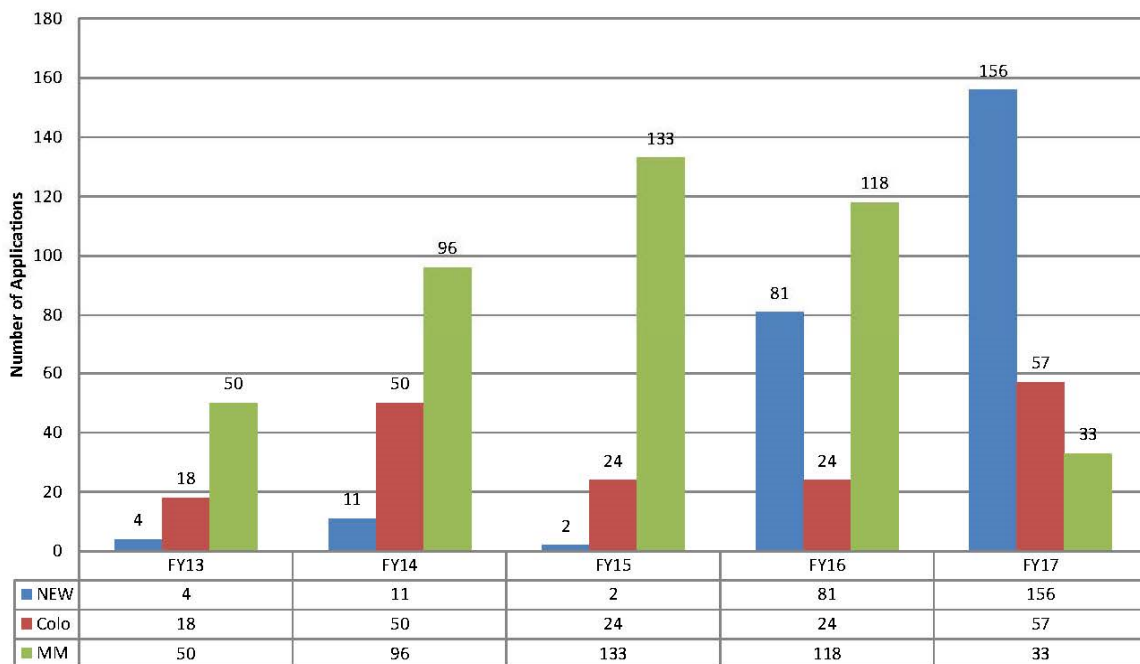
TABLE 7: APPLICATIONS SUMMITTED BY WEEK (NOVEMBER 2009-10)

Table 8 demonstrates the recent surge in applications submitted to the County.

Table 8: Applications Received by Year (FY2013-FY2017 Partial)



These wild fluctuations in the volume of work make it impractical to use County employees to review applications. Use of contractors allows the County to pay for the volume of service we require. But our contractors must manage their own employee staffing levels. Batching hundreds of applications together that each require individual consideration as to placement, set back limits, and available collocations, will only exacerbate the staffing challenge.

II. A 10 MONTH ODYSSEY AND COUNTING: MOBILITIE HAS NOT PUT FORTH A REASONABLE EFFORT TO USE THE COUNTY'S TELECOMMUNICATIONS SITING PROCESS

As documented above, the County has a rich and successful history of accommodating wireless deployment. Mobilitie's complaints do not reflect problems with governmental processes; rather, in our experience, they are a reflection of problems with Mobilitie's internal processes. The complaints do not justify a declaratory ruling. Carriers need a deliberate and detailed process that is also swift. The fact that the four major carriers, and numerous other

players have been able to have their needs met in a timely manner, and Mobilitie claims it has not, is evidence of the problems with the Mobilitie process, not the County's.

A. Mobilitie Will Take Eight Months to Submit Information Missing from Initial Applications

While the County looks forward to working with Mobilitie to enhance services in our community, it must be stated that Mobilitie has not put forth a reasonable effort to use the County's process. Mobilitie filed 22 incomplete applications on July 29, 2016. The County provided a written Request for Information on August 17, 2016, identifying missing information. As described below, the County engaged in an open dialogue with Mobilitie. Mobilitie did not provide the missing information. On September 30, 2016, Mobilitie filed another 119 incomplete applications. The County provided written Requests for Information between October 9 and November 2, 2016, identifying missing information for each of the 119 incomplete applications. Mobilitie again did not provide the missing information.

By comparison, in the seven months since Mobilitie filed its first set of applications and could have had its applications considered on the September 2016 meeting agenda, the TFCG has issued seventy-seven (77) recommendations for siting for other carriers.

Mobilitie's inability to comply with a well-established and functioning process is even more surprising given the amount of effort the County has put forth to help Mobilitie leverage the County's well-documented process.²⁷

²⁷ All application materials are available at <http://www.montgomerycountymd.gov/towers>.

1. May 2016

On May 23, 2016, one of Mobilitie's Network Real Estate Specialist first contacts the Department of Permitting Services to request information to file applications to install temporary "cell on wheels" towers, 80 to 100 feet in height intended to operate for 12 to 18 months.²⁸ The Network Real Estate Specialist was directed to contact the TFCG Chair, informed in writing what would be needed for building permits, and offered a meeting when she had the necessary information. Inexplicably, the Network Real Estate Specialist then submits 50 building permit applications on the same day, May 23, 2016, without the prerequisite information Mobilitie was informed it would need to provide.

2. June 2016

After several back and forth e-mails, the County hosted a conference call on June 2, 2016 to explain the County process to Mobilitie's representative. Mobilitie then asserts a variety of reasons why it thinks it does not need a TFCG recommendation. The County suggests an in person meeting to answer Mobilitie's questions. On June 20, 2016, the County meets with five Mobilitie representatives to discuss Mobilitie's project. Mobilitie sends follow-up e-mails asking for information about what is needed for collocation applications and what is needed for new installations.

²⁸ See e.g. Email from Montgomery County's Simin Rasolee to Mobilitie Network Real Estate Specialist, May 26, 2016.

3. July 2016

On July 8, 2016, Mobilitie suggests a third meeting. A series of e-mails is exchanged answering Mobilitie's questions. Mobilitie sends a sample application on July 11, 2017. After further back and forth, Mobilitie submits a revised sample application on July 12, 2017. Mobilitie lists no carrier that will use the Mobilitie facilities, which leaves the TFCG with no information to determine what effect Mobilitie's facilities will have on existing telecommunications facilities, whether there are gaps in service that must be met, whether collocation can serve Mobilitie's service objectives, and what impact Mobilitie's proposed service will have on the surrounding area.²⁹ The County determines that it will allow Mobilitie to file County applications without carrier information and the TFCG will make its decision based on the limited information provided.

On July 29, 2016, Mobilitie files 22 more applications with the TFCG. On the same day, Mobilitie notifies the County that it is transferring its CLEC authority to its wholly-owned subsidiary, Technology Maryland Network Co. As a result, Mobilitie is required to obtain a transfer of its franchise agreement and to obtain revised bond and insurance certificates. An entity applying to place transmission facilities in the right-of-way must have a legal right to occupy the right-of-way. If the new subsidiary is going to obtain the TFCG recommendations, it must hold the right-of-way franchise.

²⁹ See COMCOR 02.58E.01.05.a.2.

4. August 2016

A series of communications commences in which Mobilitie asks that Permitting Services and TFCG process the Mobilitie applications without having an approved right-of-way franchise agreement or revised bond and insurance certificates. The County stands firm that legal permits must be issued to the actual legal party in interest. On August 16, 2016, Mobilitie requests a street map of Montgomery County. On August 17, 2016, the County sends Mobilitie a Request for Information, stating in writing what information is missing. Mobilitie provides no response. By the end of August 2016, Mobilitie has obtained the proper bond and a franchise agreement has been submitted for County Council approval.

5. September 2016

The TFCG issues sixteen recommendations for approval to other carriers.

On September 2, 2016, Mobilitie submits a second batch of TFCG applications. The County reaches out to Mobilitie because the Mobilitie cover letter states that Mobilitie is submitting 115 applications, but only 102 applications were received and payment was provided for 103 applications. Mobilitie informs the County on September 6 that they will be sending an additional 22 collocation applications and asks the County to go through the 103 applications and inform Mobilitie which applications are missing. The County reviews the Mobilitie applications and informs Mobilitie that five applications were submitted without application fees. Additional telephone calls and e-mails are exchanged, but none of the missing information is provided. On September 27, 2016, the County Council approves transfer of Mobilitie's right-of-way franchise to its subsidiary.

6. October 2016

The TFCG issues fifteen recommendations for approval to other carriers.

On October 3, 2016, the County informs Mobilitie that two applications for other jurisdictions have been mistakenly filed with the County and need to be filed in the proper jurisdictions. On this same day, Mobilitie files two more TFCG applications. Between October 9 and November 2, 2016, the County provides Requests for Information for 116 applications, stating in writing what is missing. On October 24, 2016, Mobilitie provides a revised Certificate of Insurance to Permitting Services.

On October 31, 2016, Mobilitie informs the County that a new Network Real Estate Specialist will be taking over responsibility for the Montgomery County applications.

7. November 2016

The TFCG issues ten recommendations for approval to other carriers.

On November 1, 2016, the County holds a conference call with the new Mobilitie representative. Mobilitie requests that all applications for new structures be placed on hold and tells the County that Mobilitie will decide over the next few weeks how to proceed with the new structure applications, but requests to move forward with its collocation applications. On November 10, 2016, the County contacts Mobilitie to inquire when the missing information from the collocation applications (first requested on August 17, 2016) will be provided. The County suggests a conference call to move forward.

On November 23, 2016, a conference call is held with five parties. The Mobilitie engineer on the call states that he has never seen the County's Request for Information. The new

Network Real Estate Specialist states that he will forward the Request for Information to the engineer. Mobilitie also informs the County that they are no longer going to pursue installing new structures at approximately 25 locations. The County summarizes the call and agreed upon actions in an e-mail, including: the County's offer to set a meeting for Mobilitie with the TFCG senior engineer; Mobilitie's pledge that it will provide a list of the sites they no longer wish to pursue; and that Mobilitie will submit the Request for Information responses by December 15, 2016. In response to this e-mail, a Mobilitie engineer informs the County that Mobilitie will file complete applications within two weeks, and the new Network Real Estate Specialist provides the list of sites that Mobilitie will no longer pursue.

8. December 2016

The TFCG issues eight recommendations for approval to other carriers.

On December 6, 2016, the County hosts a conference call with nine parties to discuss the still missing application information. Once again, a Mobilitie engineer on the call states that he has not seen the Request for Information. The County suggests that Mobilitie try to focus on submitting applications for ten locations of their choosing. On December 28, 2016, the new Network Real Estate Specialist submits ten collocation applications. The County determines on the same day that the applications do not contain the missing information and are less complete than the original applications.

9. January 2017

The TFCG issues fifteen recommendations for approval to other carriers.

On January 6, 2017, the County informs Mobilitie that the applications remain incomplete. On January 24, 2017, the County sends Mobilitie an e-mail noting that Mobilitie has not followed through on previous promises to provide the missing information within two weeks, and suggests a conference call to discuss how to move forward. On January 27, 2017, the County provides a third Request for Information, itemizing everything that is missing from the subset of ten applications resubmitted by Mobilitie in December 2016. A conference call is scheduled for February 9, 2017.

10. February 2017

The TFCG issues three recommendations for approval to other carriers.

On February 9, 2017, a conference call is held with eleven parties. Mobilitie agrees to submit one complete application for review before resubmitting additional applications. Mobilitie suggests that it continue to work on the applications with no specific target date to submit the missing information. Having spent eight months working with Mobilitie to get complete applications, the County informs Mobilitie that because of the length of time since the initial submission, the multiple reviews, and resources required to continually re-review applications, the County would like to close out this matter and consider the applications withdrawn; Mobilitie could refile the applications with payment of new filing fees when Mobilitie is ready to move forward. Mobilitie tells the County it will discuss the matter internally. On February 10, 2017, Mobilitie and the County have a conference call and Mobilitie agrees to provide complete applications by April 30, 2017, or it will resubmit applications with new filing fees. On February 16, Mobilitie submits one collocation test application. On February 24, 2017, the County informs Mobilitie that the test application is complete.

11. March 2017

The TFCG issues ten recommendations for approval to other carriers.

B. Mobilitie's Actions Demonstrate How Representatives of Carrier Host Companies Can Increase Costs for All Applicants

Mobilitie spent two months discussing application requirements with the County and will take another *eight months* to provide information required for its applications. Mobilitie had complete control over the timing of its submissions. Based on the one complete application, the County believes that Mobilitie should be able to submit complete applications for deployments within Montgomery County. The fact remains that the process has required immense amounts of staff time and resources. When costs are calculated and reviewed in relation to fee payments received, work required to assist companies or representatives like Mobilitie can drive up overall average costs. In its *2009 Declaratory Ruling* and *2014 Infrastructure Order*, the Commission imposed timelines for local government action, but failed to address how carriers may contribute to the problem by providing incomplete or inaccurate information. Furthermore, the Commission did not address how unprepared carriers may be driving up the costs for well-prepared carriers.

Mobilitie states that it has filed “thousands of applications for permits or franchises in 50 states.”³⁰ Given Montgomery County’s experience, the County respectfully suggests that the Commission request from Mobilitie copies of any correspondence relating to the completeness of its applications. If the great majority of their applications were returned as being incomplete, one must determine if this is inconsistent training of a few front-line representatives, willful

³⁰ Mobilitie Petition at 13.

refusal to comply with any process, or a systematic effort to artificially create the perception that it takes a long time for applications to be reviewed.

III. MARKET FORCES, NOT FCC RULINGS, HAVE AND WILL CONTINUE TO DRIVE DEPLOYMENT IN MONTGOMERY COUNTY

The Commission's *2009 Declaratory Ruling* has had no discernable impact. The demand for wireless deployments in Montgomery County has been primarily driven by market and technology factors, not regulatory changes. As stated in the Smart Communities Comments, local public-private collaboration has proven to be the best way to speed deployment.³¹ Montgomery County's experience supports this premise. The County enacted a zoning ordinance to encourage collocation and deployment, and created an incentivized zoning classification in areas where reasonable setback and height requirements could be met. It resulted in a streamlined process that balances everyone's interest in expanding access to advanced networking services and protecting public safety, without sacrificing community-specific aesthetic concerns.

C. Federal Regulatory Changes Have Not Resulted in Increased Service to Rural Areas

Montgomery County's experience indicates that changing regulatory policies or further restricting local authority will not solve the problem of inadequate broadband deployment in rural areas. Over one-third of the land mass of the County is designated as an Agricultural Reserve.³² Housing density in this area is 17 housing units per square mile, where as it is

³¹ Smart Communities Comments, Declaration Andrew Afflerbach, at 23.

³² See "Agricultural Reserve in Montgomery County" available at <http://www.montgomerycountymd.gov/agsservices/Resources/Images/mcagreservemap.jpg> and

1,117 per square mile in other areas of the County. Incomes and home values are similar to other areas of the County. As a result, the County is a living laboratory that demonstrates that both wireline and wireless broadband telecommunications deployment will flow to the areas with the largest concentration of people.

Montgomery County, like Chairman Pai, agrees that wireless broadband is important to modern agriculture.³³ The County's Innovation Program is supporting pilots to expand broadband applications in farming. The County's Office of Agriculture is using digital communications to connect farmers to "farm-to-table" restaurants and residents interested in Community Support Agriculture (*i.e.*, farm shares).³⁴ The County is working in creative partnerships to expand wireline broadband.³⁵ And our school-aged children should not have to choose between being able to do their homework, or continuing the County's agricultural heritage. But as demonstrated herein, more federal preemption of local authority is not going to bring more broadband to rural areas; nor is Mobilitie planning to bring more broadband to rural Montgomery County.

visit the County's Office of Agriculture for general information
<http://www.montgomerycountymd.gov/agservices/>.

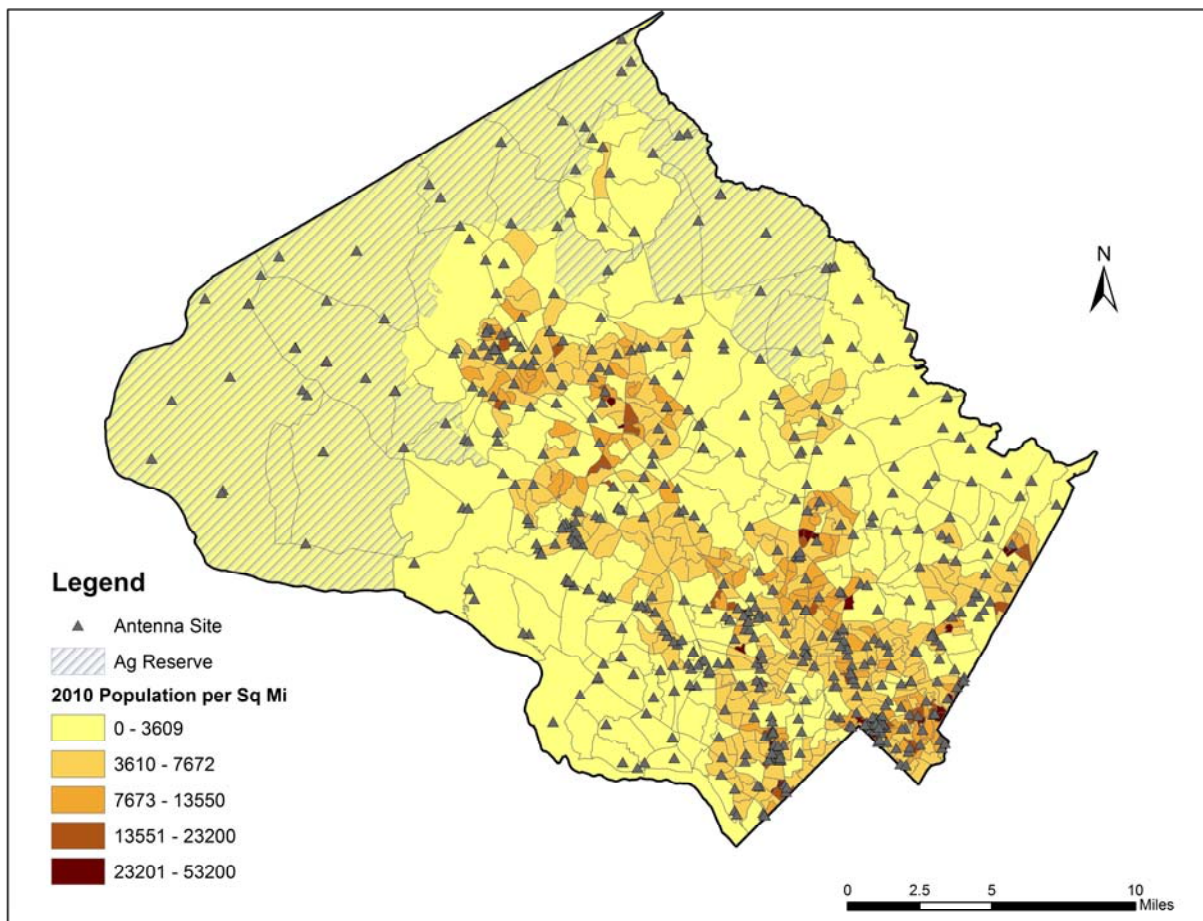
³³ Remarks of FCC Commissioner Ajit Pai at the Bandery, "Digital Empowerment Agenda," Cincinnati, Ohio ("Pai Digital Empowerment Agenda Speech") (September 13, 2016) ("But the benefits of wireless broadband in rural America extend far beyond that. Take precision agriculture. High-speed wireless connections can make America's farms more productive and efficient. Not long again, I had the chance to visit Clear Meadow Farm, in a rural part of northern Maryland. I saw first-hand how machine-to-machine communications, GPS-controlled combines, and remote weather and soil sensors – all powered by wireless connections – can transform our nation's agriculture industry.")

³⁴ See <http://www.montgomerycountymd.gov/agservices/>.

³⁵ See *e.g.* Fn 41 *supra*.

FIGURE 1 below supports the statement made in the Smart Communities Comments: “The fundamental dynamic of broadband investment is that network deployments and upgrades are capital intensive and capital flows to areas where projected returns are greatest because demand is most concentrated and per customer costs lowest.”³⁶ The majority of sites were created in the most densely populated areas of the County. In addition, as TABLE 1 demonstrated, seventy (70) percent of sites have more than one carrier. There are more carriers collocating at sites in the densely populated areas.

FIGURE 1: ALL WIRELESS FACILITIES DEPLOYMENT SITES

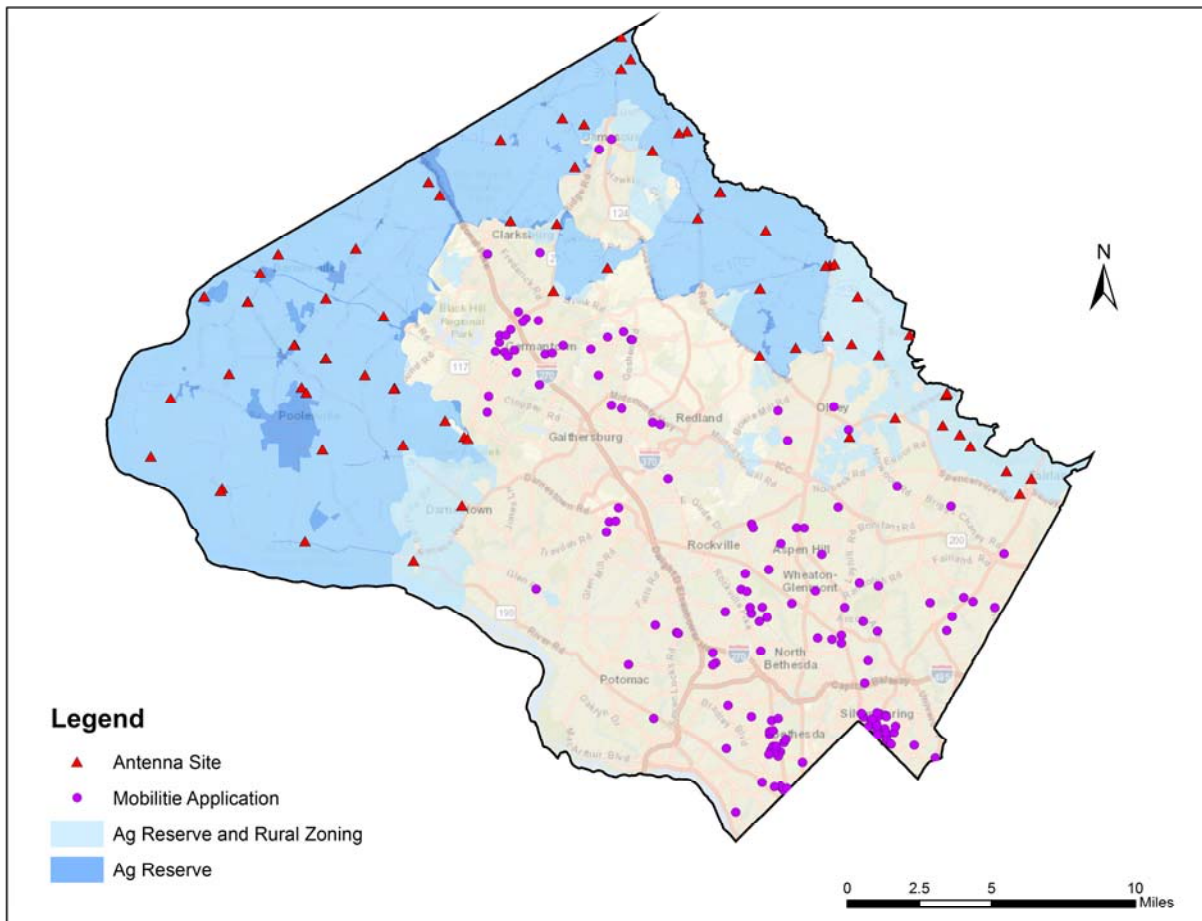


³⁶ Smart Communities Comments, Affidavit of Andrew Afflerbach, at 22.

Furthermore, the Mobilitie applications filed in Montgomery County support the statement in the Smart Communities Comments that: “It is deeply misleading to suggest that ‘streamlining’ processes for reviewing small cell deployments will lead to increased buildout in rural areas—because such processes and fees are limited or non-existent in those areas already, and the technology is not well-suited to rural areas.”³⁷ As FIGURE 2 demonstrates, Mobilitie’s deployments will not provide much of any additional wireless broadband service to the rural areas of the County.

³⁷ Smart Communities Comments, Affidavit of Andrew Afflerbach at 19.

FIGURE 2: MOBILITIE PROPOSED SITES AND OTHER RURAL DEPLOYMENT SITES

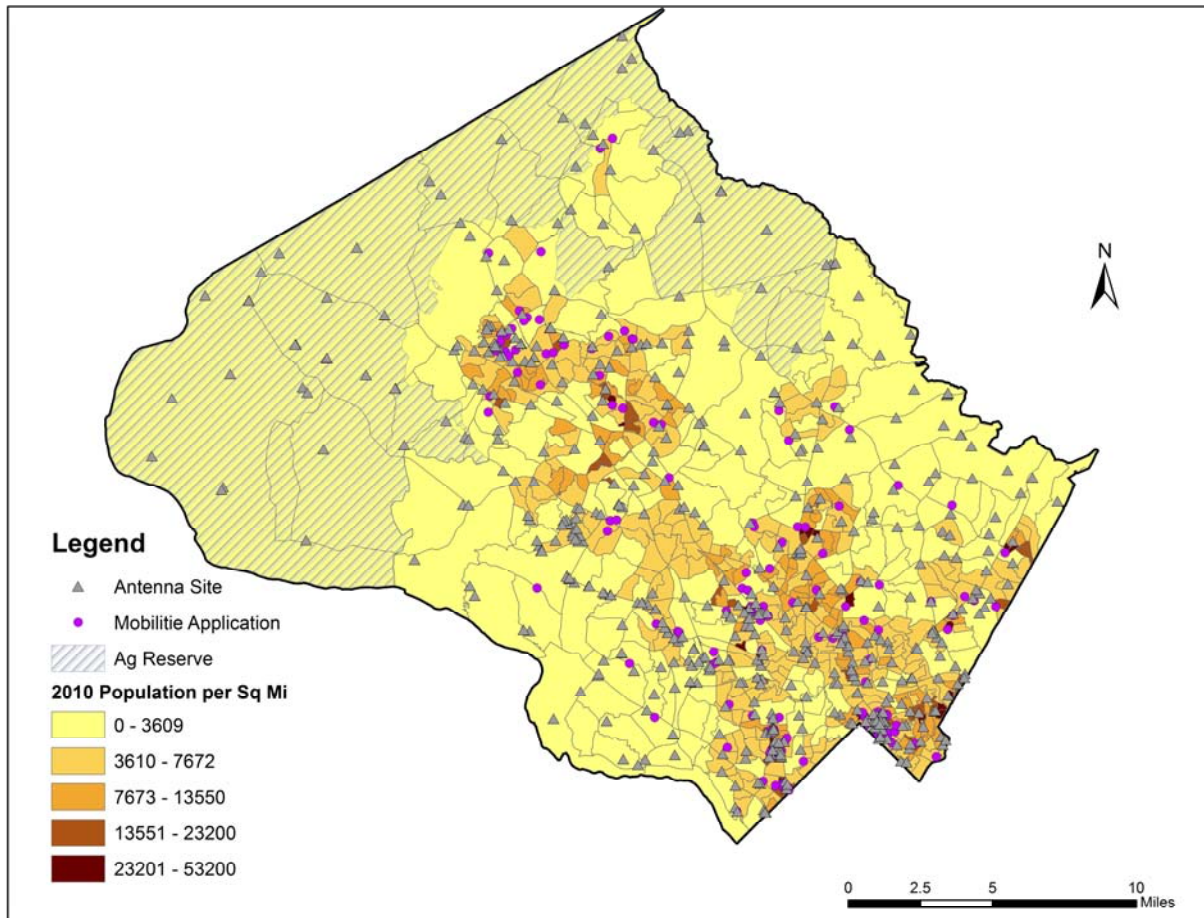


Mobilitie claims that 5G small cell and DAS deployment will bring broadband deployment to all Americans.³⁸ But as Mr. Afflerbach wrote in his affidavit, this is deeply misleading. Only one

³⁸ See generally, Mobilitie Comments at 3 (“Removing obstacles to deploying small cell networks in rights of way is particularly important because the wireless broadband those networks deliver will play a vital role in closing any gaps in nationwide broadband deployment.”); at 4 (rights of way “now can serve the public by making broadband, the newest essential service, available to all”); at 6 (achieving “FirstNet’s vision” to support public safety communications “in cities and rural communities across America” “will depend on dense deployments of many sites across localities”); at 7 (“Rights of way are also the key to expanding the availability of robust broadband to all Americans.”); and at 9 (“federal telecommunications policy has been designed to increase the availability of wireless broadband (including 5G) to meet the needs of all Americans.”)

of Mobilitie's 141 applications seeks to site a facility in a rural area.³⁹ And unfortunately for the residents, businesses and farms in the County's Agricultural Reserve, as FIGURE 3 illustrates, Mobilitie's applications, like eighty-six (86) percent of other sites hosting wireless facilities, are seeking to deploy to serve the most densely populated areas of the County.

FIGURE 3: MOBILITIE PROPOSED SITES AND ALL OTHER SITES



³⁹ The one site is located a few feet over the zoning boundary and is thus technically located within a rural zone.

D. Deployment Continues to be Driven by Market Economics

Montgomery County is fortunate to have the characteristics that are attractive to providers:

- Densely populated housing
- Strong home values
- Reasonable construction costs (which is also driven by the number of potential users per site deployment)
- A significant number of residents and businesses that use wireless technology

Montgomery County has significantly more wireless deployments than the average county. The County believes that the reasonable regulatory practices the County has put into place facilitate access to robust wireless services. They serve to make the County more attractive. The lack of deployment in the rural parts of the County suggests that regulatory practices are not the controlling factor – capital flows where demand is most concentrated and per customer costs lowest place to deploy.

The FCC cannot preempt the rules of economics or physics. If wireless carriers cannot make a business case in rural areas today because there are too few customers to support the deployment costs, then 5G deployments which may cover smaller areas and require more densely deployed facilities, will only exacerbate that challenge. Subsidies⁴⁰ and creative public-private partnerships will continue to be necessary to change the market equation and render rural areas sufficiently attractive.⁴¹

⁴⁰ See generally, Pai Empowerment Agenda Speech at 4.

⁴¹ Montgomery County and Comcast have engaged in a partnership to expand broadband deployment in the Agricultural Reserve. The County worked with residents to obtain commitments that more than 65 percent of residents in a pilot area would sign up for broadband

IV. PUBLIC SUPPORT FOR ADVANCED DEPLOYMENT OF 5G WIRELESS SERVICES REQUIRES THE COMMISSION TO COMPLETE ITS 2013 PROCEEDING TO UPDATE THE RF EMISSIONS RULES

The elected leadership of Montgomery County has already shared with the Commission by means of an *ex parte*⁴² the constant and growing concerns of members in our community with the health effects of RF emissions. The Commission's failure to act on RF rulemakings is resulting in growing public concern and potential opposition to 5G deployments in residential neighborhoods. The Commission has exclusive jurisdiction to regulate RF emissions. The Commission should not be dedicating scarce staffing resources to contemplating whether to take further action to preempt local government authority while the Commission has unfinished work that has been languishing for four years in the *2013 RF NOI*.

On October 26, 2016, the County Council hosted a public meeting to discuss small cells and anticipated densification of networks in neighborhoods. In addressing the importance of public acceptance of 5G deployments, former Chairman Tom Wheeler stated, that the Commission needs to "to help leaders at the local level" help the public understand the benefits of 5G.⁴³ The entire meeting is available online.⁴⁴ The County has also edited together the questions residents asked about RF emissions. Residents were particularly concerned about how

service. In exchange, Comcast agreed to waive construction charges that would have required individual residents to pay \$2,000 or more to receive service.

⁴² *2013 RF NOI*, Letter from Montgomery County Executive Isiah Leggett to FCC Chairman Tom Wheeler, re: Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies (Jan. 17, 2017). *See* Attachment A.

⁴³ Remarks of FCC Chairman Tom Wheeler, CTIA Super Mobility Show 2016, Las Vegas (Sept. 7, 2016).

⁴⁴ Informational Meeting on Cell Towers, October 26, 2016, available at <https://www.youtube.com/watch?v=6t2AkvI9q54>

close these new antennas would be deployed to their houses and children. These questions include:

- Rick Popovitch: “Why does it have to be in residential areas when these same towers can be put in other areas that are non-residential, not with the proximity of children and others.”
- Sonya Beakman: “I would like just a simple explanation, why concentrating all this energy is not going to further *increase* the health risks?”
- Peter Chung: “The World Health Organization has categorized these RF signals as level 2 or class B carcinogenic.”
- Lisa Klein: “Let’s set a precedent for precautionary safety measures to protect the people.”
- Bob Salwani: “It’s likely to cause DNA damage, it’s likely to cause cancer, specifically brain cancer, and more specifically in children. The County has to be responsible for ensuring there are no longer term health effects of these frequencies on kids.”
- Debra Hines: “Why can’t we do a health assessment here and find out what the real health effects are *to our children*?”
- Unidentified Man: “You blew off that health thing, that’s the first thing you said, ‘that there are studies, you can go look at them.’ Well that’s the main concern of everybody in this room!”
- Jim Sledge: “If you go through with these installations, my grandson will have an antenna 35 feet from his bedroom.”

- Vasilis Maginis: “But still the question remains, why [does] this thing have to be right outside my bedroom window? That’s the basic question! And you hear health studies, you hear depreciation of the houses – nobody wants it!”

In response, Montgomery County staff held several meetings with staff from U.S. Representative John Delaney’s office to determine how best to address residents’ concerns about RF emissions in light of the fact that Congress: gave exclusive authority to establish RF emission standards to the Commission; prohibited local governments from basing wireless facility siting decision on RF emissions (except to the extent that local governments enforce the federal standards enacted by the Commission); required that local government regulations “shall not prohibit or have the effect of prohibiting the provision of personal wireless service;” and required that local governments “approve, any eligible facilities request for a modification of an existing tower or base station that does not substantially change the physical dimension of such tower or base station.” But also, that the Commission, has not updated the RF emissions standards since 1996.⁴⁵

Montgomery County does not make siting decisions on the basis of health concerns about RF emissions. But acceptance of reasonably managed wireless deployment by the public is important. And the message from the October 26, 2016 public meeting to local officials was residents want their local elected officials and federal representatives to do much more to get federal agencies to act in this area. After further research, the County determined:

⁴⁵ See 47 USC §§332(c)(7)(b)(i)(II) and 332(c)(7)(b)(ii); 2013 RF NOI at ¶ 5.

- In 2012 the GAO Commission had recommended that the “FCC formally reassess and, if appropriate, change its current RF energy exposure limit and mobile phone testing requirements.” The GAO felt that the Commission’s standards did not adequately address what happens to the body when phones are used close to the body. The GAO further stated: “By not formally reassessing its current limit, FCC cannot ensure it is using a limit that reflects the latest research on RF energy exposure.”⁴⁶
- Almost four years ago, on March 29, 2013, the Commission opened a proceeding to address changes in the RF emissions standards related to human exposure, “received nearly a thousand comments totaling more than 20,000 pages,”⁴⁷ but had taken no further action to complete its review of its RF emission rules and determine if any updates were necessary.⁴⁸

⁴⁶ United State Government Accountability Office, Report to Congressional Requestors, *TELECOMMUNICATIONS: Exposure and Testing for Mobile Phones Should Be Reassessed*, GAO-12-1771 (July 2012). The GAO recommended: “FCC formally reassess and, if appropriate, change its current RF energy exposure limit and mobile phone testing requirements related to likely usage configurations, particularly when phones are held against the body.”

⁴⁷ Letter from Federal Communications Commission Chairman Wheeler to U.S. Senator Richard Blumenthal (Nov. 24, 2015) available at <http://eshoo.house.gov/issues/economy/eshoo-blumenthal-urge-fcc-to-enforce-exposure-limits-for-those-who-work-near-wireless-towers/> (“Eshoo Blumenthal Letter”).

⁴⁸ See 2013 RF NOI at ¶ 5: “*Inquiry*. We initiate a new proceeding with a *Notice of Inquiry* to determine whether there is a need for reassessment of the Commission radiofrequency (RF) exposure limits and policies. The *Inquiry* focuses on three elements: the propriety of our existing standards and policies, possible options for precautionary exposure reduction, and possible improvements to our equipment authorization process and policies as they relate to RF exposure. **We adopted our present exposure limits in 1996**, based on guidance from federal safety, health, and environmental agencies using recommendations published separately by the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers, Inc. (IEEE).⁴⁸ Since 1996, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) has developed a recommendation supported by the World Health Organization (WHO), and the IEEE has revised its recommendations several times, while the NCRP has continued to support its recommendation as we use it in our current

- Three years ago, in response to the *2013 RF NOI*, members of the Smart Communities Coalition called attention to concerns of having more wireless infrastructure sited closer to homes and people: “Unlike early cell tower deployment, today’s new repeater network technologies are deployed in closer proximity to users. As such, *potential exposure comes* not from the receiving device – the phone – but rather *the transmission device*.”⁴⁹
- Two years ago, in February 2015, Congress asked the Commission to complete the *2013 RF NOI* proceeding. U.S. Senator Richard Blumenthal and U.S. Representative Anna Eshoo were concerned about worker exposure on rooftops when working within mere feet of wireless facilities, given that RF emissions are strongest within a few feet of the antennas.⁵⁰
- Two years ago, in 2015 in response to the Congressional letter, then-Chairman Wheeler stated that he had directed his staff to prioritize this proceeding. Yet no further action was taken during the final two years of Chairman Wheeler’s term as Chairman.

On January 17, 2017, Montgomery County Executive Isiah Leggett sent a letter to the Commission, asking that the Commission take action to complete its work on the *2013 RF NOI*.⁵¹ No further action was taken by the Commission to update or confirm current RF emissions

rules. *In the Inquiry, we ask whether our exposure limits remain appropriate given the differences in the various recommendations that have developed and recognizing additional progress in research subsequent to the adoption of our existing exposure limits.*” (emphasis added).

⁴⁹ *2013 RF NOI*, Reply Comments of the Cities of Boston and Philadelphia (Nov. 18, 2013) at 3 (emphasis added).

⁵⁰ See Eshoo Blumenthal Letter.

⁵¹ See Exhibit A.

standards. Rather, at the request of Mobilitie, the Commission released the *Public Notice*, to determine whether further prohibitions on local governments collecting compensation for right-of-way use should be considered, whether local governments review siting applications in a reasonable period of time, and whether local government rules have the effect of prohibiting the provision of service.

At the very least, before imposing additional “speed up” obligations on local governments, and given the years the Commission has had to review information submitted in the *2013 RF NOI* docket, the Commission should complete the revision of its RF emission rules.

V. CONCLUSION

The County urges the Commission to exercise leadership where it has exclusive authority and complete work on the *2013 RF NOI* by December of this year. There is no need for a further declaratory ruling by the Commission. Systematic data presented by the County herein demonstrates that federal declaratory rules have little impact on deployment overall, and do little to spur deployment in rural areas.

Local governments work every day to develop public-private partnerships to promote broadband deployments in ways that do not sacrifice community interests. The Commission should work to promote public acceptance of 5G technology by addressing the community

concerns about the health effects of RF emissions as soon as possible.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mitsuko R. Herrera".

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March 8, 2017

EXHIBIT C

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

STREAMLINING DEPLOYMENT)	
OF SMALL CELL INFRASTRUCTURE)	
BY IMPROVING WIRELESS FACILITIES	)	WT Docket No. 16-421
SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	
<hr/>)	

**REPLY COMMENTS OF
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SUMMARY OF COMMENTS OF THE SMART COMMUNITIES SITING COALITION

In these reply comments, the Smart Communities Siting Coalition, a collection of local governments, and associations that represent them, as well as local government agencies responsible for highway safety reiterate our commitment to ensuring our communities and our residents are fully connected in this increasingly wireless information age. This reply, which includes two additional expert declarations, demonstrates conclusively that were the Commission to accommodate the industry's requests for preemption and declaratory rulings, such actions would harm market forces that reward innovation.

Further, this reply documents that Section 253 (47 U.S.C. §253) does not apply to wireless siting disputes and should not be addressed in this proceeding. Moreover, the legal relief the industry seeks cannot be granted by the Commission in a rulemaking, let alone a declaratory ruling, as Congress chose to delegate dispute resolution over the types of complaints raised by Mobilite (Petitioner) and industry commenters regarding public rights-of-way and wireless siting to the federal courts.

Smart Communities identifies and documents significant shortcomings in the record. For instance:

1. A review of the record reveals that Petitioner and its fellow industry commenters fail to establish that there exists a predicate for preemptive action.

2. Neither the Notice, nor any industry commenter, has addressed any of the vitally important public safety concerns over deployments of vertical infrastructure in the public rights-of-way that have been raised by multiple state and local road agencies. Smart Communities, which itself filed an expert declaration addressing the public safety concerns of such deployments, concurs with the comments of the highway community.

3. The industry's proposed definition of small cell, while it would exclude Mobilitie's typical tower package, is still anything but small. CTC, an expert in these matters, provides a response to the industry's proposed definition to document that the industry would allow fairly major installations, ignores Section 106's test for being minimally visible and does not justify shorter times to act on a complete application. The WIA definition would also retard market forces that reward innovation and technological advances.

4. Industry commenters conflate application fees with rent, and then urge the Commission to limit both to costs. Our reply documents that application fees are already limited to the recovery of costs. Further, according to our economic expert, rent, if permitted under state law, should be set at market value to ensure the most efficient use of public assets not unlike the Commission's spectrum auctions.

Finally, Smart Communities calls on the Commission to complete its work on updating RF emissions standards. Local governments are more than willing to partner with industry's densification effort, but it is in everyone's best interests to recognize that siting RF emitting equipment ever closer to the general public will heighten RF issues, and the Commission alone bears the regulatory authority and responsibility to address public concerns about siting in closer proximity to the public through updated standards.

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**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
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STREAMLINING DEPLOYMENT)	
OF SMALL CELL INFRASTRUCTURE)	
BY IMPROVING WIRELESS FACILITIES)	WT Docket No. 16-421
SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	
_____)	

**REPLY COMMENTS OF
SMART COMMUNITIES SITING COALITION**

I. INTRODUCTION

The Smart Communities Siting Coalition (“Smart Communities”) is comprised of local governments, and associations that represent them, as well as local government agencies responsible for highway safety. Collectively, the individual members and associations represent approximately 1,854 communities in 10 states, serving nearly 30 million residents.¹

¹ Individual members: Ann Arbor, MI; Atlanta, GA; Berlin, MD; Berwyn Heights, MD; Boston, MA; Capitol Heights, MD; Cary, NC; Chesapeake Beach, MD; College Park, MD; Dallas, TX; DeSoto County, MS.; Frederick, MD; Gaithersburg, MD; Greenbelt, MD; Havre de Grace, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; McAllen, TX; Monroe, MI, Montgomery County, MD; Myrtle Beach, SC; New Carrollton, MD; Perryville, MD; Pocomoke City, MD; Poolsville, MD; Portland, OR; Rockville, MD; Takoma Park, MD; University Park, MD; and Westminster, MD.

Organizations Representing Local Governments and Road Agencies: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The GVMC DAS Tower Consortium is a collaboration of over 20 Western Michigan cities, villages and townships that worked collectively with local telecommunication providers to establish a model permitting process and fee structure. The Conference of Eastern Wayne is a formal council of governments established by intergovernmental agreement consisting of the six municipalities on the eastern side of Wayne County outside of the City of Detroit. The municipalities represented are: City of Grosse Pointe, City of Grosse Pointe Farms, City of Grosse Pointe Woods, Village of Grosse Pointe Shores (a Michigan City), and the City of Harper Woods. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of Michigan cities that focuses on protection of their citizens’ governance and control over public rights-of-way. The

Collectively, the Smart Communities have significant experience in addressing the placement of wireline and wireless facilities, including wireless deployments that involve very large structures and monopoles like the Mobilitie 120 foot towers, as well as relatively small wireless structures.² Smart Communities members recognize that job-creating success depends not solely on having the most advanced communications infrastructure, but as importantly on creating desirable communities where people want to live and work. Achieving these goals requires a careful balancing of the needs of local businesses, utilities, residents, consumers and tourists while maintaining the safety and integrity of infrastructure within their public rights-of-way.

Michigan Townships Association (“MTA”) promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position. The Michigan Municipal League (“MML”) is a non-profit Michigan corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance. The County Road Association (CRA) of Michigan works with all 83 county road agencies on matters of common interest. County road agencies in Michigan are responsible for ensuring safe, efficient transportation on 73 percent of the road miles in Michigan and are responsible for reviewing the applications for placement of facilities along the roads to ensure, among other things, that proposed facilities do not interfere with road functions, or create safety issues. The Kitch Firm represents Monroe, Michigan, DeSoto County, Mississippi and the Michigan associations identified above. Best Best & Krieger represents the others in the Smart Communities coalition.

² As noted in our Comments, Smart Communities celebrates that local government and industry’s collective efforts permit Chairman Pai to report to the Mobile World Congress that “...98% of Americans now have access to three or more facilities-based [wireless] providers. And the United States has led the world in the deployment of 4G LTE.” Address available at <https://www.fcc.gov/document/chairman-pais-keynote-mobile-world-congress-barcelona>

II. INDUSTRY COMMENTS FAIL TO ESTABLISH THAT THERE EXISTS A PREDICATE FOR PREEMPTIVE ACTION

The Commission has made it clear that it will not take action to change the status quo based on mere innuendo and pretext, but rather it will make data driven decisions that are supported by economic analysis. As Chairman Pai noted, such caution is warranted “... knowing that this marketplace is dynamic and that preemptive regulation may have serious unintended consequences.”³ The Commission has taken the position that new preemptive regulations should be supported by facts and by a careful cost-benefit analysis.⁴

Mobilite and other industry commenters notably failed to demonstrate that there exists a problem of such significance as to warrant declaratory rulings of preemption. As importantly, they failed to show that there would be significant benefits from preemption that would outweigh the costs. By contrast, localities did submit economic and technical information that indicated that granting the relief requested could have significant adverse economic, safety, and technical impacts, potentially preventing localities from developing solutions that will result in more deployment, in a manner that protects public safety and the legitimate interests of communities and their residents and businesses.⁵

A. There is a Paucity of Specific, Verifiable Allegations Backing Industry Complaints.

Industry complaints of problems routinely lack specific and verifiable information. Instead, most complaints about local governments in the record are anonymous. There were

³ *Remarks of FCC Chairman Ajit Pai at the U.S.-India Business Council* at p. 3, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0329/DOC-344124A1.pdf

⁴ *See Remarks Of FCC Chairman Ajit Pai At The Hudson Institute, The Importance Of Economic Analysis At The FCC, Washington, D.C.*, available at <https://www.fcc.gov/document/chairman-pai-economic-analysis-communications-policy>

⁵ Comments of Smart Communities at pp. i-v, (filed Mar. 8, 2017) (“Smart Communities Comments”).

approximately twenty –two industry commenters that filed in this docket and no less than seventeen⁶ of these industry filings make no reference to any specific community in alleging conduct that might lead to delays in wireless infrastructure deployment. A number of the seventeen do make allegations in a generic sense, i.e. “northeastern town,”⁷ “many municipalities,”⁸ and “some local governments,”⁹ but it is impossible for Smart Communities or any other local government participating in this proceeding, to respond to any of these nameless allegations.¹⁰ The Commission should therefore dismiss all of these anonymous allegations as they lack probative value in that they cannot be examined for accuracy.

Crown Castle is the primary industry commenter that actually names communities and local government practices that it feels establish a predicate for action in this proceeding. But a review of Crown’s comments reveals that despite the fact that company claims to be “the nation’s largest provider of shared wireless infrastructure”¹¹ it could only muster about 25

⁶ See Comments of Nokia, Tech Freedom, Mobile Future, Wireless Communication Initiative, U.S. Black Chamber, Information Technology and Innovation Foundation, Wireless Internet Service Providers Association, Sprint, Lighttower Fiber Networks, U.S. Chamber, NTCH (while NTCH lists specific communities, it is alleging poor treatment for macros cells outside of right of way, not small cells within rights of way), CTIA (The Wireless Association), Mobilitie, Wireless Infrastructure Association, AT&T, Extenet, T-Mobile (with exception of citing to San Francisco ordinance in litigation), Verizon, (Verizon list three model communities, but all allegations of bad conduct are anonymous). Where complaints of conduct were made, they were made anonymously. See. E.g. “WISPA’s members have encountered a patchwork of State and local policies ... regarding charges for access to broadband.” Comments of WISPA at p. 6 (filed Mar. 8, 2017). Without any specificity of the claim, one cannot confirm or refute the conduct complained of and therefore has no probative value.

⁷ Comments of Verizon, Appendix A (filed Mar. 7, 2017) (“Verizon Comments”).

⁸ Comments of T-Mobile at p. 7 (filed Mar. 8, 2017) (“T-Mobile Comments”).

⁹ Comments of AT&T at p. 4 (filed Mar. 8, 2017) (“AT&T Comments”).

¹⁰ As addressed *infra*, Crown Castle does list approximately twenty-five community names. A rather small universe when measured against the almost 40,000 general purpose government units in the U.S.

¹¹ <http://www.crowncastle.com/about-us.aspx>.

communities named as exercising rules and practices that Crown finds offensive.¹² And even those claims should not be taken at face value but should be evaluated after hearing from the communities themselves. Crown fails to note that in a great many of the communities named it has a thriving enterprise and is expanding on a monthly basis. In fact, as we show in later in this reply, some of the communities that Crown maligned are held up as model communities by other providers. (*See e.g.* Smart Community member Atlanta, Georgia).

But were every complaint made by Crown true, still the number of verifiable complaints is small. According to the 2012 Census of Governments, there are over 90,056 local governments in the United States.¹³ Twenty-five complaints against that number represents 0.02%. If we measure the number of complaints against the 38,910 general purpose units of government, the percentage of complaints rises to a paltry 0.06%.

Surely a level of complaints that represents well under one-tenth of 1% of communities does not come close to suggesting that there is a serious, nationwide problem that requires Commission action – or a serious misunderstanding of the law that the Commission must correct.¹⁴

¹² *See e.g.*, Comments of Crown Castle (filed Mar. 8, 2017) (“Crown Castle Comments”). It should be pointed out that among industry commenters naming allegedly offending communities, the Comments of Conterra Broadband (filed Mar. 8, 2017) contains complaints against the City of Baltimore, MD and Newark, NJ but not because of their wireless siting rules, but because of “Dig Once” principles endorsed by the Commission and a linear foot charge Newark seeks to impose for access to the public rights of way.

¹³ 2012 Census of Governments available at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk_

¹⁴ On the day that Comments were filed in this matter, Commissioner O’Rielly updated the Senate Commerce Committee on the status of wireless broadband infrastructure deployment. He reflected that “...the vast number of communities see the benefit of broadband deployment and welcome providers seeking to serve their citizens...Oversight Of The Federal Communications Commission,” Testimony of Commissioner Michael O’Rielly before the Senate Commerce Committee (March 8, 2017) http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0308/DOC-343816A1.pdf.

Indeed adding all the complaints made in the industry’s filings, both named and anonymous falls far short of that threshold. As the Virginia Department of Transportation stated: “There has been no demonstration of a nation-wide problem that warrants a “one size fits all” solution as Mobilitie, LLC requests in its Petition for Declaratory Ruling.”¹⁵ Smart Communities wholeheartedly agrees. There is no basis, then, for granting any of the relief requested in order to promote deployment (because there is a no showing of a problem), and no showing that the costs associated with preemptive action would justify the actions requested (because no cost-benefit analysis was actually provided by industry).

B. The Record Shows Deployment Has Proceeded Apace.

It is worth emphasizing that the industry’s comments demonstrate there have been very few cases that turn on a failure of a community to act in a timely way. Moreover, industry has not shown that a shorter time frame is required, or would significantly cut deployment times, given, for example the time required prior to beginning construction for things such as make-ready engineering work.

One community accused by name in industry comments is Montgomery County, Maryland.¹⁶ Montgomery County is a member of Smart Communities, but also filed Supplemental Comments¹⁷ in which the County documented that any claims of delay or excessive fees made against the County are dwarfed by its record of success, including:

- The County has reviewed 2,900 applications in 20 years, and currently has 1,121 wireless facilities deployed at 534 unique locations throughout the County.

¹⁵ Comments of the Virginia Department of Transportation p.1 (Mar. 8, 2017) (“VA DOT Comments”).

¹⁶ See e.g., Crown Castle Comments at pp. 12-13 (burdensome application fees) and perhaps is the “Maryland locality” complained of at p. 15 of the Comments of Mobilitie (“Mobilitie Comments”) as being “on hold” for eleven months.

¹⁷ Supplemental Comments of Montgomery County, MD (filed Mar. 8, 2017) (“Montgomery County Comments”).

- ...The County ... Department of Permitting Services processes over 60,000 permits and conducts more than 157,000 inspections annually.¹⁸

The record also suggests that in cases where the time between initial application and grant of the request has been longer than one might expect under the Commission's shot clock rules, the fault lies with the operator, Mobilitie being a particular complainant and culprit in this regard. While we do not know what community Mobilitie complains has had it on hold for eleven months,¹⁹ Montgomery County's Supplemental Comments offer the Commission a detailed timeline documenting its own experience with Mobilitie, and explaining that the company repeatedly submitted incomplete applications, and abandoned its original plans for different ones. Similarly, the record shows that in some cases entities do not get necessary franchises or licenses, because they refuse to apply for them based on misreading or misunderstanding of state law requirements.²⁰ The resulting "delays" from choices made by the companies themselves are of course not justification for preemption.

C. Cities Are Praised in Industry Comments.

If all the named complaints listed by industry commenters are well founded (and we know they are not), it is but a micro fraction of the number of communities nationwide that worked with industry to facilitate the deployments which allowed Chairman Pai to boast that the U.S. is the world's leader in deployment of 4-G technology.²¹ It is hard to square that level of

¹⁸ *Id.* at p. i.

¹⁹ Mobilitie Comments at p. 15 ("...[A] Maryland locality informed Mobilitie eleven months ago that an agreement would be required but put the agreement on hold.").

²⁰ See Montgomery County Comments at pp. 12-20. ("A 10 Month Odyssey And Counting: Mobilitie Has Not Put Forth A Reasonable Effort To Use The County's Telecommunications Siting Process").

²¹ Smart Communities celebrates that our efforts permit Chairman Pai in a February 28, 2017 keynote address to the Mobile World Congress that "...98% of Americans now have access to three or more facilities-based [wireless] providers. And the United States has led the world in the deployment of 4G LTE." Those successes are local governments' as much as they are the industry's. Address available at <https://www.fcc.gov/document/chairman-pais-keynote-mobile-world-congress-barcelona>.

success with the dire circumstance most of industry claims to face at the local level. It is also hard to reconcile this collective achievement with Mobilitie's CEO Gary Jabara's view that a consultative process is a reflection of "...how stupid the elected officials — the mayor and the city councilors —are."²² Or that "[t]here are many stupid cities around the country — really dumb. They're greedy. They have their hands out."²³

Notably, the industry is not uniform in its distress call. The record reveals that there is praise for some U.S. cities as models for the world. For instance, Nokia²⁴ shares with the Commission an international study of best practices from 22 international cities. The study features Cleveland, New York City and San Francisco. In a chart to accompany the report, all three U.S. cities scored relatively high compared to the other cities studied on: smart, safe, and sustainable measures. Further, the study reveals that New York City and San Francisco are global models or "advanced smart cities." Cleveland, while characterized as being behind a number of other cities in the study, is nevertheless identified as one to be watched as the city features a number of ambitious pilot projects.²⁵

Even Crown Castle highlights a number of communities for their model conduct including: Cincinnati, Ohio, Chicago, Ill., Pittsburgh, Pa., Minneapolis, Minn., Louisville-Jefferson County Metro Government, Kentucky, State College, Pennsylvania, Brookfield,

²² Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> ("Jabara Interview"). It should be pointed out that a number of Smart Communities members are cited in the AGL interview as being the best of the best of communities. But even those communities have found Mobilitie's conduct and performance wanting.

²³ *Id.*

²⁴ Comments of Nokia (filed Mar. 8, 2017). Nowhere in Nokia's comments are there any specific allegations of wrong doing. There are general accusations about "some jurisdictions," or "one major city," but no communities are named other than the three U.S. cities singled out for praise.

²⁵ *Id.*

Wisconsin, Little Elm, Texas, The Colony, Texas, Texas City, Texas, New York City, NY, Philadelphia, PA., and the Borough of Sea Bright, New Jersey.²⁶

So not only were the number of named communities complained about infinitesimally small, there are almost an equal number of communities that industry commenters praise and recommend to others that they serve as models to be followed, or best practices to be emulated in this developing market. This record of evidence surely demonstrates there is no need for preemptive measures on a grand scale. As importantly, it demonstrates that localities are able to craft creative solutions that allow rapid deployment within the public rights-of-way once basic design parameters are established. New York, for example, has developed standards for placement of facilities on its proprietary property that are designed to ensure that small cells visible in the public rights-of-way remain small (with equipment cabinets under 3 cu. ft).²⁷

D. Industry Players Sometimes Have Inconsistent Views Of the Same Communities.

Perhaps the most revealing feature of the industry comments, and a reflection of the challenges facing local governments as they seek to meet the needs of the community and industry, are the inconsistent views of a given community in the industry comments.

Chicago,²⁸ San Francisco,²⁹ and New York City³⁰ are simultaneously praised as models by some commenters (*See e.g.* Nokia, Sprint and Crown) and criticized by others such as the Competitive Carriers Association “for demanding unreasonable annual and escalating pole

²⁶ Crown Castle Comments at pp. i-ii, 5 and 8.

²⁷ The New York City DoITT standards appear as appendices to the eight mobile franchises issued by the City, which can be found at <https://www1.nyc.gov/site/doitt/business/mobile-telecom-franchises.page>

²⁸ Crown Castle Comments at p. i-ii.

²⁹ San Francisco finds itself praised by Nokia as a model for other cities of the word, but criticized by Crown Castle (p. 15) and T-Mobile (p. 2-3) and being regulatory over bearing.

³⁰ Comments of Sprint at p. 18 (filed Mar. 8, 2017) (“Sprint Comments”) describes New York City as responding to the needs of its residence by adopting a streamlined application process.

attachment fees.”³¹ Smart Communities member Atlanta, Georgia is praised by Mobilitie as a model city for deploying small cell wireless technology,³² while Crown Castle would list Atlanta in the bad actor category for an overly expensive fee ordinance that it has yet to pass.³³ Should the city not change its policies to please Crown Castle, and if so, would it then be listed as a bad actor in Mobilitie’s eyes? The fact that some entities are able to function quite effectively in cities that are identified as “bad actors” indicates that in fact, the claimed problems are not actually preventing deployment; and also indicates that the Commission should be reluctant to intercede, since effectively it would be stepping into establish a federal regulatory and preemptive regime at the behest of one competitor where local markets are functioning well for others.

³¹ Comments of Competitive Carriers Association at p. 17 (filed Mar. 8, 2017) (“CCA Comments”). See also Comments of T-Mobile at p. 2-3 (filed Mar. 8, 2017) (“T-Mobile Comments”) which criticizes San Francisco for adopting “...an ordinance that singles out wireless facilities in public ROWs for discretionary pre-deployment “aesthetic” review not imposed on similarly-sized landline or utility facilities.

³² Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> (“Jabara Interview”).

³³ Crown Castle Comments at p.12 – The City of Atlanta files as part of these Reply Comments as Exhibit 1 a Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O’Rielly (“Atlanta Letter”) that provides a different story. (“The City of Atlanta, specifically the City’s Utilities Committee, is considering an ordinance that would establish reasonable fees for wireless pole attachments in the City’s public right-of-way. Before moving the legislative proposal out of Committee, the City invited the Georgia Wireless Association (“GWA”) to engage in discussions about the proposed ordinance. As a GWA member, Crown Castle has participated in three meetings at City Hall during a five week period, with a fourth meeting scheduled to occur in two weeks. The meetings were hosted by City officials from the Mayor’s Office and the Department of Public Works, and attended by approximately 20 industry representatives from GWA. In response to industry’s input, including that of Crown Castle, during the first three meetings, the City substantially restructured the proposed ordinance. None of this information, however, was included in Crown Castle’s description of the City’s ordinance that was shared with the Commission.”)

Crown Castle appears so desperate to come up with enough complaints that it includes in its “*Parade of horrors*,” complaints based upon proposed, not enacted ordinances.³⁴ For instance, it maligns the cities of Vista and Palos Verdes Estates, California, for merely considering draft ordinances that are identical to San Diego.³⁵ Yet, CTIA’s Accenture Study holds San Diego out to the world as a model for integrating smart technology into its Smart Lighting initiative, which includes wireless service.³⁶

Finally, Crown Castle is even guilty of internal inconsistencies. After listing the Texas cities of Little Elm, The Colony, and Texas City as good actors, it challenges the willingness of any local government in the state to work with Crown as “Texas is another jurisdiction where municipalities have challenged the validity of state-issued certificates held by network providers like Crown Castle.”³⁷ It is, of course, unclear why challenging the status of Crown Castle under *state law* ought to be viewed as grounds for preemption.

E. The Vast Majority of Communities Want and Support Wireless Infrastructure in Their Planning.

Local government commenters, including Smart Communities, agree with Commissioner O’Rielly that the vast number of communities see the benefits of wireless connectivity and are striving to serve their citizens.³⁸ Smart Communities endorses the comments of diverse

³⁴ Crown Castle also wrongfully accuses Atlanta of overcharging for wireless deployments based upon a draft ordinance that is undergoing public and industry review, a review in which Crown has been active and yet fails to share with the Commission changes that have been made in the draft at Crown’s request.

³⁵ Crown Castle Comments at p. 20. “For example, the cities of Vista, California, and Palos Verdes Estates, California, are considering draft ordinances (virtually identical to ordinances adopted in Irvine, Santa Monica and San Diego) governing the review process for wireless facilities that include an ‘amortization’ provision effectively prohibiting the grant of new EFR permits for an existing facility.”

³⁶ CTIA *Ex Parte* Letter to Marlene Dortch (Jan. 13, 2017), Accenture Study (“Accenture Study”) at p. 7.

³⁷ Crown Castle Comments at p. 18.

³⁸ See note 14, *supra*.

communities such as large and urban New York City³⁹ and San Francisco,⁴⁰ the mixed bedroom Maryland and Virginia communities near Washington D.C., small towns like Edina⁴¹ and the geographically, topographically and historically diverse San Antonio, Texas; Eugene, Oregon; Bowie, Maryland; Huntsville, Alabama and Knoxville, Tennessee⁴² which all agree that deployment of wireless facilities is proceeding apace and that the industry has failed to meet its burden to show that any declaratory order is warranted.

CTC Technology & Energy is an independent communications and IT engineering consulting firm with more than 30 years of experience with public sector and non-profit clients throughout the nation. A leading example of their work can be seen in the Washington, D.C. area's regional wired and wireless communications interoperability initiative funded by the U.S. Department of Homeland Security.

³⁹ Comments of New York City at p. 1 (filed Mar. 8, 2017) ("New York Comments") ("The City, as a large population center and technology, cultural, and business hub, is committed to encouraging deployment of new technology and looks forward to advances its citizens will reap from small cell/DAS facilities.").

⁴⁰ Comments of the City and County of San Francisco at p. 1 (filed Mar. 8, 2017) ("San Francisco Comments") ("San Francisco has worked with telecommunications carriers to enable the deployment of personal wireless service facilities throughout San Francisco, particularly the deployment of Distributed Antenna Systems ("DAS") and other small-cell technology on existing utility and other poles located in the public right-of-way.").

⁴¹ Comments of Edina, Minn. at p. 1 (filed Mar. 6, 2017) ("Upon hearing ...that small cells were arriving, the City of Medina amended its ordinance.... We researched industry concerns.... We generally supported the roll out of small cells....").

⁴² Comments of San Antonio, Texas; Eugene, Oregon; Bowie, Maryland; Huntsville, Alabama; and Knoxville, Tennessee at p. 1 (filed Mar. 8, 2017) ("Cities Comments"). ("Each of the Cities already acts to promote broadband deployment through all technologies. But unlike the Commission, the Cities must also consider and balance factors other than the needs of broadband providers; they must consider public safety, right-of-way ("ROW") capacity and congestion, unique local historic and scenic neighborhoods and parks, and the obligation that taxpayers receive adequate compensation for private commercial use of public property.").

In his Declaration⁴³ included in our opening Comments, CTC's Afflerbach explained, many communities are working with industry to develop new approaches to deployment that take wireless into account as part of the development processes associated with new subdivisions, roadway widening, or as part of a general planning processes that is designed to provide some certainty for both localities and for providers as to what may be installed, and where.⁴⁴ This process may take some up front time, and is distinct from the procedures that apply once an application is received under Section 332(c)(7) or Section 6409.

This preliminary planning work may appear to result in a delay in deployment, as communities gather all industry players together to attempt to develop a cooperative solution. But the "upfront" time may translate into faster consideration of individual applications over the longer term, as providers gain a better understanding of what is required of them, and submit applications that are tailored to community requirements. These local consultative processes ought to be encouraged, and certainly provide no basis for additional federal regulations.

F. Delays in Deployment are Most Often Attributable to Incomplete Applications.

While the Notice cites to delays and potential delays in siting 5G technology as its predicate for action, industry commenters fail to prove claimed delays are occurring, and more importantly, the record reveals that the large majority of delays are attributable to incomplete applications, many of which are primarily assigned to Petitioner.⁴⁵

⁴³ Smart Communities Comments, Ex. 1, CTC Declaration.

⁴⁴ *Id* at pp. 23-25.

⁴⁵ The only time any industry commenter approached the presentation of any data of delay was Sprint which stated: "Mobilitie has sought access agreements in hundreds of jurisdictions. Of those, 343 have taken more than six months to reach agreement. Of those 343 jurisdictions, 75 have taken more than a year, 11 have taken more than 18 months, and two have taken more than two years." (Sprint Comments at p. 22) Sprint does not tell us how many were granted in less than 6 months, nor the reason for any delays, i.e., how many of these were the fault of Mobilitie, and the poor engineering that we and other local

The collective comments of local governments,⁴⁶ road commissions and state highway officials,⁴⁷ as well as technical experts⁴⁸ are clear: where there appear to be problems with the speed of deployment of wireless facilities, they are most often the result of some shortcoming of an applicant that failed to file a complete application or in the alternative fails to acknowledge and address the safety concerns raised by deploying infrastructure within the public rights-of-way.⁴⁹

For instance, numerous parties commented that as a routine matter, Mobilitie has submitted cookie cutter proposals for 100-120 foot towers in the public rights-of-way, without doing any meaningful field engineering,⁵⁰ or making any significant effort to comply with state, federal or local requirements. Mobilitie CEO Gary Jabara may have explained exactly why so

government commenters demonstrated was endemic in Mobilitie applications. For instance, as to any pending applications in Montgomery County, the County's filing documents the 10 month struggle it has engaged in with Mobilitie and its ever changing staff to develop a complete application. In addition, a number of the applications submitted by Mobilitie to Montgomery County were for locations that were in municipalities and not even subject to the County approval process.

⁴⁶ See e.g., Smart Communities Comments at p. 8 ("The Cities note their experience with incomplete or otherwise deficient applications slowing down (or preventing) deployment....These delays have impacted the City's development and finalization of master lease agreements with providers for use of ROW and City-owned poles for small cell/DAS installations.")

⁴⁷ Virginia DOT Comments at p. 7; See e.g., American Association of State Highway and Transportation Officials, Comments of Maine at p. 15 and Comments of Maryland at p. 21 (filed Mar. 21, 2017).

⁴⁸ See e.g., Smart Communities Comments, Ex. 1, CTC Declaration at p. 20. (Most delays in processing an application are caused by incomplete applications.)

⁴⁹ An example of this devil may care attitude regarding the safety issues of deploying in the public rights of way may be found in an interview with Gary Jabara, CEO of Mobilitie. Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> ("Jabara Interview").

⁵⁰ Comments of Michigan Road Commission (filed by Denise S. Donohue) at p. 1 (filed Mar. 9, 2017) ("Michigan Road Commission Comments"). While Michigan's local county road agencies and others recognize the importance of expanding wireless infrastructure, it is significant to note that nowhere in Mobilitie's pending Petition for a Declaratory Ruling is safety either mentioned or addressed. See e.g. Montgomery County Comments; Comments of Houston, TX (filed Mar. 8, 2017); New York Comments; Comments of Edina, Minn. (City established a Master License Agreement to meet needs for deployment).

many Mobilitie applications looks the same, and repeat the same deficiencies. “At Mobilitie, we’ve done a good job of industrializing the process. We take 20 seconds to pop out a set of drawings based on algorithms and form factors.”⁵¹ Community needs and safety considerations are not typically found in algorithms and form factors.

While Mobilitie may develop an application in 20 seconds, the impact of these “20 second applications” is extended hours of work for local government reviewers. Most often these reviews result in the application being returned as incomplete with a detailed incompleteness notice, and a shifting of significant costs, both opportunity and real, not only to communities such as Smart Communities and other local government commenters,⁵² but also to other wireless applicants. This latter cost shift is as a result of the time and resources that might otherwise be available to process that applicant’s submission being consumed to address Mobilitie’s “20 second applications.”

III. THE WIRELESS INDUSTRY REQUESTS RELIEF THAT CANNOT BE GRANTED BY THE COMMISSION OR IS ALREADY AVAILABLE IN FEDERAL DISTRICT COURTS

Industry commenters repeat the errors of the Commission in its Public Notice,⁵³ assuming that Section 253 authorizes the Commission to take action with respect to wireless facilities siting, when Section 332(c)(7) is the sole available mechanism.⁵⁴ Further, Section 253(c) does not provide an independent means by which to regulate the rates at which local governments lease their property. And application of Section 332(c)(7) (with the exception of Section

⁵¹ Jabara Interview at p. 42.

⁵² *Id.*

⁵³ Public Notice.

⁵⁴ Smart Communities Comments at pp. 51-53; AT&T Comments at p. 6; Verizon Comments at pp. 19-20; CTIA Comments at pp. 19-27.

332(c)(7)(B)(iv)) is explicitly delegated exclusively to the federal courts by statute, foreclosing some of the remedies sought by industry.⁵⁵

A. Section 253 Doesn't Apply to Wireless Siting and Should Not Be Addressed in This Proceeding.

1. *Section 253 Doesn't Apply*

As Smart Communities explained in its initial comments and other commenters affirm, Section 332's plain language makes clear it is the only provision which applies to placement of personal wireless facilities, as does the statute's legislative history.⁵⁶ None of the industry commenters suggesting use of Section 253 make any legal arguments overcoming the plain and constrictive language of Section 332. In fact, CTIA acknowledges that the Commission has historically used Section 253 preemption authority only in particular factual circumstances.⁵⁷

As recently as last week, the D.C. Circuit warned the Commission not to infer statutory authority where there is none. In a case analogous to this one, the Commission concluded, where the statute required opt-out notices on *unsolicited* faxes but was silent about such notices on *solicited* faxes, it was free to require opt-out notices on *solicited* faxes. The court stated:

The FCC ... suggest[s] that the agency may take an action ... so long as Congress has not *prohibited* the agency action in question. That theory has it backwards as a matter of basic separation of powers and administrative law. The FCC may only take action that Congress has authorized.⁵⁸

In the present case, Section 332 is even more clear: Section 332(b)(7) is the means by which Congress directed the Commission to address wireless siting.

⁵⁵ Smart Communities Comments at p. 52.

⁵⁶ Smart Communities Comments at p. 52, San Antonio Comments at p. 11; San Francisco Comments at p. 17.

⁵⁷ CTIA Comments at p. 20.

⁵⁸ *Bais Yaakov of Spring Valley v. FCC*, 2017 U.S. App. LEXIS 5589 (D.C. Cir. 2017) (citations omitted).

As the D.C. Circuit observed, “the fact that the agency believes its ... [r]ule is good policy does not change the statute’s text.”⁵⁹

Crown Castle tries to claim application of Section 253 by arguing its network includes within it fiber optic telecommunications subject to Section 253.⁶⁰ There are two answers to that claim: first, Crown Castle ignores that the Commission has already found, in response to an argument that DAS facilities include wired and wireless components, that “[d]etermining whether facilities are ‘personal wireless service facilities’ subject to Section 332(c)(7) does not rest on a provider’s characterization in another context; rather, the analysis turns simply on whether they are facilities used to provide personal wireless services.”⁶¹ The second answer is, even were the Commission to reverse this ruling, and treat the wires as distinct from the wireless installations and not part of the wireless facilities, Crown Castle does not contend that its placement of wires has been a source of contention – and the treatment of wireline facilities is not the subject of this proceeding. Crown Castle cites the Commission’s rejection of a CTIA’s request for preemption in the 2009 Declaratory Ruling⁶² as “suggest[ing]” a broad application of Section 253,⁶³ but in that case the Commission explicitly made “no interpretation of whether and

⁵⁹ *Id.*

⁶⁰ Crown Castle Comments at p. 25 (citing *In the Matter of the Petition of the State of Minnesota for A Declaratory Ruling Regarding the Effect of Section 253 on an Agreement to Install Fiber Optic Wholesale Transp. Capacity in State Freeway Rights-of-Way*, Memorandum Opinion and Order, 14 FCC Rcd. 21697 (1999)).

⁶¹ *In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting 2012 Biennial Review of Telecommunications Regulations*, WT Docket 13-238, Report and Order, *et al.*, ¶ 271 (Oct. 21, 2014).

⁶² *In the Matter of 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 as Proposals as Requiring Variances*, Declaratory Ruling, 24 FCC Rcd. 13994, 14020 (2009) (“2009 Declaratory Ruling”).

⁶³ Crown Castle Comments at pp. 25-26 (citing 2009 Declaratory Ruling at ¶67).

how a matter involving a blanket variance ordinance for personal wireless service facility siting would be treated under Section 332(c)(7) and/or Section 253 of the Act.”⁶⁴ Nor does a speech by a Commissioner authorize agency action without statutory authority.⁶⁵

2. *Even if Section 253 Did Apply, the Commission Need Not Clarify California Payphones*

Despite the clear legal barrier to application of Section 253 in this proceeding, commenters press their case for applying Section 253 to wireless siting by manufacturing a conflict among court interpretations of the section and suggesting the Commission has the power to resolve the conflict. In fact, there is no dispute, as the City and County of San Francisco stated, “Both this Commission and the federal courts generally agree that the pertinent question under section 253(a) is ‘whether the ordinance materially inhibits or limits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment.’”⁶⁶ CTIA and Verizon cite approvingly to this standard, originating in the Commission’s *California Payphones* decision.⁶⁷ However, CTIA and Verizon attempt to create ambiguity in this clear and well-accepted standard by arguing a diversity of interpretations of this provision in case law. CTIA and Verizon claim that the Eighth and Ninth Circuits have incorrectly interpreted the Commission’s standard and incorrectly claim the Commission has

⁶⁴ 2009 Declaratory Ruling.

⁶⁵ Crown Castle Comments at pp. 25-26; CTIA Comments at p. 20 (citing then-Commissioner Pai’s speech claiming Section 253 applies to “wired or wireless service”); more relevantly and recently, now Chairman Pai has noted that “Going forward, the Commission will strive to follow the law and exercise only the authority that has been granted to us by Congress,” Statement of Chairman Ajit Pai On the Latest D.C. Circuit Rebuke of FCC Overreach (March 31, 2017), available at: https://apps.fcc.gov/edocs_public/attachmatch/DOC-344186A1.pdf. Here, Section 332(c)(7) makes clear that no other provision of the Communications Act (including Section 253) may be used to confine local authority over wireless siting.

⁶⁶ San Francisco Comments at p. 15 (citing *P.R. Tel. Co. v. Municipality of Guayanilla*, 450 F.3d 9, 15 (1st Cir. 2006); *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67 (2d Cir. 2002) both of which quote *California Payphone*, 12 FCC Rcd. 14191 (1997) (“*California Payphone*”).

⁶⁷ CTIA Comments at p. 22; Verizon Comments at p. 11 (citing *California Payphone* at 14206, ¶ 31).

authority to overturn these cases pursuant to *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967 (2005).⁶⁸ That case, however, found Commission authority to act where the statute was *ambiguous*. The Eighth and Ninth Circuits decisions are explicitly based on the *plain language* of Section 253 where the Commission receives no *Chevron* deference.⁶⁹ Moreover, these interpretations are consistent with *California Payphone* so there is no need to clarify anything.⁷⁰

Verizon suggests the First Circuit's ruling in *Puerto Rico Tel. Co. v. Guayanilla* supports its proposed standard that a local regulation has the "effect of prohibiting" where it "(1) significantly increases a carrier's costs; or (2) otherwise meaningfully strains the ability of a carrier to provide telecommunications service."⁷¹ It is not clear what this standard actually means – and indeed, it is best read as confined to the facts of the case.⁷² Applied more broadly, as proposed by Verizon, it is unsustainable as a manner of law or policy. Not only, as outlined below, does the Commission lack the authority to regulate the rent or fees paid to compensate the public for use of public land, but as explained above, the Commission also lacks authority to overturn binding judicial precedent interpreting the plain language of the statute. And even if

⁶⁸ CTIA Comments at p. 24 (citing *Level 3 Communications, L.L.C. v. City of St. Louis*, 477 F.3d 528 (8th Cir. 2007); *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571 (9th Cir. 2008)); Verizon Comments at p. 13, fn. 34.

⁶⁹ *Level 3 Communications, L.L.C. v. City of St. Louis*, 477 F.3d 528, 532-33 (8th Cir. 2007) ("under a plain reading of the statute"); *Sprint Telephony PCS v. County of San Diego*, 543 F.3d 571, 578 (9th Cir. 2008) ("our conclusion rests on the unambiguous text of § 253(a).").

⁷⁰ *Sprint v. San Diego*, 543 F.3d at 578 ("our interpretation is consistent with the FCC's. See *California Payphone*, 12 FCC Rcd. 14191, 14209 (holding that, to be preempted by § 253(a), a regulation "would have to actually prohibit or effectively prohibit" the provision of services); *Sprint v. San Diego*, 543 F.3d at 578 ("our conclusion rests on the unambiguous text of § 253(a) Were the statute ambiguous, we would defer to the FCC under *Chevron*....").

⁷¹ Verizon Comments at 12 (*Puerto Rico Tel. Co.*, 450 F.3d at 19 found that it constituted an effective prohibition because it would "negatively affect [the provider's] profitability;" give rise to "a substantial increase in costs for [the provider];" and "place a significant burden on [the provider]," thereby "strain[ing the provider's] ability to provide telecommunications services.").

⁷² See, n. 85 *infra*.

these were not bars to action, it would make little sense to upset the appellate and reinterpret Section 253 after the vast majority of the federal judiciary has adopted the Commission's view in *California Payphones*, which would only serve to cause delay through uncertainty and litigation, while presumably dampening investment in 5G networks.⁷³

B. Further Commission Interpretation of Section 332(c)(7) Via Declaratory Ruling is Not Permitted or Necessary; and In Any Case this Proceeding is Fatally Flawed.

1. *Interpreting Section 332(c)(7) Must be Done Via Rulemaking*

While CTIA encourages the Commission to adopt a range of additional declaratory rulings pursuant to Section 332(c)(7)⁷⁴ and the Commission has acted in the past to adopt particular guidance pursuant to declaratory rulings under Section 332(c)(7), Section 332(c)(7) explicitly directs parties dissatisfied under Section 332(c)(7) to commence an action in any court

⁷³ Not only is the Commission barred from adopting Verizon's proposal, but Verizon is incorrect in its interpretation of *P.R. Tel Co.* supports a broad rule which would be met if a rule "increased a carrier's costs." This interpretation would be inconsistent with the Supreme Court's interpretation of the Act's language: the Court interpreted the word "impair" under the Communications Act to require more than a showing of an increase in costs, *AT&T v. Iowa Utilities Board*, 525 U.S. 366, 389-390 (1999); thus the more-absolute term under the Act—effect of "prohibiting"—would require a telecommunications company complaining about a local requirement to show much more than that the local requirement increases its costs – even if doing so created a "strain" on the company. Moreover, Verizon is wrong to suggest a new test based solely on the facts in *P.R. Tel Co.* because under the facts of that case, the court accepted as given the untested assumption that the provider would see an 86 percent decrease in profit. Such a unique factual scenario is inappropriate for a generalized test to replace the widely-accepted *California Payphones* test.

⁷⁴ CTIA Comments at pp. 33-37; Crown Castle Comments at p. 31.

of competent jurisdiction,⁷⁵ and only grants authority to the Commission for considering disputes with regard to Radio Frequency (“RF”) emissions.⁷⁶

Even if the Commission believes it has authority under Section 332(c)(7), it should heed the warning of the Fifth Circuit and call this proceeding what it is: a rulemaking. When reviewing the Commission’s adoption of shot clocks under Section 332, the Fifth Circuit questioned the denomination of “declaratory ruling,” because it “harbor[ed] serious doubts as to the propriety of the FCC’s choice of procedures,” finding that the Commission should have termed the proceeding a rulemaking rather than a declaratory ruling because it “b[ore] all the hallmarks of products of a rulemaking” by affecting “the rights of broad classes of unspecified individuals.”⁷⁷ Reviewing in detail a number of D.C. Circuit cases considering the appropriate use of rulemaking vs. declaratory rulings, the Fifth Circuit stated:

these cases involved concrete and narrow questions of law the resolutions of which would have an immediate and determinable impact on specific factual scenarios. Here, by contrast, the FCC has provided guidance on the meaning of § 332(c)(7)(B)(ii) and (v) that is utterly divorced from any specific application of the statute. The time frames’ effect with respect to any particular dispute arising under § 332(c)(7)(B)(ii) will only become clear after adjudication of the dispute in a court of competent jurisdiction. *This is classic rulemaking.*⁷⁸ (emphasis added)

⁷⁵ Contrary to the contention of Crown Castle and CTIA (Crown Castle Comments at fn 49; CTIA pp. 36-37, 41), the Supreme Court’s ruling in *City of Arlington* did not address whether the Commission has authority to interpret Section 332(c)(7), and instead stands for the proposition that a court should grant *Chevron* deference to “an agency’s determination of its own jurisdiction.” *City of Arlington v. FCC*, 133 S. Ct. 1863, 1867-68 (2013). The Supreme Court rejected a local government argument that interference with local matters implicates whether the Commission deserved *Chevron* deference, not whether the Commission has authority to issue local land use permits.

⁷⁶ 47 U.S.C. § 332(c)(7)(B)(v).

⁷⁷ *City of Arlington v. FCC*, 668 F.3d 229, 242 (5th Cir. 2012) aff’d in part 133 S. Ct. 1863 (2013) (quoting *Yesler Terrace Cmty Council v. 51 Cisneros*, 37 F.3d 442, 448 (9th Cir. 1994)).

⁷⁸ *Id.* at 243 (citations omitted).

The Fifth Circuit ultimately found that because the Commission followed the procedural requirements of notice and comment rulemaking and that process was subject to judicial review pursuant to the Administrative Procedure Act, it was harmless error.⁷⁹ Nonetheless, it is inappropriate for the Commission to continue operating under a fiction that it is issuing a declaratory ruling when, in fact, it is conducting a rulemaking and a federal court has made that clear to the agency. Further, while the Fifth Circuit found the Commission's actions were harmless error in previous proceedings, there is no guarantee other circuits will concur. Here, where we do not have a clear indication as to what rules the Commission is considering – and where there are dozens of suggestions – the failure to identify rules in advance is not harmless error, particularly when combined with the other procedural errors identified.

2. *No Further Interpretation of Section 332(c)(7)'s Prohibition Standard is Necessary.*

Commenters and the Commission agree that most courts have come to a common interpretation of Section 332(c)(7): “[c]ourts generally agree that a carrier may establish that a land-use authority’s denial of its siting application ‘prohibits or has the effect of prohibiting’ the provision of service by showing that it has a significant gap in service coverage in the area and a lack of feasible alternative locations for siting facilities.”⁸⁰ According to the Commission and industry commenters, the courts have not necessarily developed consensus “about the showings needed to satisfy this standard.”⁸¹ The application of a legal standard to facts is the precise scenario where case-by-case decision-making is required—not general standards or prescriptive

⁷⁹ *Id.*

⁸⁰ Public Notice at p. 10; Verizon Comments at p. 21.

⁸¹ *Id.*

national rules. Localized zoning decisions and their real-world impacts on provider offerings are well-suited to district court proceedings to ascertain facts and apply relevant legal standards.

Verizon argues that the federal courts have incorrectly interpreted Section 332's effective prohibition section by requiring the provision to be met only if there is a "significant gap" in wireless service, stating that a gap is no longer the standard, instead it is a gap in an ever-increasing quality level of service.⁸² The Commission has already addressed the courts' interpretations of this standard, ensuring that the courts which address this issue promote competition.⁸³

3. *This Proceeding Is Not Being Conducted In Accordance With Rules Governing Declaratory Rulings, and It is Doubtful Mobilitie Can Pursue a Declaratory Ruling*

In addition to the obligations established by the Communications Act⁸⁴ and the Administrative Procedures Act⁸⁵ that an applicant bears the burden of proof in a proceeding, a standard we have demonstrated in our initial Comments and above has not been met, in the instant matter. Mobilitie, as petitioner,⁸⁶ has also failed to comply with the Commission's rules on service.

Note 1 to Section 1.1206(a) of the Commission's Rules reads in full:

⁸² Verizon Comments at pp. 21-22.

⁸³ 2009 Declaratory Ruling.

⁸⁴ See e.g. 47 USC §309 "...The burden of proceeding with the introduction of evidence and the burden of proof shall be upon the applicant...."

⁸⁵ See 5 USC § 556 (d). "Except as otherwise provided by Statute, **the proponent of a rule or order has the burden of proof.**" (emphasis added) What the Petitioner and industry seek in the instant matter is equivalent to a request for summary judgment under Rule 56 of the Federal Rules of Civil Procedure. While the Commission is not a Court, and Congress made clear that it was not to serve as a Court for Section 332 or 253 matters, it should at least be aware of the standards that the proper entity reviewing this matter would apply and that is "...that there is no genuine dispute as to any material fact and the movant is entitled to judgement as a matter of law." FRAP §56(a).

⁸⁶ *Promoting Broadband for All Americans by Prohibiting Excessive Charges for Access to Public Rights of Way*, WT 16-421, Petition for Declaratory Ruling (filed Nov. 15, 2016).

In the case of petitions for declaratory ruling that seek Commission preemption of state or local regulatory authority and petitions for relief under 47 U.S.C. 332(c)(7)(B)(v), the petitioner must serve the original petition on any state or local government, the actions of which are specifically cited as a basis for requesting preemption. Service should be made on those bodies within the state or local governments that are legally authorized to accept service of legal documents in a civil context. Such pleadings that are not served will be dismissed without consideration as a defective pleading and treated as a violation of the ex parte rules unless the Commission determines that the matter should be entertained by making it part of the record under Sec. 1.1212(d) and the parties are so informed.

The Public Notice⁸⁷ incorporated Mobilitie's petition by reference and explicitly incorporated some of the petition's allegations as the basis for action. Neither Mobilitie nor the Commission followed Commission rules requiring service of the original petition on any state or local government, the actions of which are specifically cited as a basis for requesting preemption. The Commission should dismiss without consideration Mobilitie's petition and withdraw the tainted Notice as both are defective.

Note 1 to Section 1.1206(a) provides for a cure by the Commission of notifying maligned parties of the allegations against them under Sec. 1.1212(d). Neither the Commission, nor Mobilitie, effected such a cure. In fact, the Commission denied a local government request⁸⁸ for additional time to alert maligned communities and seek their input.

Should the Commission choose not to dismiss this proceeding due to the violations of Note 1 to Section 1.1206(a), the Commission should nevertheless delay these proceedings until each of the maligned communities has been identified and served. If the Commission is to remain true to its mission of making data driven decisions, it is imperative that it have both

⁸⁷ Public Notice.

⁸⁸ Order Denying Extension to File Comments, WT 16-421, at ¶ 3 (Mar. 29, 2017) ("We also are not persuaded by the Petitioners' claim that the existence of non-specific allegations in the record about some local governments' conduct that do not identify the entities that allegedly engaged in such conduct is a sufficient ground for granting an extension of time for reply comments.").

sides of every story.⁸⁹ The failure of Mobilitie and other industry commenters to name, let alone serve, local maligned state and local governments also leaves any Commission action subject to a claim of being arbitrary and capricious because the inevitable result is the failure to develop a full record, particularly as many of the items it seeks to address are outside of the authority Congress has delegated to the Commission.⁹⁰

The Supreme Court in *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*⁹¹, (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S. Ct. 2856, 77 L. Ed. 2d 443 (1983)) was clear in its standard: “We will uphold the regulations if the FCC has ‘examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.’ Agency action is arbitrary and capricious only if the agency: has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”⁹²

⁸⁹ For instance, while Mobilitie complains about delays in a Maryland locality, we learn from the Comments of Montgomery County that it has spent 10 months assisting Mobilitie file a single complete application due to staff changeover and the institutional weaknesses of the Mobilitie siting practice. The Mobilitie allegation is the abstract might appear an indicatable offense, however, when seen in light of Montgomery County’s detailed facts, one must question the credibility of the allegations. When further seen in light of similar stories the nation over, one becomes convinced that Montgomery County’s account is the more accurate portrayal of the facts.

⁹⁰ The Petition seeks, and the Notice invites, comments on the federal preemption of state and local regulatory authority by establishing federal caps on permit costs, rents and timelines for action on zoning applications and “deeming” these applications granted if the federal timetables are not met. The vast majority of these issues have been assigned by Congress to the federal judiciary, not the Commission.

⁹¹ *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*, 419 U.S. 281, 286 (1974).

⁹² *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983).

In the instant proceeding, should the Commission act on unserved allegations against state and local governments without giving them notice and an opportunity to respond, it will fail to meet the Court’s test to have “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”⁹³

Moreover, recent representations by Mobilitie to local communities suggest that Mobilitie is not even in a position to assert rights under either Section 253 or 332(c)(7). Smart Communities’ member, the City of Laurel, Maryland, recently asked Mobilitie, (operating as Technology MD Network Company), in response to a request to put large towers in the public rights-of-way to address whether and when it would move forward with the filings required under the Nationwide Programmatic Agreements. Mobilitie’s response suggested that it was seeking approval for placement of towers, but will treat the addition of wireless facilities as a “collocation” to an existing facility – meaning, apparently, that Mobilitie is seeking the right to build a structure divorced from the provision of any service or facility that would be governed by federal law. It can claim no rights under Section 332(c)(7) or Section 253, much less a right to declaratory relief if this is the case.

C. The Commission Should Reject Specific Proposed Standards Under Section 332(c)(7).

1. *The Commission Cannot Adopt a Deemed Granted Solution*

CTIA, Verizon and Crown Castle support Commission adoption of a “deemed granted” remedy for applications not already covered by Section 6409(a).⁹⁴ CTIA argues that the Commission has authority for such an action by citing to the Commission’s general rulemaking

⁹³ *Id.*

⁹⁴ CTIA Comments at pp. 39-43; Verizon Comments at pp. 23-26; Crown Castle Comments at pp. 35-37.

authority,⁹⁵ and claims particular authority under Section 706(b)⁹⁶ but does not begin to address the fact that the Commission has no authority to issue local land use permits, safety inspections, or other necessary local approvals. Congress does not have the “ability to commandeer local regulatory bodies for federal purposes.”⁹⁷

Nor does the industry recognize the difference between the statutory language in Section 6409 and Section 332(c)(7). Section 332 is very different from Section 6409 and, as described below, the Fifth Circuit in *City of Arlington* explicitly found that the shot clock provisions adopted by the Commission were a presumption only to be used in fact-finding by the courts, to whom enforcement of Section 332(c)(7) is confined.⁹⁸ Further, Section 6409 contains very different statutory language from Section 332(c)(7) and is limited to a much smaller set of questions. Specifically Section 6409(a) states “a State or local government may not deny, and shall approve, any eligible facilities request” but Section 332(c)(7) does not contain the phrase “shall approve.”⁹⁹ Thus, Section 6409 is very different from Section 332(c)(7) and the rules implementing Section 6409 cannot be imported into Section 332(c)(7). The Commission itself

⁹⁵ CTIA Comments at p. 40, fn 90.

⁹⁶ CTIA Comments at p. 41, fn 91. Section 706(b) does not address mandates against local governments in any form.

⁹⁷ *Cablevision, Inc. v. Public Improvement Comm’n*, 184 F.3d 88, 105 (1st Cir. 1999) (citing *Printz v. United States*, 521 U.S. 898, 934, 138 L. Ed. 2d 914, 117 S. Ct. 2365 (1997) (“The Federal Government may [not] issue directives requiring the States to address particular problems”); *id.* at 961 (Stevens, J., dissenting) (agreeing that the notion of “cooperative federalism” does not include a direct “mandate to state legislatures to enact new rules”); *id.* at 975 (Souter, J., dissenting) (agreeing with the majority that “Congress may not require a state legislature to enact a regulatory scheme”)). As noted above, *supra* note 75, *City of Arlington* determined the extent of *Chevron* deference and did not directly address the Commission’s authority to override the Tenth Amendment rights of states and localities no matter the dicta to the contrary. CTIA Comments at p. 41.

⁹⁸ *See infra*.

⁹⁹ *Cf.* 47 U.S.C. § 1455(a) with 47 U.S.C. § 332(c)(7).

found a “deemed granted” remedy would not be appropriate because of Congressional intent and the importance of a fact-based analysis regarding any particular challenge:

This provision indicates *Congressional intent that courts should have the responsibility to fashion appropriate case-specific remedies*. [T]he case law does not establish that an injunction granting the application is always or presumptively appropriate when a “failure to act” occurs. To the contrary, in those cases where courts have issued such injunctions upon finding a failure to act within a reasonable time, they have done so only after examining all the facts in the case. While we agree that injunctions granting applications may be appropriate in many cases, the proposals in personal wireless service facility siting applications and the surrounding circumstances can vary greatly. It is therefore important for courts to consider the specific facts of individual applications and adopt remedies based on those facts.¹⁰⁰

While in considering Section 6409, the Fourth Circuit did not agree that the shot clock violated the Tenth Amendment rights of states, but the Fourth Circuit did not consider the role of the federal courts in the Section 332 scheme.¹⁰¹ “The general principle is ‘that Congress cannot compel the States to enact or enforce a federal regulatory program.’”¹⁰² “The doctrine explicitly does not affect ‘the power of federal courts to order state officials to comply with federal law’ because ‘the Constitution plainly confers this authority on the federal courts.’”¹⁰³ Congress delegated to the courts the right to enforce Section 332, thus ensuring that the appropriate branch of government would be in the position to direct the grant of a particular local land use permit.

Verizon is incorrect that the deemed granted remedy the Commission adopted pursuant to Section 621 is relevant.¹⁰⁴ In that instance, the Commission adopted an interim deemed granted

¹⁰⁰ 2009 Declaratory Ruling at ¶39 (emphasis added).

¹⁰¹ *Montgomery County v. FCC*, 811 F.3d 121, 129 (4th Cir. 2015).

¹⁰² *Dakota, Minn. & R.R. Corp. v. South Dakota*, 362 F.3d 512, 518 (8th Cir. 2004) (quoting *Printz*, 521 U.S. at 935, reaffirming *New York*, 505 U.S. at 161).

¹⁰³ *Id.*, quoting *New York v. U.S.*, 505 U.S. 144, 179 (emphasis in the original).

¹⁰⁴ Verizon Comments at p. 25.

order until the local franchising authority issued a franchise.¹⁰⁵ An interim deemed granted remedy is a vastly different remedy from a permanent form of relief. Further, the reviewing court did not consider whether the interim deemed granted remedy improperly violated local and state governments' Tenth Amendment rights.¹⁰⁶

2. *The Commission Should Not Adopt Shot Clocks for DAS.*

The Commission should not adopt new shot clocks for DAS facilities or small cells generally, or a different standard for acting upon applications. As Smart Communities showed in their initial filing, and as shown in the “Definitions of Small Cells, and the Review of Small Cell Applications, Supplemental Report”¹⁰⁷ by Andrew Afflerbach of CTC Technology and Energy included with this reply, there is no sound factual basis for doing so, and given the number of applications that are being filed in batch, it is wise to maintain a regime under which both parties have an incentive to work together to establish practical timelines for actions on proposed installations that may present particular issues. As the Fifth Circuit found in *City of Arlington*, that existing shot clocks operate merely as the “bursting-bubble” theory of presumption, under the Federal Rules of Evidence where “the only effect of a presumption is to shift the burden of producing evidence with regard to the presumed fact. If the party against whom the presumption operates produces evidence challenging the presumed fact, the presumption *simply disappears*”¹⁰⁸ This not only avoids constitutional problems and issues

¹⁰⁵ *Alliance for Cmty. Media v. FCC*, 529 F.3d 763 (6th Cir. 2008).

¹⁰⁶ *Id.* at 778-780.

¹⁰⁷ CTC Reply Report, Exhibit 2.

¹⁰⁸ *City of Arlington v. FCC*, 668 F.3d 229, 258 (5th Cir. 2012) *aff'd* in part 133 S. Ct. 1863 (2013) (emphasis added) (“The time frames do provide the FCC’s guidance on what periods of time will generally be ‘reasonable’ under the statute ... and they might prove dispositive in the rare case in which a state or local government submits no evidence supporting the reasonableness of its actions. But in a contested case, courts must still determine whether the state or local government acted reasonably under the circumstances surrounding the application at issue.”).

of statutory interpretation, it results in both sides viewing the burdens presented by applications realistically. This limited approval of shot clocks by the courts shows, as explained above, that a more extreme version of a shot clock with a “deemed granted” component would not be appropriate or lawful for Section 332.¹⁰⁹

IV. THE COMMISSION CANNOT AND SHOULD NOT DECLARE PUBLIC RIGHT-OF-WAY ACCESS MUST BE BASED ON INCREMENTAL COSTS OR ANY OTHER COST MEASURE.

A. The Commission Does Not Have Authority to Regulate Under Section 253.

1. *If the Commission Attempts to Apply Section 253 to Wireless Siting, It Must Recognize That Section 253(c) Is a Savings Clause or Safe Harbor, and Not An Authorization to Regulate.*

As discussed above in Section III.A, Section 253 does not apply to wireless siting. If the Commission nonetheless attempts to apply Section 253 to DAS, then the Commission must follow the plain language in Section 253(c), which makes clear it is a savings clause or safe harbor, working in conjunction with Section 253(a) to protect the rights of local governments to manage and charge compensation for use of public rights-of-way.¹¹⁰ Comments make clear federal courts almost uniformly find Section 253(c) to be a savings clause or safe harbor which permits state or local governments to adopt rules that might otherwise be considered inconsistent with Section 253(a).¹¹¹ The Commission is not free to overturn this explicit statutory directive to

¹⁰⁹ Notably, the current leading federal legislative proposal to address these issues, the Mobile Now Act, adopts a 270 day deadline for federal approval of communications facility installations. Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless Act (S.19, 115th Cong., §6(b)(5)(a) (2017)) available at https://www.commerce.senate.gov/public/_cache/files/dc139eec-a303-47bf-88f8-6abe64325cb1/B30EF9FCB7D36BB155D45356D42F5F7E.mobile-now-text.pdf (the “Mobile Now Act”).

¹¹⁰ Section III.B

¹¹¹ San Antonio Comments at pp. 27-28; San Francisco Comments at pp. 15-16. *Level 3 v. St. Louis*, 477 F.3d 528, 532 (8th Cir. 2007) (finding that because 253(c) begins with “nothing in this section,” it is not “self-sustaining” 253(a) is a general rule of preemption and 253(c) creates a safe harbor) (citing *NJ*

regulate public right-of-way compensation. CTIA's citation to Senator Gorton's statements in the legislative history is unavailing.¹¹²

2. *Market Value is "Fair and Reasonable"*

If the Commission were to find Section 253(c) relevant to the placement of wireless facilities, Smart Communities' initial comments made clear that sound policy dictates compensation for use of a public right-of-way should reflect market value because it will promote competitive and economically efficient use of scarce resources.¹¹³ Industry commenters do not refute these economically and factually sound arguments. Instead, CTIA, Verizon, Sprint, and Crown Castle attempt to use Section 253 where it does not apply and argue that the Commission should interpret Section 253 to limit localities to cost-based compensation.¹¹⁴ As Smart Communities explained in our initial comments, localities' charges for the use of public rights-of-way can be divided into two categories: (1) fees which generally are limited by state or

Payphone, 299 F.3d at 240 (3d Cir. 2002); *Bellsouth v. Palm Beach*, 252 F.3d 1169, 1188 (11th Cir. 2001) ("it is clear that subsections (b) and (c) were added to the statute to preserve, rather than to limit, state and local government authority"); *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67, 77 (2d Cir. 2002) (§ 253(c) is a savings clause)). While the Sixth Circuit found in *TCG Detroit v. Detroit*, 206 F.3d 618, 624 (6th Cir. 2000) that 253(c) creates a private right of action, it focused more on whether relief could be found in federal court. The Sixth Circuit has not directly addressed the contrary findings in other circuits.

¹¹² See CTIA Comments at 19. Senator Gorton was quite clear that the Commission had no role, and that challenges would be heard on a case-by-case basis: "There is no preemption, even if my second-degree amendment is adopted, Mr. President, for subsection (c) which is entitled, 'Local Government Authority,' and which is the subsection which preserves to local governments control over their public rights of way." 141 Cong. Rec. S 8206, 8212 (daily ed. June 13, 1995). At least one court has confirmed this interpretation. *Qwest Communs. Corp. v. Maryland-National Capital Park & Planning Comm'n*, 2010 U.S. Dist. LEXIS 47009 at 20 (D. Md. 2010) (Senator Gorton's comments show that the exclusion of subsection (c) was intended to restrict the preemptive authority of the FCC, not to create a right in telecommunications providers to sue for damages under subsection (c)).

¹¹³ Smart Communities Comments at pp. 37-40; See Exhibit 3, attached, the Reply Declaration of Kevin E. Cahill, PhD, Regarding the Accenture Report and the Economics of Local Government Right of Way Fees, p. 3 ("ECONorthwest Reply Report").

¹¹⁴ Verizon Comments at pp. 14-17.

local law to cost-based administrative fees for processing and (2) rent, which is determined by market value.¹¹⁵

Initial comments demonstrate that not only is market value reasonable, it is often legally required by state constitutions or by federal regulation for the just treatment of taxpayers. For example, as the Virginia Department of Transportation explains it has “spent many millions of dollars acquiring ROW throughout the Commonwealth” and because majority of these acquisitions were made using federal funds, VDOT must comply with federal rules, including a USDOT regulation that requires that all property interests obtained with funding under Title 23, the use or disposal of such interests must be for “current fair market value.”¹¹⁶ Further, as articulated in our initial comments, many state constitutions include “gift clauses” which prohibit a locality from subsidizing a private entity as a way to protect taxpayer funds.¹¹⁷ The Commission has no authority to require state or federal taxpayers to subsidize the business plans of wireless companies.

Crown Castle acknowledges localities have proprietary control over their property in some cases, but argues that the public rights-of-way are public goods held in public trust and are not the same as leasing, for example, the roof of a school.¹¹⁸ Crown Castle cites no authority for the proposition that public rights-of-way are held in public trust for its private use without full compensation (it would be an odd trust indeed that turned trust property over to third parties

¹¹⁵ Smart Communities Comments at p. 59.

¹¹⁶ VA DOT Comments at pp. 3-4 (citing 23 C.F.R. §710.403(e)); AASHTO Comments at p. 2.

¹¹⁷ Smart Communities Comments at p 58; *see also* Frederick Ellrod III & Nicholas P. Miller, 26 Seattle Univ. L.Rev. 475, 490 (2003); Richard Briffault, The Disfavored Constitution: State Fiscal Limits and State Constitutional Law, 34 Rutgers L. J. 907 (2003) (“State constitutions limit the purposes for which states and localities can spend or lend their funds.... These provisions may be said to constitutionalize a norm of taxpayer protection.”)

¹¹⁸ Crown Castle Comments at pp. 26-27.

without compensation, or worse, for amounts that do not even fully recover costs); or that suggests a local government, when acting as “trustee” and providing access to a private party, is not acting in a proprietary capacity. And the case *Crown Castle* does cite, while discussing the roof of a school, is not limited to such property and explicitly holds, “the Telecommunications Act does not preempt nonregulatory decisions of a local governmental entity or instrumentality acting in its proprietary capacity.”¹¹⁹

CTIA and Verizon attempt to rely on a Black’s Law Dictionary definition of compensation to conclude that “compensation” is limited to recover injury or costs, although Verizon appropriately acknowledges that compensation also means “remuneration in return for services rendered.”¹²⁰ In this instance services rendered are no different from a property owner leasing land or building space, and Section 253(c) does not use the term “cost.” Importing the term “cost” into the Commission’s interpretation of the statute is without statutory foundation – at least if by “cost” one uses the term (as industry does) to mean out-of-pocket costs.

CTIA relies on a variety of cases which interpret the Section 253(c) savings clause to cost-based compensation.¹²¹ In many cases, the limitation is actually a function of state law limits on local authority, not a federal law limitation. Even if Section 253(c) were applicable to wireless facilities, *Smart Communities* showed in our initial comments that the legislative history

¹¹⁹ *Sprint Spectrum L.P. v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002). In fact, the cases the Second Circuit relies on this ruling are labor law cases. It is true that the court notes that this case constituted a single high school roof, but the court used the following tests, both of which point toward affirmation of most local ordinances which seek rent for use of public property because in most cases a locality will be acting as a landlord seeking to maximize value and would not be making policy through compensation schemes: “(1) whether ‘the challenged action essentially reflects the entity’s own interest in its efficient procurement of needed goods and services, as measured by comparison with the typical behavior of private parties in similar circumstances,’ and (2) whether ‘the narrow scope of the challenged action defeats an inference that its primary goal was to encourage a general policy rather than address a specific proprietary problem’).”

¹²⁰ Verizon Comments at p. 15; CTIA Comments at p. 29, fn 56.

¹²¹ *Id.* at pp. 28-33.

demonstrates Congressional intent not to govern the rates which localities charge, only the fairness of the charge among competitors,¹²² and several lines of cases clearly hold that municipalities have the authority to charge rent.¹²³ CTIA relies extensively on *Bell Atlantic v. Prince George's County*, but that decision is no longer good law.¹²⁴ Further, just because cost-based fees have been found to be reasonable in other contexts, it does not follow that *only* cost-based fees are reasonable under Section 253(c).¹²⁵ As demonstrated above, localities are often required to obtain fair market value for public property. Sprint seems to say that local taxpayers should subsidize a private, competitive service with below-market access to the physical property needed for those businesses.¹²⁶

CTIA, Crown Castle, and Verizon further argue that the Commission should proscriptively invalidate fees that are based on a percentage of a provider's revenue.¹²⁷ This request is not grounded in the rulings of most courts considering the issue, many of which have upheld percentage-based fees, and have properly looked instead to see whether the fees violate 253(a).¹²⁸

¹²² *Id.*

¹²³ Smart Communities Comments at pp. 60-61.

¹²⁴ *P.R. Tel. Co. v. Municipality of Guayanilla*, 283 F. Supp. 2d 534 (Dist. of Puerto Rico 2003) (the holding in *Bell Atlantic-Maryland, Inc. v. Prince George's County, Maryland*, 49 F. Supp. 2d 805 (1999), with regard to the appropriate level of compensation under Section 253(c) is no longer good law because it has been vacated) *aff'd* 450 F.3d 9 (1st Cir. 2006).

¹²⁵ See Verizon Comments at p. 15, fn 38.

¹²⁶ Sprint Comments at p. 34.

¹²⁷ CTIA Comments at p. 32; Crown Castle Comments at p. 28; Verizon Comments at pp. 16-17. . See e.g., Comments of the Texas Municipal League at pp. 5-8 (filed March 8, 2017).

¹²⁸ *P.R. Tel. Co. v. Municipality of Guayanilla*, 450 F.3d 9, 35 (1st Cir. 2006) (most courts have not found gross revenue fees or other non-cost based fees to be per se invalid under § 253(c)) (citing *Qwest Comms. Inc. v. City of Berkeley*, 433 F.3d 1253, 1257 (9th Cir. 2006); *TCG Detroit v City of Dearborn* 206 F.3d 618, 624-25 (6th Cir. 2000); *City of Santa Fe*, 380 F.3d at 1273; *TCG N.Y., Inc. v. Shite Plains*, 305 F.3d 67, 77-78 (2nd Cir. 2002)) (quotations omitted). The request is not only based on a misreading of the law, it fails to recognize that a gross revenues based fee may often be an appropriate way to obtain

Beyond arguing against percentage-based fees, Sprint and Verizon seek to have the Commission develop a comprehensive set of rules governing every aspect of what could constitute cost.¹²⁹ This extensive list demonstrates the complexity of any Commission decision to start down the road of limiting localities to cost-based compensation as Smart Communities warned in its initial comments.¹³⁰ And while Sprint argues that obtaining the full value of local government property is shortsighted,¹³¹ the taxpayers who paid for the land might not agree even if it is within the local government's power to offer below-market rates.

Verizon argues that the phrase “fair and reasonable” is ambiguous and the Commission should receive *Chevron* deference to interpret it.¹³² But, as we showed in our initial comments, the term defines a range of possible rates, and by definition permits a rate that reflects the market value of property – what a willing buyer will pay a willing seller. Section 253(c) does not authorize the Commission to set rates, or require use of a particular mechanism for calculating rates, as requested by the industry. Setting a particular formula would not only be unlawful, it would be unwise, as state constitutions and other federal agencies have interpreted their own statutes to determine what kind of compensation should be obtained by local governments for their public rights-of-way. The Commission should not (and in the case of federally-funded public rights-of-way, cannot) ignore the widespread consensus about the appropriate disposition of public property.¹³³

compensation for the value of property used – and is commonly used in competitive markets to that end. *See, e.g.* Smart Communities Comments, Declaration of ECONorthwest, Ex. 2 at ¶33.

¹²⁹ Sprint Comments at pp. 36-41; Verizon Comments at pp. 16-17.

¹³⁰ Smart Communities Comments at p. 40.

¹³¹ Sprint Comments at p. 34.

¹³² Verizon Comments at p. 15.

¹³³ When two agencies have jurisdiction, *Chevron* deference is, at best, uncertain. *See generally* Russell L. Weaver, Deference to Regulatory Interpretations: Inter-Agency Conflicts, 43 Ala. L. Rev. 35 (1991)

3. *Local Governments Do Not Possess a “Monopoly” Over Land Suitable for Wireless Facilities*

Providers seek to argue two sides of the same coin. At the same time they explain that small cell wireless facilities are small, unobtrusive and easy to place in a variety of situations, they also argue that local governments have a monopoly on land suitable for these facilities.¹³⁴ Even in the case of relatively large, facilities proposed by Mobilitie and others, it is simply not true that local governments hold a monopoly over the potential locations for towers and other facilities. In just two examples, billboards and broadcast towers exist all over the United States and these are often located outside public rights-of-way. The small size of some DAS facilities make these the perfect choice for siting on private land. Indeed, that is where the industry originated, with in-building DAS installations. Providers may complain about the difficulty or alleged delays in dealing with local government, but nothing stops these providers from using private property for their facilities.¹³⁵

V. INDUSTRY COMMENTERS FAIL TO ADDRESS THE CHALLENGES OF SITING WIRELESS FACILITIES IN THE PUBLIC RIGHTS-OF-WAY

The public must always be considered first and foremost when placing objects in the road right-of-way; especially large monopolies. In addition, the transfer of costs to road agencies by limiting how road agencies are able to recoup costs for managing the public right-of-way and for reviewing and issuing permits would stretch road budgets that are already spread ultra-thin. Subsidizing any industry, especially those affiliated with for-profit unregulated services, is

¹³⁴ Sprint Comments at p. 33.

¹³⁵ The Smart Communities fully addresses monopoly claims in the expert reports attached to their initial comments. The industry submits no factual or credible economic arguments that support classification of public rights of way as “monopolies” where wireless facilities are concerned.

simply not a viable option to agencies across the state, like the Ottawa County Road Commission.¹³⁶

The concerns of the Ottawa County Road Commission are echoed in the numerous comments of state and local highway authorities that have filed in this docket.¹³⁷ The number and quality of these filings is perhaps the best evidence of the safety concerns these entities have with regard to the deployment of infrastructure within the public rights-of-way.

The concerns of these highway professionals and the engineering and planning community that serve them stands in stark contrast when juxtaposed to silence of the industry comments and Notice, which fail to even raise the issue of safety when discussing the deployment of infrastructure within the public rights-of-way. It is perhaps the failure of the Bureau and the industry to realize just how serious these issues are that resulted in the unprecedented participation of the road community in this docket.

As part of its comments, Smart Communities engaged Puuri Engineering, LLC to review for the Commission the numerous safety issues that must be addressed before allowing the placement of any new structure in the public rights-of-way, whether categorized as a small cell or not, as such a deployment can raise significant issues for roadway engineering, safety, and coordination with other utilities.¹³⁸ These same points are raised in the numerous filings of highway community¹³⁹ and strongly agrees with the numerous state and local departments of

¹³⁶ Ottawa Comments at p. 1.

¹³⁷ See e.g., Comments of Kansas DOT (filed Mar. 3, 2017); VA DOT Comments; Comments of Illinois Department of Transportation (filed Mar. 22, 2017); American Association of State Highway and Transportation Officials (filed Mar. 21, 2017) including supportive statements from the state Departments of Transportation of Georgia, Maine, Maryland, Michigan, Missouri, New Mexico, North Dakota, Oregon, South Dakota, Texas, Utah, Vermont (collectively “Highway Community Filings”).

¹³⁸ See Smart Cities Comments at pp. 150- 192, Ex. 4, Puuri Declaration.

¹³⁹ See Highway Community filings *supra* at note 136.

transportation that counsel that the “..Federal Communications Commission ...[should] ... make no changes to FCC rules that would diminish the role of the local county road agency when it comes to implementation and expansion of the local wireless infrastructure network. County road agencies are concerned first and foremost, and are statutorily charged with, the safety of the motoring public. While Michigan’s local county road agencies recognize the importance of expanding wireless infrastructure, it is significant to note that nowhere in Mobilitie’s pending Petition for a Declaratory Ruling is safety either mentioned or addressed.”¹⁴⁰

But it is not just local road agencies that counsel against preemption: “[I]ndividual states should be permitted to develop their own statutory and regulatory approaches designed to address the individual needs and circumstances of the particular state, and to protect the safety of the users of the roadways adjacent to the rights-of-way, as the Commonwealth of Virginia ...has done.”¹⁴¹ For instance, the Virginia Department of Transportation explained: “There has been no demonstration of a nation-wide problem that warrants a “one size fits all” solution as Mobilitie, LLC requests in its Petition for Declaratory Ruling.”¹⁴²

Indeed, the Notice and industry commenters ignore the ongoing and unavoidable risks to public safety that placement of new structures in the public rights-of-way generate. They further fail to address the financial and operational impact such new facilities have, including:

- Long-term stresses on the roadbed,
- Drainage interference,
- Enhanced expenses for maintenance or expansion of the roadway, or

¹⁴⁰ Ottawa Comments at p. 1.

¹⁴¹ Virginia DOT Comments at p. 1.

¹⁴² *Id.* See also, Exhibit II of Virginia DOT’s filing which provides diagrams of selected utility pole collisions and their impact.

- Improve other utilities.¹⁴³

Expert testimony in the record documents each of these concerns¹⁴⁴ and the Commission cannot move forward in this proceeding until each has been addressed. Long term harm to roadbeds, and hazards will predictably result in billions of dollars of loss to the economy, including in small communities.¹⁴⁵ And, these costs do not even include the potential costs to adjoining properties and property owners, or other externalities that may be associated with the placement of wireless facilities.¹⁴⁶

Commissioner Michael O’Rielly testified before the U.S. Senate Committee on Commerce, Science and Transportation that a major objective of the new Commission leadership was to “...conduct sound cost-benefit analyses as part of the Commission’s consideration of new regulations....”¹⁴⁷ Commissioner O’Rielly explained that “[t]oo often under the prior Commission leadership, sufficient work was not done, certainly prior to votes by Commissioners, to calculate the particular costs that new burdens or obligations would impose on regulated entities... [relying on] vague or illusory benefits of these new regulatory burdens.”¹⁴⁸

¹⁴³ See Smart Communities Comments, Ex. 4, Puuri’s Declaration regarding the impacts of placement of wireless structures in the public rights-of-way. See also Smart Communities Comments, Ex. 1, CTC Declaration. Comments of Maryland State Highway Administration (incorporated as part of AASHTO Comments) at p. 17 (“Use fees ...[must reflect]...the real costs associated with the management of ROW access, impact to infrastructure, and maintenance.”)

¹⁴⁴ *Id.*

¹⁴⁵ Smart Communities Comments, Ex. 3, Report and Declaration of David E Burgoyne at pp. 8-10; Smart Communities Comments, Ex. 4, Puuri Declaration at p. 3.

¹⁴⁶ *Id.* Smart Communities Comments, Ex. 2, Declaration of ECONorthwest.

¹⁴⁷ Testimony of Commissioner Michael O’Rielly before the Senate Commerce Committee (Mar. 8, 2017) at p. 1, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0308/DOC-343816A1.pdf. See also, *Remarks Of FCC Chairman Ajit Pai At The Hudson Institute, The Importance Of Economic Analysis At The FCC, Washington, D.C.*, available at <https://www.fcc.gov/document/chairman-pai-economic-analysis-communications-policy>

¹⁴⁸ *Id.*

While Smart Communities’ filings and expert reports, and the filings of other commenters, have highlighted the potential costs to localities and the public of uncontrolled deployments, neither the Petitioner, nor any industry commenter has provided any such analyses to support their claims that action is needed. Nor has industry shown that specific options that they seek (such as the WIA classification of a 28 cubic foot box in front of a residential unit as small) are either necessary, or costless. As it happens, the industry proposed definitions are not required for deployment; this is a case where the costs of Commission intrusion have few clear benefits that would not be otherwise realized.¹⁴⁹

Some in the industry may point to an Accenture Strategy study entitled “Smart Cities; How 5G Can Help Municipalities Become Vibrant Smart Cities”¹⁵⁰ filed with the Commission by CTIA,¹⁵¹ as a cost benefit analysis. Such a claim would be misleading at best.

While Smart Communities generally hope that 5G will add to GDP growth and network investment, and have other public benefits, nowhere in the report is there any explanation as to how – if the benefits are real - retaining local review of siting in the public rights-of-way or allowing localities to recover all permitting costs and market value for property used, will prevent realization of those benefits. Local review *at most* means that deployers must go through steps before deploying – but it does not mean that they will not deploy (as Smart Communities have shown). To be sure, Accenture suggests that there are delays. For example, while there is a reference to applications taking as long as 24 months¹⁵² for approval, there is no data to document the claim. In fact, page 13, the page that is dedicated to outlining the “challenges”

¹⁴⁹ CTC Reply Report, Exhibit 2, p. 2.

¹⁵⁰ The Accenture Study, claims that 5G could impact up to \$275 billion in investment, create 3 million jobs and increase GDP growth by 500 billion dollars. Accenture Study.

¹⁵¹ CTIA Ex Parte filed January 13, 2017.

¹⁵² Accenture Study at p. 13.

facing small cell operators cites no empirical data and names no specific jurisdiction or practice.¹⁵³ But even assuming that its allegations of challenges were true, the report nevertheless seems to indicate that deployment is occurring, meaning benefits are being realized.

The report's claims with respect to charges preventing deployment are also not actually supported, and are not even theoretically sound. As the report by ECONorthwest attached to these reply comments explains, if the benefits that Accenture estimated are real, then the providers should be able to pay market rates for resources used; if the economic value of the benefits are so tenuous that providers cannot pay market value for property, that suggests the benefits are in fact illusory.¹⁵⁴

Moreover, as Dr. Cahill explained in his initial and reply reports¹⁵⁵ requiring states and localities to subsidize the small cells current incumbents seek to deploy is a bad economic idea. Because if the Commission picks winners and losers through subsidies and below market access, it may encourage deployments that actually delay development of more advanced technologies by subsidizing the incumbent players. The prospects outlined in the Accenture Study are more likely to be achieved if localities recover all their costs and are entitled to charge fair market value for the property used by providers.

¹⁵³ The absence of any real facts regarding the 24-month example is illustrative of the deficiencies in the report. The Commission has before it examples of 120-foot towers being proposed to be placed in ways that they would interfere with other utilities, create safety hazards, block handicapped access, and so on. Smart Communities also showed that facilities are being installed without complying with Section 106 procedures, and applications are being submitted without engineering. If Accenture is suggesting that society would be better off allowing the negative impacts (which include fatalities, loss of property values and so on) in order to replicate functionality already provided on private lands); or is trying to say that 24 months was unreasonable under the circumstances it examined, it surely should have examined the costs and causes of delay v. benefits afforded v. the harms avoided. It did not attempt to do so.

¹⁵⁴ ECONorthwest Reply Report, Ex. 3, p. 4 Dr. Cahill provides a detailed economic criticism of the Accenture Report in his comments. It is not a cost-benefit analysis that justifies imposition of any additional rules.

¹⁵⁵ Smart Communities Comments, Ex. 2, Cahill Declaration; ECONorthwest Reply Report, Ex. 3.

The Accenture Study is also technically inaccurate. The Accenture Study says that 5G “cells are small – the size of a shoe box.”¹⁵⁶ As Accenture is a management consulting firm, perhaps its lack of technical expertise can be forgiven. While there may be devices that are the size of a shoe box,¹⁵⁷ these devices must be powered and connected to a communications network. Many times, the power connection or backhaul connection requires another component, a component that is always much larger than a shoe box.

CTC, an engineering firm, documents that some “small” cell facilities approach “macro” site facilities and electric transmission monopoles in size and weight.¹⁵⁸ Its supplemental report provides a description of “small cells” as actually deployed, and shows that in fact, those facilities can be quite expansive and intrusive.¹⁵⁹ However, the Accenture Study is revealing in one respect – it is premised in part on the assumption that very small installations can yield benefits estimated. The problem (as the Supplemental Report by CTC explains) is that industry is seeking relief that would apply to large facilities that could have impacts Accenture ignores.

¹⁵⁶ Smart Communities Comments, Ex. 2, Cahill Declaration at p. 1.

¹⁵⁷ While there are no 5G devices at the moment, it is reasonable to imagine that there will be a huge diversity of devices in size and function, just as there are now with LTE devices.

¹⁵⁸ Smart Communities Comments, Ex. 1, CTC Declaration at p. 6 (In some small cell deployments, the technology does not use fiber or wired infrastructure to connect to the network. The network connectivity, known as “backhaul,” is done wirelessly. In order for backhaul to work effectively using a wireless approach, there needs to be a strong signal between the small cell devices and one or more master backhaul antennas. Some providers are accomplishing this by making the master backhaul antenna especially tall, potentially 70 to 120 feet, which exceeds the height of many macrocells. Mobilitie is one company that uses this architecture and has filed many applications for poles of great height.

¹⁵⁹ CTC Reply Report, Exhibit 2, p. 1.

VI. THE INDUSTRY-PROPOSED DEFINITION OF SMALL CELL IS ANYTHING BUT SMALL, AND CERTAINLY NOT A DEFINITION THAT JUSTIFIES SHORTER TIMES TO ACT ON A COMPLETE APPLICATION

A. Small Refers to Area Served, Not the Size of Facilities

The term “small cell” is typically used to describe an installation that serves a small area – not to distinguish between facilities that are “small v. those that are large.”¹⁶⁰ For purposes of this Notice, it is important to recognize that what falls within the rubric of a “small cell” at any given site can actually involve many different pieces of equipment, some of which could be quite large and quite intrusive. Thus, as CTC explained, at any given location, a “small cell” may involve a support structure (ranging in size from a Mobilitie tower to a more conventional utility pole); an antenna; radio units; power supplies/electric meters/disconnects/cabling; and potentially back-up power supplies.¹⁶¹ Some of these facilities may be mounted on the tower or pole; some may be placed in a vault, and some may be ground-mounted.

B. The Commission Should Not Adopt A New Definition of Small Cell As Proposed By Industry

The Wireless Infrastructure Association (“WIA”) proposes a definition of “small wireless facility” that would capture both individual nodes in a DAS network and a stand-alone small wireless facility by employing the “volumetric definition contained in the Commission’s First Amendment to the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas...”¹⁶²

First, Smart Communities questions whether the Commission has the authority to create a new class of wireless sites. Congress has neither directed the Commission to establish such a

¹⁶⁰ Smart Communities Comments, Ex. 1, CTC Declaration at p. 2.

¹⁶¹ Smart Communities Comments, Ex. 1, CTC Declaration at p. 6.

¹⁶² Comments of the Wireless Infrastructure Association at p. 1, fn 2 (filed Mar. 8, 2017).

category and Congress has already provided the Commission guidance for cell sites and for collocations at cell sites. It did not authorize the Commission to create a third category of a small cell site.

Moreover, there are significant, practical reasons why a new category even if appropriately defined, is not appropriate. It complicates the siting process by adding a new layer or regulations for whatever the Commission defines as “small cells.” And, because applications are being submitted in batch, there is no reason to believe that applications for many small cells could be reviewed in a shorter time than is occurring now, under existing rules.¹⁶³

Most importantly, however, the industry’s proposal uses a definition that does not actually limit placement to the sorts of small facilities that can be reviewed quickly, and its reliance on the Programmatic Agreements to support that definition involves a great deal of “cherry-picking” and reflects a misunderstanding of the Section 106 process. For example, the Section 106 standards are designed to identify situations where there is a definite risk of harm to historic properties or areas; the rights are not absolute – a locality, a tribe or any interested party could still trigger a Section 106 review by complaint.¹⁶⁴ That is, the rules recognize that in many instances, even when the standards the Commission adopted are followed, they could cause harm, and may require significant review..

¹⁶³ CTC Reply Report, Ex. 2.

¹⁶⁴ See e.g. Collocation Agreement (entitled “National Programmatic Agreement for the Collocation of Wireless Antennas”) Stipulation V. A. 4 – A prerequisite of the Section 106 process is that there is no complaint from a member of the general public, Indian Tribe, a SHPO or the Council. See also Stipulation VI C, which provides there is a right of review after the collocation has taken place even if fully in compliance with Stipulations if in the opinion of a SHPO/THPO or Council the collocation has resulted in an adverse effect on the historic property.

Second, the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas is designed to discharge only the Commission's duties, not the broader duties of states and localities.

Third, the rules effectively recognize that even for small cells located outside of historical areas, a size greater than 28 cubic feet has the potential for significantly affecting an historic area.¹⁶⁵ One can therefore reasonably draw the inference that the same size deployment has a significant possibility of a negative impact on immediately adjacent properties. While the value of adjacent properties and the aesthetic impacts of a deployment may not be a concern of the Commission in the Section 106 Agreement, it is a major concern of localities, given both aesthetic interests and the real possibility that such large facilities could affect property values significant.¹⁶⁶ While adjoining property value may not be a concern for WIA and its members, such a concern must be considered by the FCC, especially on smaller communities. In other words, the Commission's own rules reflect that at the very least, a 28 cubic feet structure, even when subjected to the minimally visible rules, requires significant reviews, and is not a minor structure eligible to fast track applications.¹⁶⁷

C. WIA's Definition Ignores Minimally Visible Elements of the Section 106 Test

WIA excludes from its volume test, the second portion of the *First Amendment to Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*, i.e. that the

¹⁶⁵ See Stipulation VI A.5.(b) (ii).

¹⁶⁶ Smart Communities provided an expert analysis to highlight for the Commission the potential impacts of wireless facilities on adjoining property values. See Smart Communities Comments, Ex. 3, Report and Declaration of David E Burgoyne. Burgoyne concludes many deployments of small cells could affect property values, with significant potential effects. See also

¹⁶⁷ It is also helpful to note that the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas* does permit 21 cu ft. facilities on active utility poles in historic areas. While one can question whether that exemption was warranted, it is noteworthy that this is the maximum size permitted, despite section 6409; and such a deployment is subject to a complaint process. In other words, placements in the public rights of way subject to 6409 raise substantial issues not of concern under NHPA

device be minimally visible. As the Bureau explained in its Notice¹⁶⁸ announcing the agreement, “the amendment tailors the Section 106 process for small wireless deployments by excluding deployments that have minimal potential for adverse effects on historic properties.” The amendment then goes to establish that a site need not only be small, but “minimally visible.”

A review of the minimally visible standards would exclude a great many of the sites WIA would otherwise argue fit the cubic foot test. In order to ensure the minimal visible impacts, the *First Amendment to Nationwide Programmatic Agreement for the Collocation of Wireless Antennas* provides:

1. The “small cell” must be deployed on a building or non-tower structure.¹⁶⁹
(Stipulation VI)
2. The antenna or antenna enclosure must be the only equipment that is visible from the ground level. (Stipulation VII. A)
3. The antenna or enclosure must not exceed 3 cubic feet in volume.
 - a. Antenna or enclosure must be installed using concealment techniques that match or complement the structure on which or within which it is deployed. (Stipulation VII. A)
4. No other antenna on the building or non-tower structure may be visible from the ground level. (Stipulation VII. A)
5. No antenna’s associated equipment may be visible from the ground level.
(Stipulation VII. A)

¹⁶⁸ *Wireless Telecommunications Bureau Announces Execution Of First Amendment To The Nationwide Programmatic Agreement For The Collocation Of Wireless Antennas*, WT 15-180 (Rel. Aug. 8, 2016).

¹⁶⁹ Since the definition of Tower in the Collocation Agreement has the same meaning as for Section 6409, i.e. deployed for the “sole or primary purpose of supporting FCC-licensed antennas and their associated facilities,” a Mobilitie pole, which is deployed for the just that purpose would not qualify.

6. The depth and width of any proposed ground disturbance associated with the collocation cannot exceed the original depth and width with a maximum of four lightning grounding rods.

The basic premise of the WIA proposal is that facilities of a certain size require minimal review, and therefore can be subject to a shortened shot clock. In fact, viewing the Programmatic Agreements as a whole, it is fairly clear that absent other protections, a facility of the size proposed by WIA can require significant review, and that the circumscribed definition does not provide a sound legal line (and definitely fails to identify a sound technical line) between “small” cells and other installations.

VII. NATIONAL POLICY SHOULD REWARD INNOVATION AND TECHNOLOGICAL ADVANCES; THE INDUSTRY DEFINITION OF SMALL CELL DOES NOT.

As CTC explained in its declaration, today’s small cell sizes may approach or exceed the size of many monopoles or macrocells.¹⁷⁰ This is because many small cells utilize the same equipment that is utilized on traditional macrocells, despite some of the equipment occupying a smaller physical area due to placement or powering.

The Commission has also recognized that its rules should “neither explicitly nor implicitly express a preference for one particular entry strategy....[nor be] an attempt to indicate such a preference...[as it] may have unintended and undesirable results.... As to success or failure, we look to the market, not to regulation, for the answer.”¹⁷¹

Petitioner and the industry commenters are arguing for just such an industrial policy. For instance, by fast tracking Mobilitie’s 120 foot “small cell” model, or even the 28 cubic foot

¹⁷⁰ Smart Communities Comments, Ex. 1, CTC Declaration at pp. 6-8.

¹⁷¹ *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, 11 FCC Rcd. 15499, 15508-15509 (1996) (“Interconnection Order”).

model proposed by WIA, the Commission retards the development of technologies that are truly small. Tipping the scales in favor of Mobilitie's model that requires installation of a significant foundation in the public rights-of-way that and requires analysis of the soil underneath the facility and the support required to prevent the tower from falling, thwarts the day when a new technology that presents none of those costs to the community arrives.¹⁷²

VIII. REGULATING THE PRICES CHARGED FOR ACCESS TO THE PUBLIC RIGHTS-OF-WAY OR OTHER GOVERNMENT PROPERTY AT LESS THAN FAIR MARKET VALUE IS BAD POLICY

A. Fees for Use of Government Property Should Be Priced At Fair Market Value

As ECONorthwest explains:

if a municipality is forced to sell access to its ROW at a below-market rate, then users will not fully consider the cost of accessing the ROW and will over utilize it. One form in which this overutilization could manifest itself is that existing ROW could become overcrowded, and be unable to accommodate new, innovative technologies.¹⁷³

Moreover, a review of the comments of the state and local highway community makes clear that many federal, state and local codes prohibit the use of governmental assets for less than property value. But the Commission need only look in the mirror and its use of spectrum auctions to see a government entity that embraces the concept that the use of public assets should

¹⁷² Moreover, it may discourage innovations and new entrants, as Dr. Cahill points out in his Reply Comments. ECONorthwest Reply Report, Ex. 3. And this is before even addressing Commission's goals such as Historic Preservation. See, E.g. Smart Communities Comments, Ex. 5, which describes a "small cell" proposal for a historic district in Monroe, Michigan. It would have included a facility 40" in diameter with a 50" base plate, that would rise 100' above ground. Hardly a "shoebox."

¹⁷³ Smart Communities Comments, Ex. 2, Cahill Declaration at p. 5.

be at market value, for in using market value, the government agency can be assured that the government property is used for its best and highest purpose.¹⁷⁴

The Commission is nearing the end of a multi-year Broadcast Incentive Auction as a means to move current occupants of government property (broadcasters), who may be underutilizing that government property, to winning wireless bidder that by their price they are offering can demonstrate a higher use of the property, i.e., the market value.

In the case of local government public rights-of-way, it would not be consistent with the Commission's own policies, or basic economic principles, to require access to property be provided at less than market value.

IX. THE COMMISSION SHOULD NOT BE FOOLED BY INDUSTRY'S EFFORT TO CONFLATE PERMIT FEES WITH MARKET RENT

A. Application Fees Are Cost Based

Almost every industry commenter¹⁷⁵ sought to challenge the level of fees that were being assessed for applications for building, electrical permits, or for land use permits. As explained in our initial comments, these permit fees are based on costs, and if anything, typically under-recover actual costs. Not surprisingly, the frequency and detail with which costs are analyzed and fees set depends on the size and resources available to a community, as well as state or local requirements. But, there is certainly no reason to believe that the industry is being charged unreasonable fees, or that federal action would be appropriate or permissible. Here are some thumbnails as to the way Smart Communities set fees:

¹⁷⁴ The Commission devotes a section of its web site to the most recent auction, the Broadcast Incentive Auction. <https://www.fcc.gov/about-fcc/fcc-initiatives/incentive-auctions>

¹⁷⁵ See e.g. Competitive Carriers at pp. 9, 15, 16; Verizon at p. 14; Mobilitie at p. 3; Crown Castle at p. 28; T-Mobile at p. 7.

Ann Arbor, MI¹⁷⁶ — Each year in conjunction with the preparation of the budget,¹⁷⁷ Service Areas/Service Units (permitting operations) are requested to review license and fee revenues to determine if the cost of the services rendered are covered by the charges. When determining these costs, Service Units take into account increases or decreases in expenses such as: labor, material and supplies, equipment, and overhead costs.¹⁷⁸ The increases are generally in the range of 1% to 5% and are for purposes of full cost recovery. In some cases where fees are proposed to be higher than the nominal, explanations are provided to give a rationale for the increase. Decreases are in the range of 4-54% and vary more widely due to efficiency improvements, and equipment pricing fluctuations.

In Ann Arbor, other than the fees that are based on hourly rates, rates that are established as “per unit” fees result from an annual calculation of total hours spent per fiscal year for each type of unit, and the number of units, resulting in the average cost per unit. Fee revisions are made to reflect current hourly wages and overhead, and to reflect staff time (e.g., adjustments based on total time and total # of units).

It is anticipated that at the City Council meeting of May 15, 2017, Ann Arbor’s permit fees for fiscal year 2018 will go up in FY18¹⁷⁹ (starting July 1, 2017). While the same methodology to calculate fees is being employed, the increases are as a result of staff’s hourly

¹⁷⁶ <http://www.a2gov.org/Pages/default.aspx>

¹⁷⁷ Here is a URL for Ann Arbor’s Council resolution adopting the FY16 fees, including links to the schedules of fees:

<http://a2gov.legistar.com/LegislationDetail.aspx?ID=2267182&GUID=4894D595-FA79-43A1-9195-F64ED9CB884C&Options=ID|Text|&Search=fees>

¹⁷⁸ See <http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx>

¹⁷⁹ Here is the URL for the Ann Arbor Council resolution adopting the FY17 fees, including links to the one schedule of fees that was approved:

<http://a2gov.legistar.com/LegislationDetail.aspx?ID=2694497&GUID=BDF8CBCF-82CC-4060-B3CE-AA12EC579E75&Options=ID|Text|&Search=fees>

rates having increased and some fees have been adjusted to conform to an increase in the average time actually spent.

Pocomoke City, MD¹⁸⁰ — Under Maryland law, fees must be roughly proportionate to costs. Among the costs traditionally include are the time required to process the fees, including any engaged experts and certain off-site costs that are included as part of a permit fee for things such as advertising costs. Expert costs may be required to be done at the applicant's expense such as an independent review of engineering plans. A review of the City's Fiscal Year 2016 adopted budget reflects that costs and revenues from the permitting sections are roughly equivalent.¹⁸¹

Cary, NC¹⁸² — Across Cary, cost recovery for permitting fees stands at about 65% of actual cost and prices as well as explanations for the fees can be found on-line and in simple language.¹⁸³ Not unlike Ann Arbor, permit fees in Cary, are authorized by the Council based upon an annual staff calculation of how many staff professionals must review typical development plans and for how long each must dedicate to the application. The staff then develops an “average” cost for the review of a generic application based on this staffing time.

A review of the types of costs involved applications that are subject to this matter reveals that for a plan review of a new stealth tower, the fee would be \$2,000. For telecommunications towers that require a special use permit, the application fee is \$4,500. If there is also an associated site plan, then the \$2,000 site plan fee is also required.

¹⁸⁰ <http://www.cityofpocomoke.com/>.

¹⁸¹ http://www.cityofpocomoke.com/_charter_files/FY2016%20Adopted%20Budget%20for%20Website.pdf.

¹⁸² <http://www.townofcary.org/>.

¹⁸³ <http://www.townofcary.org/services-publications/residential-permits-inspections/faq>.

The \$4,500 special use fee was developed based on the City's Land Development Ordinance's provision¹⁸⁴ that the Town may hire outside experts to help review the application, so a certain portion of the application fee is used to cover any costs associated with hiring such experts. The \$4,500 amount includes what the City of Cary determined was a state wide average for such outside assistance.

The fee to review plans for a structure mounted antenna depends on whether it is processed as a Minor Alteration (which is \$125), or a site plan (which would be \$2,000).¹⁸⁵ Again, the estimates are based on the City's experience as to time required to process applications. While it may be that some applications require more, and some less time; overall the goal has been to limit recovery of permitting type fees to costs, and the City, in practice, under recovers those costs.

B. The Commission Does Not Set Charges In the Way Industry Claims Local Governments Should Be Obligated To Set Charges.

In our initial comments, we explained that charges to wireless providers can be legally divided into fees intended to recover costs associated with managing the public rights-of-way, or performing traditional police power functions, and charges for occupancy of public property. As suggested above, the latter are not restricted to costs, and cannot and should not be restricted to cost by the Commission. The distinction between rents and fees – which industry seeks to conflate – are recognized widely, and are in fact reflected in the Commission's own actions.¹⁸⁶

¹⁸⁴ <http://www.townofcary.org/services-publications/residential-permits-inspections/development-regulations/land-development-ordinance>.

¹⁸⁵ Under Cary's fee schedule, if a site plan is re-submitted for review a fourth time, there is a re-review fee that is charged, and repeated for every fourth review of the plan. That cost is 50% of the initial fee. This fee would be collected at the time the plan is submitted a fourth (or eighth) time.

¹⁸⁶ In fact, the Federal Communications Commission recovers a fee that most local government do not collect – an annual regulatory fee.

As explained on the Commission's webpage¹⁸⁷ dedicated to fees, there are five types of fees collected by the Commission. These include:

1. **Application Processing Fees**¹⁸⁸
2. **Annual Regulatory Fees**¹⁸⁹
3. **Freedom of Information Act (FOIA) Fees** for processing requests under the Freedom of Information Act.
4. **Auction Payments**¹⁹⁰ for upfront payments, down payments, and subsequent payments for licenses that the FCC auctions.

¹⁸⁷ <https://www.fcc.gov/licensing-databases/fees>.

¹⁸⁸ According to the FCC's website, "The Federal Communications Commission's authority to impose and collect fees is mandated by Congress. In Section 8 of the Omnibus Reconciliation Act of 1989 (Title III, Section 3001 of the Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239), Section 8, revising 47 U.S.C. 158), Congress authorized the FCC to impose and collect application processing fees and directed the Commission to prescribe charges for certain types of application processing or authorization services it provides to communications entities over which it has jurisdiction. Application processing fees are deposited in the U.S. Treasury and are not available to the Commission.

¹⁸⁹ The Commission explains its need for regulatory fees, in this case for cable providers, at https://apps.fcc.gov/edocs_public/attachmatch/DOC-335230A1.pdf. "Each year, the Commission is required to collect regulatory fees. Licensees and regulatees are assessed fees as set forth in Assessment and Collection of Regulatory Fees for Fiscal Year 2015, Report and Order and Further Notice of Proposed Rulemaking, (released September 2, 2015) ("FY 2015 Regulatory Fees, Report and Order and Further Notice of Proposed Rulemaking"). The Commission also publishes industry-specific guidance in Who Owes Fees & What Is My FY 2015 Fee, which can be found on the Commission website at <http://www.fcc.gov/regfees>.

¹⁹⁰ The history of auctions as a means to achieve the fairest return for government is explained by the Commission at http://wireless.fcc.gov/auctions/default.htm?job=about_auctions.

"In 1993 Congress passed the Omnibus Budget Reconciliation Act, which gave the Commission authority to use competitive bidding to choose from among two or more mutually exclusive applications for an initial license. Prior to this historic legislation, the Commission mainly relied upon comparative hearings and lotteries to select a single licensee from a pool of mutually exclusive applicants for a license. The Commission has found that spectrum auctions more effectively assign licenses than either comparative hearings or lotteries. The auction approach is intended to award the licenses to those who will use them most effectively. Additionally, by using auctions, the Commission has reduced the average time from initial application to license grant to less than one year, and the public is now receiving the direct financial benefit from the award of licenses.

In the Balanced Budget Act of 1997, Congress extended and expanded the FCC's auction authority. The Act requires the FCC to use auctions to resolve mutually exclusive applications for

5. **Forfeitures** are penalties that the FCC may assess for violations of law or noncompliance with authorizations.

Each of the parties filing in this proceeding are subjected to application and annual regulatory fee that are generally set by the Commission at the average costs such services and oversight impose on the federal government/tax payers, not incremental cost as is proposed here. And of course, none of the parties claim that they are entitled to use spectrum at the incremental cost of such a use.¹⁹¹ If the Commission's pricing mechanisms do not prohibit entry, it is hard to imagine why a subsidy model can or should be required of local governments.

X. THE DOCKET IS A TESTAMENT TO WHY THE COMMISSION MUST MOVE FORWARD TO UPDATE ITS RF EMISSIONS RULES

More than four years ago (March 29, 2013), the Commission opened a proceeding to address changes in the RF emissions standards related to human exposure that received nearly a thousand comments totaling more than 20,000 pages but has yet to take action to complete its review of its RF emission rules and determine if any updates were necessary. In response to the Notice's open invitation to list actions the Commission might take to assist the deployment of wireless broadband infrastructure, Montgomery County,¹⁹² Smart Communities and no less than eight-five percent of the parties filing in this proceeding called on the Commission to finish its work on the 2013 RF NOI.¹⁹³

initial licenses unless certain exemptions apply, including exemptions for public safety radio services, digital television licenses to replace analog licenses, and non-commercial educational and public broadcast stations. *Id.*

¹⁹¹ See, e.g., Verizon Comments at p. 14; Crown Castle at p. 11; Mobilitie at pp. 3, 9, 17; T-Mobile at pp. 3, 7.

¹⁹² Montgomery County Comments at p. 28.

¹⁹³ See e.g. Comments of Lynn Beiber at p. 1 (filed Mar. 13, 2017) ("The informed public is STILL waiting for you to act upon 2012 recommendations from the GAO that call for reassessment of your current RF energy exposure limits.") Comments of Ben Gerdeman at p. 1 (filed Mar. 13, 2017). ("The FCC does NOT have our permission to microwave our communities, resulting in environmental and

As Montgomery County shared in its comments:

The Commission's failure to act on RF rulemakings is resulting in growing public concern and potential opposition to 5G deployments in residential neighborhoods. The Commission has exclusive jurisdiction to regulate RF emissions.¹⁹⁴

Commission action is particularly important because there are recent studies describing the impact of small cell deployments on RF exposure that are simply not reflected in existing rules.¹⁹⁵ To put it another way: The basic predicate for this proceeding is that it is a benefit to deploy ultra-dense wireless networks, and a basic assumption is that the deployment (which is designed to lead to greater use of wireless devices generally) does not endanger public health. We believe it will be much easier to gain public acceptance and support for deployment of wireless facilities (which will in turn lead to more private properties being opened for placement) if the Commission acts to complete its proceeding. Indeed, it is arguably required to do so before preempting local authority any further.

health damage that has been widely documented in peer-reviewed scientific studies.”) Comments of Elizabeth Kelley, MA Electromagnetic Safety Alliance (filed Mar.8, 2017) (“The FCC should not promote the deployment of 5G technologies and infrastructure until they complete their work on Docket 13-84, Reassessing RF emission guidelines, and also receive the final results of the NTP rat study later this year. - The wireless industry adamantly opposes being regulated but they are requesting privileges (access to public rights of way on our properties) that are reserved for regulated utilities. I ask you to place an hold on these proposed rules pending a complete investigation in the public interest.”); Comments of Rachel Newcomb at p. 1, (filed Mar 9, 2017). (“Last year, the US government, led by the National Toxicology Program (NTP) linked cancer to cell phone radiation. Until this link has been more thoroughly researched, we don't need more wireless networks introduced.”); Comments of James (filed Mar 8, 2017), (“As a County Legislator [James DiSalvo]...I understand that the FCC has not responded to its 2013 Docket 13-84 Reassessing RF emission guidelines. At a minimum, it would seem to me to be prudent, conservative policy not to allow more rollouts of transmitter infrastructure until this docket reviewed. Notwithstanding the results of Docket 13-84, home rule is very important to us in New York and I am not comfortable with the FCC gutting local regulations.”), Comments of April Hurley, MD (filed Mar 8, 2017) (“I have been board certified, licensed in 3 states, 33 years treating families affected by electromagnetic radiation in their homes and places of play, work, or study. EMF density needs to be reduced not increased.”); (“I have been board certified, licensed in 3 states, 33 years treating families affected by electromagnetic radiation in their homes and places of play, work, or study. EMF density needs to be reduced not increased.”)

¹⁹⁴ Montgomery County comments at 28.

¹⁹⁵ <http://onlinelibrary.wiley.com/doi/10.1002/bem.22045/full#references>;
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4377923/>.

XI. CONCLUSIONS

For the reasons discussed above, and in the expert declarations, the Commission should not grant Mobilitie the relief it seeks, or adopt additional rules or shot clocks for “small cell” deployments.

It should clarify its rules to ensure that service and facilities providers are not incentivized to file incomplete applications; should clarify its Section 6409 rules so that small cells remain small and subject to safety guidelines applicable to roads; and should move forward to update its rules governing RF emissions.

Respectfully submitted,

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Coalition

April 7, 2017
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EXHIBIT D

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

In the Matter of)	
)	
Comment Sought on Streamlining)	
Deployment of Small Cell Infrastructure by	)	WT Docket No. 16-421
Improving Wireless Facilities Siting Policies;)	
)	
Mobilitie, LLC Petition for Declaratory	)	ET Docket No. 13-84
Ruling)	
)	
Notice of Inquiry, Reassessment of)	
Federal Communications Commission	)	ET Docket No. 03-137
Radiofrequency Exposure Limits and Policies)	

**SUPPLEMENTAL REPLY COMMENTS
OF MONTGOMERY COUNTY, MARYLAND**

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April 7, 2017

SUMMARY

Montgomery County, Maryland (the “County”), by its counsel, filed comments and reply comments in WT Docket 16-421 as part of the Smart Communities Siting Coalition. The County files these Supplemental Reply Comments to provide follow-up information about the status of Mobilitie’s applications to deploy wireless facilities in Montgomery County and to provide additional information about cost-based permit fees. The County further notes that it was the only party to file comments that provided systemic data regarding the effects of local regulations on wireless facility siting as requested by the Commission.

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Before the
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Washington, DC 20554

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Radiofrequency Exposure Limits and Policies)	

SUPPLEMENTAL REPLY COMMENTS OF MONTGOMERY COUNTY, MARYLAND

Montgomery County, Maryland (the “County”), by its counsel, filed comments and reply comments in WT Docket No. 16-421¹ as part of the Smart Communities Siting Coalition.² The County files these Supplemental Reply Comments to provide follow-up information about the status of Mobilitie’s applications to deploy wireless facilities in Montgomery County and to provide additional information about cost-based permit fees. In addition, while the County does not believe that the Commission has legal authority to expand “deemed granted” – *i.e.*, preemptive zoning by another name, the County nonetheless requests that the Commission

¹ *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)(“*Public Notice*”).

² Comments of Smart Communities Siting Coalition (filed Mar. 8, 2017)(“*Smart Communities Comments*”) and Reply Comments of Smart Communities Siting Coalition (filed Apr. 7, 2017)(“*Smart Communities Reply Comments*”).

reevaluate all time limits for local government review of wireless siting applications should it opt to do so.

I. MONTGOMERY COUNTY WAS THE ONLY PARTY TO PROVIDE SYSTEMIC DATA. SUCH DATA SHOULD BE ACCORDED GREATER WEIGHT THAN ANECDOTAL ASSERTIONS

Smart Communities' Reply Comments note, there "were approximately twenty-two industry comments filed in this docket and no less than seventeen (17) of these industry filings make no reference to any specific community in alleging conduct that might lead to delays in wireless infrastructure deployment."³ To this, Montgomery County adds that NONE of the industry commenters provided systemic data as requested by the *Public Notice*.⁴ None of the industry commenters – AT&T, Sprint, T-Mobile, Verizon, Lightower, Extenet, or their various coalitions and trade associations – provided any systemic data describing:

- The number of facilities they have deployed over a specific number of years;
- The percentage of their applications filed for antenna replacements (minor modification in the real sense), collocations, or new sites
- The average time required either overall or on an annual basis to obtain regulatory approval
- The difference in time required by local governments to take action to review antenna replacements (minor modification in the real sense), collocations, or new sites
- What the average time required to receive approval or denial by a local government is as a percentage of the total time required to acquire spectrum, design networks, obtain equipment, and install equipment

³ Smart Communities Reply Comments at 4 (footnote citing commenters omitted).

⁴ Public Notice at 9.

In contrast, Montgomery County provided a summary of twenty-one (21) years of data and included an Internet address to a publicly available database so that any party or the Commission could independently verify the data provided in the County's Supplemental Comments.⁵

In summary, the County provided the following systemic data:⁶

- The County received 2,900 applications over 21 years
- The County recommended 2,382 applications and did not recommend 20, with the remainder pending or withdrawn (a denial rate of less than one percent (1%))
- Currently, there are 1,121 wireless facilities deployed at 534 unique locations
- Seventy (70) percent of wireless facilities sites have 2 or more carriers
- AT&T, Sprint, T-Mobile and Verizon have seventy-nine (79) percent of facilities, 193, 246, 245, and 204 respectively, and each has had more applications approved in the past three years than in previous years
- The County processed 60,543 permits in FY2016 and only 265 were for wireless siting facilities

The *Public Notice* promised that the Commission would “accord greater weight to systematic data than merely anecdotal evidence.”⁷ Following that directive, the Commission must accord greater weight to Montgomery County's systemic data and must find that local government regulations like Montgomery County's do not have the effect of prohibiting the provision of wireless service.

Moreover, the County provided systemic data to demonstrate that new providers such as Mobilitie are not seeking to expand service to the one-third of the County that is rural – rather, providers seek to deploy facilities in the most populated areas of the County.⁸ The County

⁵ Montgomery County Supplemental Comments at 5-9. The Montgomery County database is available at <https://www.montgomerycountymd.gov/towers>.

⁶ *Id.*

⁷ Public Notice at 9.

⁸ Montgomery County Supplemental Comments at 9.

remains committed to bringing services to all its residents and is currently working to streamline approval for “microcell” lower height facilities – that is, poles under thirty (30) feet tall. The Commission rules are therefore not only unnecessary, they impede such efforts to streamline approval processes.⁹

Montgomery County not only provided the systematic data sought by the Commission, but also demonstrated the market reality. In a pure marketplace, “small cell” deployment will not conquer the national digital divide. It will exacerbate, not ameliorate, the problem of limited broadband options in rural America.¹⁰

II. REGULATORY FEES ARE ALREADY COST-BASED INDUSTRY SHOULD STOP CONFLATING REGULATORY FEES WITH MARKET-BASED RENTS

Multiple commenters conflate regulatory fees with market-based rents. Under Maryland common law, regulatory fees must be reasonable and related to the purpose of regulatory measure.¹¹ The County presumes that this principle is common to all states. Thus, the County

⁹ For example, the Commission’s interpretation of Section 6409 is likely more of an obstacle to facilitating efficient deployment of “micro cell,” lower height facilities. The Commission’s inexplicable decision to interpret “minor modification” as an increase of ten (10) percent or ten (10) feet – *whichever is greater* when a facility is in the right of way, or an increase of twenty (20) percent or twenty (20) feet – *whichever is greater* when a facility is not in the right of way, means that a zoning ordinance that would facilitate deployment of twenty-five (25) feet tall facilities in residential neighborhoods, could lead to thirty-five (35) or forty-five (45) foot tall facilities – a decidedly non-minor increase of increase of forty (40) to eighty (80) percent that is well over the Commission’s lesser ten (10) percent modification. Thus, the Commission’s overly broad interpretation is now an obstacle to local efforts to facilitate deployment of micro cell poles shorter than 30-feet in residential and commercial areas. More one-size-fits all federal preemption with more unintended consequences is not helpful and is not needed.

¹⁰ Montgomery County Supplemental Comments at 21-26. For example, Mobilitie’s requested small cell deployments are not in the rural one-third of the County. *Id.* at 24-26.

¹¹ *Theatrical Corporation v. Brennan*, 180 Md. 377, 380-82, 24 A.2d 911 (1942).

has no issue limiting regulatory fees to cost – the County already limits regulatory fees to cost. Here is a more detailed look at Montgomery County fees.

A. Regulatory Fees Are Limited to Cost in Montgomery County

In Montgomery County, the County requires three types of regulatory fees for wireless facilities: (1) Office of Zoning and Administrative Hearing (OZAH) fees; (2) Permitting fees; and (3) TFCG application fees.

1. Zoning Hearing Fees Are Cost-Based

The County's zoning code is designed to balance the need for wireless telecommunications facilities siting with a reasonable opportunity for public input on new facilities siting, and to be in compliance with Commission-mandated time limits to review and make final decisions on facilities siting applications. Applications that meet specific zoning code height, set back, and equipment size requirements are permitted as Limited Use.¹² A Limited Use application meets specific conditions that were approved in law and a public hearing was held to allow public input on the Limited Use conditions. Therefore, Limited Use is presumed to conform to acceptable community use standards, and no additional zoning public hearing is required.

Applications that do not meet these Limited Use conditions may be allowed as a Conditional Use.¹³ The Office of Zoning and Administrative Hearings (OZAH) is required to

¹² Montgomery County Code Section 59-3.5.2.C.2.a and 59-3.5.14.C.2, 2014, as amended.

¹³ *Id.* at Section 59-3.5.2.C.2.b.

have a Hearing Examiner conduct a public hearing for Conditional Use applications¹⁴ and surrounding property owners are notified of the hearing.¹⁵ The Hearing Examiner also considers the TFCG recommendation as part of the review of a Conditional Use application.¹⁶ Thus, the public hearing held by the Office of Zoning and Administrative Hearings serves as the appropriate venue for public participation on Conditional Use applications.

In the past twenty-one years, only three percent (3%) of all wireless facilities required an OZAH review, and since the zoning code was rewritten in 2014, only one Conditional Use application for a telecommunications facility was filed. The fee for an OZAH Conditional Use applications is \$16,900 and is cost-based. Based on limited data, OZAH estimates that the cost to review a Conditional Use application for a telecommunications facility may be \$23,375. Annually, OZAH hosts approximately forty-six (46) hearing days. OZAH estimates that for new sites in the same neighborhood, up to five could be batched together. But the application fee is not likely to be reduced because, (a) the estimated cost per application to hold a public hearing is higher than the current fee, and, (b) significantly more hearing examiners will need to be retained to process applications within the 150-day shot clock. The Mobility applications alone would require a twenty-six percent (26%) to one hundred thirty percent (130%) increase in hearing examiner resources.

¹⁴ *Id.* at Section 59-7.3.1.B.5.

¹⁵ *Id.* at Section 59-7.5.2.E.

¹⁶ *Id.* at Section 59-3.5.2.C.2.b.i.

2. Permitting Fees are Cost-Based

The Permitting fee applies to any entity performing construction and is cost-based. The Department of Permitting Services is an Enterprise Fund. Costs for all of the Permitting Department's functions must be recovered through fees charged to applicants. Funds received by the Permitting Department are not used for General Fund purposes. Recently, the Permitting Department commissioned an expert review of its fees, and as a result, *lowered its fees*.¹⁷ The application fee for a building permit application for a telecommunications facility is a minimum of \$425 for a facility in the public right of way or \$670 for an attachment to building, or a percentage of the value of building project (which typically applies during construction of a new macrocell tower).

3. TFCG Application Fees Are Cost-Based

The TFCG applications fee is the only fee imposed by Montgomery County that applies only to wireless facilities.¹⁸ The TFCG application fee is charged to recover the cost for a wireless engineering review. The TFCG staff conducts an engineering review of a telecommunications facility application, a site visit, reviews the impact on other land uses, determines whether a proposed telecommunications facility will interfere with existing telecommunications uses (including public safety communications) and where new sites are

¹⁷ The expert report is available at <https://permittingervices.montgomerycountymd.gov/DPS/pdf/DPSFeeFinalReport2015.pdf>.

¹⁸ See Code of Montgomery County Regulations (COMCOR), Section 02.58E.02.02. All wireless transmission facilities – including government agency and public safety communications towers – must apply for an engineering review and recommendation by the TFCG. Application materials, regulations, a database of applications, meeting agendas and minutes are posted on a single website. www.montgomerycountymd.gov/towers. The TFCG holds a regular, monthly meeting, open to the public.

proposed, and discusses with the applicant whether available colocation options were considered. Fees are set based on categories, reflecting the level of effort required to review applications.¹⁹

- \$500 for minor modifications (typically antenna replacements or upgrade);
- \$1,000 for collocations (such as on top of existing poles or buildings);
- \$2,000 for new structures that meet current zoning requirements;
- \$2,500 for new structure that would require additional zoning approval

These fees are periodically reviewed. The fees for new structures are significantly less than the actual cost, roughly only fifteen (15%) to twenty-five (25%) of the actual cost. The County opted to keep these fees low to facilitate the deployment of telecommunications facilities in the mid-1990s and 2000s. Until very recently, over the County's twenty-one (21) year history of reviewing TFCG applications, only fifteen percent (15%) of applications were for new applications, so the County's subsidizing of these applications was manageable. In addition, there was no shot clock until 2009, and still very few applications for new sites after 2009. In light of the increase in volume, increase in multiple applications – sometimes number in the 100's – filed in a single day subject to the same shot clock, and potential "deemed granted" preemptive zoning impact, the County is reviewing this subsidy.

B. Rents Charged for Use of Public Property, Structures and Rights of Way Should Be Market-Based

Regulatory fees recover the cost of processing applications. Franchise fees for use of public property recover the fair market value of a public good. The legal arguments for this distinction are set forth in the Smart Communities Comments and Reply Comments and not repeated here. However, the County notes that this distinction is similar to the Commission's

¹⁹ COMCOR, Section 02.58E.02.02.g.

licensing fees and spectrum auction bids²⁰ – the licensing fees are cost-based, and the spectrum auction will recover billions at fair market value. As the County has noted herein and in its Supplemental Comments, providers are not seeking access to all rights of way. Rather, they want access to the rights of way near the commercial and residential centers that have the densest populations, where the County and others have made investments that make these properties attractive and cost-effective for telecommunications providers.

III. THE COUNTY’S MOBILITY EXPERIENCE IS AN ONGOING 10-MONTH ODYSSEY THAT IS BECOMING AN EXERCISE IN BURDEN-SHIFTING

The County’s ten-month odyssey with Mobilitie was extensively documented in detail in our Supplemental Comment.²¹ In summary:

1. Mobility first approached the County in May 2016.
2. Ignoring written instruction and verbal assistance,²² Mobilitie filed 22 incomplete applications on July 29, 2016 and another 119 incomplete applications on September 30, 2016.

²⁰ On this issue, the County and Commissions appear to have a common position. The Commission has a long history of employing auctions as a means to achieve the fairest return for government property is explained by the Commission at http://wireless.fcc.gov/auctions/default.htm?job=about_auctions.

“In 1993 Congress passed the Omnibus Budget Reconciliation Act, which gave the Commission authority to use competitive bidding to choose from among two or more mutually exclusive applications for an initial license. Prior to this historic legislation, the Commission mainly relied upon comparative hearings and lotteries to select a single licensee from a pool of mutually exclusive applicants for a license. The Commission has found that spectrum auctions more effectively assign licenses than either comparative hearings or lotteries. The auction approach is intended to award the licenses to those who will use them most effectively. Additionally, by using auctions, the Commission has reduced the average time from initial application to license grant to less than one year, and the public is now receiving the direct financial benefit from the award of licenses.

²¹ Montgomery County Supplemental Comments at 12-20. The County also noted that the County has issued seventy-seven (77) recommendations for sitings for other carriers in the same time period.

3. Mobilitie did not comply with written Requests for Information provided on:
 - a. August 17, 2016
 - b. October 9, 2016
 - c. November 2, 2016
4. Mobility provided complete information for one application in February 2017.

To this, County now adds:

5. The County recommended the sole complete application on April 5, 2016, and Mobilitie has submitting missing information for 20 other collocation applications.
6. On March 23, 2017, the Chair of the TFCG met with the Permitting Manager for Mobilitie. The Permitting Manager had just started with Mobilitie in the past month. He stated that Mobilitie would be unable to file the missing information within the next five weeks.
7. On March 28, 2017, Mobilitie filed a written request to file applications in five batches. No mention was made that these applications had been previously submitted or that Mobilitie has agreed in early February 2017 to file all missing information by April 30, 2017 or resubmit as new applications with new application fees. Rather, Mobilitie stated, “we are currently redesigning our network to accommodate the comments and concerns from the community, which will require that we submit our applications in phases over the next five months.” Mobilitie then proposed to file two hundred four (204) applications between March 2017 and August 31, 2017.
8. The County contacted Mobilitie to ask why the total applications now proposed was more than the one hundred forty-one (141) incomplete applications. Mobilitie’s response was that they wanted to substitute applications, add new applications, and not be charged any additional fees to replaced applications already submitted with entirely different applications. Instead of twenty-four collocations and one-hundred seventeen (117) new site applications, Mobilitie’s new network would have one hundred forty-four (144) collocations and sixty (60) new sites.

Mobilitie is now requesting that the County provide them an additional three months to provide complete information – that is, they are requesting ONE YEAR to file complete applications. Mobilitie could have taken an additional year before filing its applications to provide itself sufficient time to perform due diligence on its network design plans. But what Mobilitie does not have a right to do is ask the County to subsidize the cost of its efforts to

²² All application materials are available at <http://www.montgomerycountymd.gov/towers>.

redesign its network by allowing it to replace one hundred twenty (120) incomplete applications for new sites – that is to replace eighty-five percent of their applications that have already been reviewed – with applications for collocations without corresponding application fees.

While the County reviews this request, there are lessons to be learned:

A. Small Cell Should Not Be Confused With Microcells

All of Mobilitie's applications are for facilities taller than thirty-nine (39) feet, and sixty-seven percent of their facilities are taller than seventy-two (72) feet.²³ Mobilitie's applications are not for "microcell," *i.e.*, short poles on par with 14-foot streetlights. Small cells simply refer to the antenna size – instead of the antenna and equipment being the size of dumpster, it is closer to the size of a 120-quart fishing coolers. From an engineering review standpoint, there is very little difference and certainly no reason to shorten the time to review by sixty percent (60%). A 120-foot or 75-foot pole is not invisible, and it very much matters whether the pole if struck by a car, or topple by hurricane-force winds, will fall on nearby structures. Moreover, as a new commercial facility, there is no reason to create so short a time frame to review, that the community is denied a public hearing to participate in the placement of 8-story to 12-story telecommunication facilities in the community.

²³ The majority Mobilitie's installations would not meet the WIA definition of a small cell, nor the definition of small cell adopted by every state that has defined the term to date, which is generally shorter than fifty (50) feet. Of Mobilitie's initial one hundred twenty-four (124) applications for new poles: six percent (6 %) were for 120-foot poles; sixty-two percent (62%) were for 72-foot to 76-foot poles; and six percent (6%) were for 46-foot to 68-foot poles.

B. The County Lacks Resources to Accommodate Shorter Shot Clocks for Batched Applications

County does not have unlimited resources available to process over one hundred applications when filed in a single day within three to five months. The County must use outside contractors because of the unpredictable and inconsistent nature of the submissions. And having a massive number of applications submitted in a single day drives up costs because more experienced, and thus more expensive, engineers must be brought in to handle the work load within the arbitrary time frames established by the Commission.²⁴

The Commission does not have legal authority to extend the “deemed granted” approach. However, if the Commission persist in this approach, it should review all time limits, and in particular, extend the time needed review siting new facilities. A preemptive zoning rule will require the County to significant increase regulatory fees to ensure that all reviews – including batched submissions numbering in the hundreds – can be reviewed within the arbitrarily short time frames established in 2009. At that time, the Commission receive no evidence of the number of new site applications that is on par with the requests for densification that is now occurring.

C. Mobilitie’s Actions Result in a Burden and Cost Shifting to the County and Other Applicants

Mobilitie’s actions demonstrate that the failure of carriers to submit complete applications may create significant delays, and drive up the overall costs to process applications. Over a period of eight months, the County has spent over \$75,000 for over 500 hours of outside

²⁴ Any expansion by the Commission of deemed granted relief will also drive up the costs as local government must hire additional staff and experts to ensure applications are not approved by Commission fiat.

engineering and administrative time to review Mobilitie’s 141 applications, met seven times with Mobilitie in person or by conference call, and exchanged countless e-mails and phone calls. In the same period, the TFCG recommended 95 other applications. Mobilitie now suggests that the County subsidize its decision to redesign its network.

D. Mobilitie Seeks One-Side Rule Changes That Create Obligations for Local Governments, But Not for Mobilitie

In its Comments, Mobilitie stated, “A northeastern jurisdiction is still reviewing applications that have been submitted without response for eight months.”²⁵ The County is uncertain if Mobilitie is referring to Montgomery County – because in part Mobilitie violated the Commission’s rules that such jurisdictions be identified. But it is impossible to say whether that unnamed northeastern jurisdiction has been waiting eight months – as Montgomery County has been – for Mobilitie to submit missing information.

Mobilitie complains that for “well over half” its permit applications, “the process has taken over six months, and many have been awaiting approval for over a year. This glacial pace is the result of both time working with jurisdictions as they change or create application requirements and process, and of delay after applications are complete.”²⁶ The County cannot speak to what happens after Mobilitie has submitted completed applications, because seven months after submitting Permit applications that required TFCG recommendations as a permit condition, Mobilitie still has incomplete applications pending for all one hundred twenty-four

²⁵ Mobilitie Comments at 16.

²⁶ *Id.* at 15-16.

(124) of its new site applications. Mobilitie glaringly omits that Mobilitie's inability to file complete applications also contributes to this "glacial pace."

1. Mobilitie Seeks a Shot Clock For Local Governments, But Not For Mobilitie

Despite its inability to meet a shot clock, Mobilitie "urges the Commission to set a new shot clock of no more than 60 days for all small cell installations, whether they are placed on new poles or attached to existing structures."²⁷ Mobilitie further states: "Delay in acting on a small cell siting permit is presumptively unreasonable if it extends beyond 60 days."²⁸ The County notes, more than one-twenty (120) days after filing incomplete applications, the County asked Mobilitie how much longer they would need to file the missing information, and Mobilitie requested eighty (80) additional days which the County granted. Midway through this additional extension, Mobilitie requested another one hundred twenty-three (123) days to file complete applications, and that it should be permitted to replace one hundred twenty (120) applications, *i.e., replace eighty-five percent (85%) of its applications*, with entirely new and different applications *at no additional fee*. Presumably, Mobilitie would argue that after taking three hundred sixty-seven (367) days to submit applications, the County drop everything and process Mobilitie's application in sixty (60) days. What is "presumptive unreasonable," rests in the eye of the beholder.

²⁷ *Id.* at 19.

²⁸ *Id.* at 4.

2. Mobilitie Confuses Incentives with Prohibitions

Mobilitie states that localities should not restrict “deployments only to attachments to existing poles. Such as prohibition interferes with a provider’s design of its network... .”²⁹ Montgomery County does not limit deployment only to attachments. But the County notes that less than five months after submitting one hundred twenty-four (124) incomplete applications, Mobilitie has been able to redesign its network to eliminate fifty-two percent (52%) of its new pole requests – at its own initiative. Thus, local ordinances that incentivize collocation should not be viewed with a one-size-fits-all lens as all bad or all good. Mobilitie’s own actions demonstrate that there is a lot of leeway in network design, and network design to address community concerns is both entirely possible, and potentially more cost-effective for the carrier.

3. Mobilitie Misunderstands the Public Can Also Be Proprietary

Mobilitie states that “municipal rights of way and structures within in are public property that serves public functions; they are not in any way ‘private’ or ‘proprietary’ the way privately-owned building is.”³⁰ Mobilitie is wrong.

While the County makes all public rights of way available on a non-discriminatory basis, is does require a franchise to occupy or use that asset, and permits for all construction is required regardless of whether it is in the public right of way. As noted above, permit fees are cost-based regulatory fees. Fees for use of the public rights of way must be reasonable, and are not limited

²⁹ *Id.* at 18.

³⁰ *Id.* at 20.

to cost, but do in fact recover the significant cost of acquiring and maintaining rights of way.³¹

Public infrastructure costs money to construct and maintain in the same way that privately-owned buildings do. County taxpayers provide nearly \$150 million annually to construction and maintain these public right of way.³² And as the County demonstrated in its Comments,³³ Mobilitie does not just want access to any public rights of way in the County, it only wants access to areas with the densest population concentration, where the County has aggregated demand for mobile services by investing in transit, libraries, community facilities and schools. It is a cycle of support. The County has created commercial areas to attract businesses, and businesses have invested to create attractive amenities for residents, and demand exists for mobile communications. Mobilitie has no special right to install infrastructure on public properties merely because the property is public. There are competing interests for the property³⁴, and it is the County's duty to ensure that such properties serve the public benefit.

³¹ A great many states have rules against gifting public property for less than market value. See also Comments of Texas Municipal League at p. 5-8 (filed Mar. 8, 2017) ("Texas municipalities control the underlying rights-of-way on which light poles and utility poles are located. They hold the public property in trust, as fiduciaries, to protect the public's interest.") AASHTO Comments at p. 2 (23 CFR 710 Subpart D provisions require that compensation for non-highway use of right-of-way be based on their fair market value).

³² County operating and construction (CIP) budgets are available at <http://www.montgomerycountymd.gov/omb/>. Annually the County spends: Road CIP \$45.5 million (\$273 million six-year total); Bridges CIP \$4.4 million (\$26.5 million six-year total); Pedestrian facilities and Bikeways CIP \$36.1 million (\$216.7 million six-year total); Highway CIP \$28.9 million (\$173.7 million six-year total); Traffic CIP \$14.2 million (\$85.3 million six-year total); Roadway and related maintenance \$17.8 million; Road resurfacing (\$2.6 million); Bridge maintenance \$0.18 million.

³³ Montgomery County Supplemental Comments Figure 3 at 26.

³⁴ County streetlights are also public property with the designed purpose of lighting the rights of way. In most cases, the streetlight cannot support new telecommunications antennas – even small cells – but rather must be replaced with a taller or stronger pole. When and if this happens is best addressed at the local level.

E. The Commission Should Act to Protect Localities and Other Providers from Bad Actors

Nothing in the Commission's *Public Notice* makes any effort to address bad actors like Mobilitie. Nor does anything in the *Public Notice* seek to ensure that when local governments dedicate scarce resources to facilitate broadband deployment, that carriers will act responsibly, or seek to provide service to underserved rural areas.

As documented by the County, in the instant matter, Mobilitie rejects a shot clock on its efforts to file complete applications, has taken over a year to file missing information, and now seeks to submit without an application fee an entirely new network design five months after a public meeting in which it was seemingly surprised that the public was opposed to installing 120-foot and 75-foot poles. Failure to govern such conduct, not only hurts local government and its residents, it hurts other providers that will be assessed high fees in future years as the average cost per application is driven up by Mobilitie.

IV. CONCLUSION

There is no need for a further declaratory ruling by the Commission. The County was the only party to submit systematic data in response to the Commission request for comments, and therefore the County's data should be accorded greater weight as evidence that local regulatory processes and ordinances do not have the effect of prohibiting the provision of service.

Regulatory fees are already cost-based. Carriers are disproportionately seeking to deploy facilities in densely populated areas where local governments and other businesses have made investments that make these properties attract to telecommunications carriers; thus, carriers should pay market-based rents. Local governments work every day to develop public-private partnerships to promote broadband deployments in ways that do not sacrifice community

interests. Additional one-size-fits all federal preemption is not needed. Rather as the County noted in its Supplemental Comments, Commission action to address community concerns about the health effects of RF emissions should be taken as soon as possible.

Respectfully submitted,



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April 7, 2017

EXHIBIT E

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO	)	WT Docket No. 17-79
INFRASTRUCTURE INVESTMENT)	

COMMENTS OF SMART COMMUNITIES AND SPECIAL DISTRICTS COALITION

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June 15, 2017

SUMMARY OF COMMENTS OF THE SMART COMMUNITIES AND SPECIAL DISTRICTS COALITION

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia. Collectively, Smart Communities have significant experience in addressing the placement of wireline and wireless facilities, including wireless deployments from very large structures and monopoles to relatively small wireless structures.¹ Smart Communities have devoted significant community resources to undergrounding utilities and other economic development projects, whose job-creating success depends on balancing the needs of local businesses, utilities, residents, consumers and tourists – all while maintaining the safety and integrity of private and public infrastructure located within their communities.

Moreover, Smart Communities interact on a daily basis with wireless industry participants in their role as owners of public rights-of-way, parks, street lights, water towers and tanks as well as other proprietary infrastructure routinely used to support commercial wireless facilities. Smart Communities thus bring to this proceeding a unique understanding of the challenges and rewards of siting wireless facilities and leasing space for their deployment, including the next generation of wireless services and infrastructure. Based on our experience, Smart Communities believe that no additional federal regulations are required at this time, and the Commission need not, should not and cannot pursue the proposals in the NOI.

Local governments want and support wireless infrastructure, including small cells that will one day support 5G in order to meet the connectivity needs of their residents and businesses.

¹ Smart Communities is also filing comments in the Commission’s companion wireline proceeding (WC Docket No. 17-84).

This rulemaking improperly assumes the presence of local barriers to deployment.

Public-private cooperation is working at the local level. There is no need for new rules aimed at local governments as the *Mobilitie* docket documented that local siting processes and requirements are not barriers to wireless broadband deployment. And, expert reports filed in the *Mobilitie* docket, and refiled here, demonstrate new rules could be counterproductive.

The Commission should promote cooperative efforts and share creative solutions or models through efforts such as the Commission's Broadband Deployment Advisory Council ("BDAC") and other initiatives rather than mandate a top down, one size fits all, set of national rules that will in the end be counterproductive.

The Commission could expedite the deployment of wireless infrastructure deployment by recognizing and addressing problems its existing rules have created. For instance, Section 6409's "insubstantial" changes are at times outlandishly large and the new shot clock rules reward incompetence to the detriment of providers that comply with application requirements. Outdated RF emissions standards create a barrier to public acceptance of widespread small cell deployment.

The Commission lacks a legal basis for adopting "deemed granted" remedies under section 332(c)(7) and shortening shot clocks will drive up costs. Neither result will enhance wireless infrastructure deployment.

Regarding the NOI section of the proceeding, we submit that Section 253 does not apply to wireless deployments and if broadband is reclassified as an information service as contemplated by the current majority of the Commission, Section 253 would not apply at broadband. There is still no need, and limited authority, for the Commission to clarify the established meaning of "prohibit or have the effect of prohibiting" in Sections 253 and 332(c)(7).

The Commission should reaffirm its 2014 Infrastructure Order’s clear and proper distinction between state and local governments’ regulatory roles versus their proprietary roles as “owners” of public property and resources, and not pursue the other proposals contemplated by the NOI.

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| Exhibit 1A | Report and Declaration of Andrew Afflerbach “Definitions of Small Cells, and the Review of Small Cell Applications, Supplemental Report” |
| Exhibit 2 | The Economics of Government Right of Way Fees, Dr. Kevin Cahill, Ph.D |
| Exhibit 2A | “Reply Declaration of Kevin E. Cahill, PhD, Regarding the Accenture Report and the Economics of Local Government Right of Way Fees.” |
| Exhibit 3 | Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition |
| Exhibit 4 | Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition |
| Exhibit 5 | Proposal for Tower from Mobilitie to Monroe, MI, and Response of City |
| Exhibit 6 | Proposal for Tower from Mobilitie to Centerville, GA., and Response of City |
| Exhibit 7 | Proposal for Tower from Mobilitie to Laurel, MD |

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO	)	WT Docket No. 17-79
INFRASTRUCTURE INVESTMENT)	

COMMENTS OF SMART COMMUNITIES AND SPECIAL DISTRICTS COALITION

I. INTRODUCTION

The Smart Communities and Special Districts Coalition (“Smart Communities”)² is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia.³

² The Smart Communities and Special Districts Coalition is comprised of members of the Smart Communities Siting Coalition which was originally formed to participate in the Mobilitee Petition docket (WT Docket No. 16-421), plus additional communities and special districts who have joined to participate in this proceeding and the Commission’s companion wireline proceeding (WC Docket No. 17-84). The full membership of the Smart Communities and Special Districts Coalition is listed in FN 2 below.

³ Individual members: Ann Arbor, MI; Atlanta, GA; Berlin, MD; Berwyn Heights, MD; Boston, MA; Capitol Heights, MD; Cary, NC; Chesapeake Beach, MD; College Park, MD; Corona, CA; Dallas, TX; District of Columbia; Elsinore Valley Municipal Water District (CA); Frederick, MD; Gaithersburg, MD; Greenbelt, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; Marin Municipal Water District (CA); McAllen, TX; Montgomery County, MD; Myrtle Beach, SC; New Carrollton, MD; North County Fire Protection District (CA); Ontario, CA; Padre Dam Municipal Water District (CA); Perryville, MD; Pocomoke City, MD; Poolesville, MD; Portland, OR; Rockville, MD; Rye, NY; Santa Clara, CA; Santa Margarita Water District (CA); Sweetwater Authority (CA); Takoma Park, MD; University Park, MD; Valley Center Municipal Water District (CA); Westminster, MD and Yuma, AZ.

Organizations Representing Local Governments: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of Michigan cities that focuses on protection of their citizens’ governance and control over public rights-of-way. The Michigan Townships Association (“MTA”) promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position. The Michigan Municipal League (“MML”) is a non-profit Michigan corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan

Collectively, Smart Communities have significant experience in addressing the placement of wireline and wireless facilities, including wireless deployments that involve very large structures and monopoles, as well as relatively small wireless structures. As importantly, many of the members have devoted significant resources to undergrounding utilities or to other redevelopment projects whose job-creating success depends on balancing the needs of local businesses, utilities, residents, consumers and tourists – all while maintaining the safety and integrity of infrastructure communications and other private and public infrastructure located in their public rights-of-way. As owners of public rights-of-way, parks, street lights, water towers, city and township halls and other proprietary infrastructure routinely used by the wireless industry for placement of wireless facilities, Smart Communities interact on a daily basis with wireless industry participants. Smart Communities thus have a good understanding of siting wireless facilities, leasing space for their deployment, and the challenges presented, or that will be presented, by new generation wireless deployments.

In addition to these comments, Smart Communities are also filing comments in the Commission’s companion wireline proceeding (WC Docket No. 17-84).

II. SUMMARY

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia. Collectively, Smart Communities have significant experience in addressing the placement of wireline and wireless facilities, including wireless deployments from very large structures and

local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance. The Kitch Firm represents PROTEC, MML, MTA and Public Corporation Law Section of the State Bar of Michigan. Best Best & Krieger represents the others in the Smart Communities coalition.

monopoles to relatively small wireless structures.⁴ Smart Communities have devoted significant community resources to undergrounding utilities and other economic development projects, whose job-creating success depends on balancing the needs of local businesses, utilities, residents, consumers and tourists – all while maintaining the safety and integrity of private and public infrastructure located within their communities.

Moreover, Smart Communities interact on a daily basis with wireless industry participants in their role as owners of public rights-of-way, parks, street lights, water towers and tanks as well as other proprietary infrastructure routinely used to support commercial wireless facilities. Smart Communities thus bring to this proceeding a unique understanding of the challenges and rewards of siting wireless facilities and leasing space for their deployment, including the next generation of wireless services and infrastructure. Based on our experience, Smart Communities believe that no additional federal regulations are required at this time, and the Commission need not, should not and cannot pursue the proposals in the NOI.

Local governments want and support wireless infrastructure, including small cells that will one day support 5G in order to meet the connectivity needs of their residents and businesses. This rulemaking improperly assumes the presence of local barriers to deployment.

Public-private cooperation is working at the local level. There is no need for new rules aimed at local governments as the *Mobilitie* docket documented that local siting processes and requirements are not barriers to wireless broadband deployment. And, expert reports filed in the *Mobilitie* docket, and refiled here, demonstrate new rules could be counterproductive.

The Commission should promote cooperative efforts and share creative solutions or

⁴ Smart Communities is also filing comments in the Commission's companion wireline proceeding (WC Docket No. 17-84).

models through efforts such as the Commission's Broadband Deployment Advisory Council ("BDAC") and other initiatives rather than mandate a top down, one size fits all, set of national rules that will in the end be counterproductive.

The Commission could expedite the deployment of wireless infrastructure deployment by recognizing and addressing problems its existing rules have created. For instance, Section 6409's "insubstantial" changes are at times outlandishly large and the new shot clock rules reward incompetence to the detriment of providers that comply with application requirements. Outdated RF emissions standards create a barrier to public acceptance of widespread small cell deployment.

The Commission lacks a legal basis for adopting "deemed granted" remedies under section 332(c)(7) and shortening shot clocks will drive up costs. Neither result will enhance wireless infrastructure deployment.

Regarding the NOI section of the proceeding, we submit that Section 253 does not apply to wireless deployments and if broadband is reclassified as an information service as contemplated by the current majority of the Commission, Section 253 would not apply at broadband. There is still no need, and limited authority, for the Commission to clarify the established meaning of "prohibit or have the effect of prohibiting" in Sections 253 and 332(c)(7). The Commission should reaffirm its 2014 Infrastructure Order's clear and proper distinction between state and local governments' regulatory roles versus their proprietary roles as "owners" of public property and resources, and not pursue the other proposals contemplated by the NOI.

PART 2: NOTICE OF PROPOSED RULEMAKING

I. ADDITIONAL RULES ARE NOT NEEDED OR APPROPRIATE

A. The NPRM Improperly Assumes Presence of Local Government Barriers

The stated purpose of the NPRM is to “examine regulatory impediments to wireless infrastructure investment and deployment and seek comment on measures to help remove or reduce such impediments.”⁵ The NPRM then asks parties to “submit facts and evidence on the issues” raised in the proceeding, including “the prevalence of barriers.”⁶ Smart Communities is troubled that the NPRM – *simultaneously and without making any preliminary findings that its current rules are ineffective or unfair in application; or that there are unlawful delays to address; and without identifying specific examples where the delays the Commission considers unreasonable are the result of actions of the localities, as opposed to applicants* - proposes measures and seeks input on whether those or other measures “are likely to be effective in further reducing unnecessary and potentially impermissible delays and burdens on wireless infrastructure deployment associated with State and local siting review processes.”⁷

Smart Communities is concerned that this approach intimates a level of pre-judgment that facts and evidence not yet submitted *will* show there are barriers, or worse, that facts and evidence demonstrating no such barriers exist will be ignored. Members of this coalition, their experts and other local public agencies submitted substantial facts and evidence in the Mobilitie docket⁸ which demonstrated that where delay has been documented, the vast majority of delay

⁵ Notice of Proposed Rulemaking, WT Docket No. 17-79, FCC 17-38 (April 21, 2017) (“NPRM”), ¶ 4.

⁶ NPRM ¶ 6 (emphasis added).

⁷ NPRM ¶ 6.

⁸ *Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling*, WT Docket No. 16-421 (“Mobilitie docket”). The comments filed by Smart Communities in the Mobilitie docket are referred to herein as Mobilitie Docket Smart Communities Comments (filed March 8, 2017) and Mobilitie Docket Smart Communities Reply Comments (filed April 7, 2017).

can be attributed to incomplete applications and siting requests that are improperly made, not to local barriers.

We trust that the Commission is not and will not prejudice the issues, or ignore the facts and evidence submitted in this docket and in the *Mobilitie* docket. Those facts will show that local processes and requirements are not barriers to wireless investment, and there is no need for, or legal basis for additional rules limiting local discretion. We say this with some confidence because the Commission received extensive filings from industry and public agencies in the *Mobilitie* docket.⁹ The potential overlaps between that proceeding and this one were acknowledged in the NPRM, and the Commission has invited parties to resubmit relevant information in this docket.¹⁰ But as to establishing a predicate for any Commission action to remove barriers to wireless broadband deployment by adopting additional rules restricting local governments, the *Mobilitie* docket fell woefully short.

B. Expert Reports Support the Conclusion that No New Rules Aimed at Local Governments Are Needed and Could Be Counter-Productive.

In the *Mobilitie* docket, members of this coalition submitted numerous expert reports,¹¹ which we resubmit in this filing to support the assertion that no new rules aimed at local governments are needed and could be counter-productive.¹² By contrast, the industry made

⁹ In the *Mobilitie* docket, as of June 12, 2017, there were 882 comments, 47 replies, and 47 *ex parte* notices filed.

¹⁰ NPRM ¶ 8, fn. 9.

¹¹ See exhibits to *Mobilitie* Docket Smart Communities Comments and *Mobilitie* Docket Smart Communities Reply Comments, also included in this filing.

¹² The materials and expert reports cited in the Comments of Smart Communities and Special Districts Coalition in the Commission's companion wireline proceeding (WC Docket No. 17-84) provide additional support for some of the principles discussed in this filing.

mention of just one report, which was fully rebutted by Smart Communities' experts in reply comments.¹³

The expert reports resubmitted in the Mobilitie docket, and resubmitted with these comments show, among other things, that:

- small cells can have significant impacts on safety and on property values, because small cells are not necessarily small.¹⁴
- while many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions.¹⁵
- there is a significant expense associated with reviewing the applications that needs to be recovered.¹⁶
- allowing localities to recover costs and obtain fair market value for property used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way.¹⁷
- There is no reason to suppose charging less than market rates for public property will lead to deployment of 5G or advanced systems in a rational way.¹⁸

C. The Mobilitie Docket Established No Predicate for Action.

¹³ In the Mobilitie docket, the industry did not submit expert reports or analyses to back their claims, but some in the industry may point to an Accenture Strategy study, filed in a January 13, 2017 ex parte by CTIA as a cost benefit analysis, entitled "Smart Cities; How 5G Can Help Municipalities Become Vibrant Smart Cities" ("Accenture Study"), which claims that 5G could impact up to \$275 billion in investment, create 3 million jobs and increase GDP growth by 500 billion dollars. Such a claim would be misleading at best. See ECONorthwest Reply Report, Ex. 3, p. 4 where Dr. Kevin Cahill provides a detailed economic criticism of the Accenture Study in his comments. It is not a cost-benefit analysis that justifies imposition of any additional rules.

¹⁴ "Report and Declaration of Andrew Afflerbach For the Smart Communities Siting Coalition" (referred to herein as the "CTC Declaration"). The CTC Declaration is attached as Exhibit 1; "Definitions of Small Cells, and the Review of Small Cell Applications, Supplemental Report" (referred to herein as the "CTC Reply Report"). The CTC Reply Report is attached as Exhibit 1A; "Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition" (referred to herein as the "Burgoyne Declaration"). The Burgoyne Declaration is attached as Exhibit 3; "Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition" (referred to herein as the "Puuri Declaration"). The Puuri Declaration is attached as Exhibit 4.

¹⁵ CTC Declaration and CTC Reply Report.

¹⁶ *Id.*

¹⁷ "The Economics of Government Right of Way Fees" (referred to herein as the "ECONorthwest Declaration"). The ECONorthwest Declaration contains an economic analysis of the effect of limiting the amounts that may be charged for use of the public rights-of-way and concludes that the rulings sought by Mobilitie will not promote economically efficient deployment of public rights-of-way and will discourage innovation. The ECONorthwest Declaration is attached as Exhibit 2. "Reply Declaration of Kevin E. Cahill, PhD, Regarding the Accenture Report and the Economics of Local Government Right of Way Fees" (referred to herein as the "ECONorthwest Reply Report"). The ECONorthwest Reply Report is attached as Exhibit 2A.

¹⁸ ECONorthwest Declaration and ECONorthwest Reply Report.

As members of this coalition documented in their *Mobilitie Docket Smart Communities Reply Comments*,¹⁹ the record revealed:

- That there are very few verifiable examples of deployment problems caused by municipalities that are not fully addressed by existing rules;
- That in some cases, communities cited as “problems” by some providers were lauded by others in the industry as speeding deployment, suggesting that some complaints have more to do with individual business preferences than barriers to entry (and also suggesting that preempting local efforts may actually undermine procedures that are working to speed deployment);
- That there is strong evidence that deployment of wireless broadband infrastructure is proceeding apace; and
- To the extent that there are delays, the large majority of deployment delays were attributable to incomplete applications – a problem some localities are seeking to address through pre-application meetings.

1. *The Mobilitie Docket Contained a Paucity of Specific, Verifiable Allegations Backing Industry Complaints.*

Commenters and reply commenters in the *Mobilitie* docket were not able to provide many specific examples of municipal or state behavior that are not already fully and adequately addressed by existing rules. Industry complaints of problems routinely lack specific and verifiable information, which prompted the Commission in this NPRM to “strongly urge” commenters who make complaints “to identify the particular entities that they assert engaged in such conduct or practices.”²⁰

Crown Castle was the primary industry commenter that actually named communities and local government practices that it felt establish a predicate for action in the *Mobilitie* proceeding. But a review of Crown’s comments reveals that despite the fact that the company states it is “the

¹⁹ *Mobilitie Docket Smart Communities Reply Comments*. See also Part III.B.1-6 *infra*.

²⁰ NPRM ¶ 6, FN 9.

nation's largest provider of shared wireless infrastructure"²¹ it could only muster about 25 communities that it claims have rules and practices that Crown finds offensive.²² And even those claims should not be taken at face value but should be evaluated after hearing from the communities themselves.²³ Notably, some of the communities that Crown maligned are held up as model communities by other providers. (*See, e.g.* Smart Communities member Atlanta, Georgia).

But were every complaint made by Crown true, still the number of verifiable complaints is small. According to the 2012 Census of Governments, there are over 90,056 local governments in the United States.²⁴ Twenty-five complaints against that number represents 0.02%. If we measure the number of complaints against the 38,910 general purpose units of government, the percentage of complaints rises to a paltry 0.06%. This hardly presents a case for revising existing regulations to further limit local and state authority (even assuming the Commission had authority to adopt rules that addressed issues discussed in the NPRM).

As the Virginia Department of Transportation stated: "There has been no demonstration of a nation-wide problem that warrants a "one size fits all" solution as Mobilitie, LLC requests in its Petition for Declaratory Ruling."²⁵ The same conclusion holds here. There is certainly no reason to assume that the costs associated with preemptive action would justify the actions

²¹ <http://www.crowncastle.com/about-us.aspx> .

²² *See e.g.*, Comments of Crown Castle in the Mobilitie docket (filed Mar. 8, 2017) ("Mobilitie Docket Crown Castle Comments"). Among industry commenters naming allegedly offending communities, the Comments of Conterra Broadband in the Mobilitie docket (filed Mar. 8, 2017) ("Mobilitie Docket Conterra Broadband Comments") contains complaints against the City of Baltimore, MD and Newark, NJ, not because of their wireless siting rules, but because of "Dig Once" principles endorsed by the Commission and a linear foot charge Newark seeks to impose for access to the public rights-of-way.

²³ For example, the City of Redwood City, California responded to the complaint about its so-called ban on wireless in the public rights-of-way. (*See* Reply Comments of the City of Redwood City, California in the Mobilitie docket.)

²⁴ 2012 Census of Governments available at https://www2.census.gov/govs/cog/g12_org.pdf.

²⁵ Comments of the Virginia Department of Transportation in the Mobilitie Docket, p.1 (Mar. 8, 2017) ("Mobilitie Docket VA DOT Comments").

requested (because no cost-benefit analysis has been provided by the industry, and no cost-benefit analysis is even requested by the Commission in this docket).

2. *The Mobilitie Docket Record Shows Deployment Has Proceeded Apace.*

Industry's comments in response to the *Mobilitie* Petition demonstrate there have been very few cases that turn on a failure of a community to act in a timely way. Industry did not show that a shorter time frame is required, or would significantly cut deployment times, given, for example the time required prior to beginning construction for things such as make-ready engineering work.

One community accused of delays by name in industry comments in the *Mobilitie* docket was Montgomery County, Maryland.²⁶ Montgomery County is a member of this coalition , but also filed Supplemental Comments in the *Mobilitie* docket²⁷ in which the County documented that any claims of delay or excessive fees made against the County are dwarfed by its record of success, including:

- The County has reviewed 2,900 applications in 20 years, and currently has 1,121 wireless facilities deployed at 534 unique locations throughout the County.
- ...The County Department of Permitting Services processes over 60,000 permits and conducts more than 157,000 inspections annually.²⁸

The record in the *Mobilitie* docket also suggests that in cases where the time between initial application and grant of the request has been longer than one might expect under the Commission's shot clock rules, the fault lies with the operator, *Mobilitie* being a particular complainant and culprit in this regard. The *Mobilitie* Docket Montgomery County Comments

²⁶ See e.g., *Mobilitie* Docket Crown Castle Comments at pp. 12-13 (burdensome application fees) and perhaps is the "Maryland locality" complained of at p. 15 of the Comments of *Mobilitie* in the *Mobilitie* docket ("*Mobilitie* Docket *Mobilitie* Comments") as being "on hold" for eleven months.

²⁷ Supplemental Comments of Montgomery County, MD in the *Mobilitie* Docket (filed Mar. 8, 2017) ("*Mobilitie* Docket Montgomery County Comments").

²⁸ *Mobilitie* Docket Montgomery County Comments at p. i.

offered the Commission a detailed timeline documenting its own experience with Mobilitie, and explained that the company repeatedly submitted incomplete applications, and abandoned its original plans for different ones. Similarly, the record showed that in some cases entities do not get necessary franchises or licenses, because they refuse to apply for them based on a misreading or misunderstanding of state law requirements.²⁹ The resulting “delays” from choices made by the companies themselves are of course not justification for preemption.

3. *Cities Are Praised in Industry Comments in the Mobilitie Docket.*

The real status of deployment — a result of cooperation among states, localities and wireless providers — allowed Chairman Pai to boast that the U.S. is the world’s leader in deployment of 4-G technology.³⁰ It is hard to square that level of success with the “barriers” the NPRM implies exist. It is also hard to reconcile this collective achievement with Mobilitie’s CEO Gary Jabara’s view that a consultative process is a reflection of “...how stupid the elected officials — the mayor and the city councilors — are.”³¹ Or that “[t]here are many stupid cities around the country — really dumb. They’re greedy. They have their hands out.”³²

Notably, the industry is not uniform in its distress call. The record in the Mobilitie docket reveals that there is praise for some U.S. cities as models for the world. For instance,

²⁹ See Mobilitie Docket Montgomery County Comments at pp. 12-20. (“A 10 Month Odyssey And Counting: Mobilitie Has Not Put Forth A Reasonable Effort To Use The County’s Telecommunications Siting Process”).

³⁰ Smart Communities celebrates that our efforts permit Chairman Pai in a February 28, 2017 keynote address to the Mobile World Congress that “...98% of Americans now have access to three or more facilities-based [wireless] providers. And the United States has led the world in the deployment of 4G LTE.” Those successes are local governments’ as much as they are the industry’s. Address available at <https://www.fcc.gov/document/chairman-pais-keynote-mobile-world-congress-barcelona>.

³¹ Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 38 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> (“Jabara Interview”). It should be pointed out that a number of Smart Communities members are cited in the AGL interview as being the best of the best of communities.

³² Jabara Interview at p. 38.

Nokia³³ shares with the Commission an international study of best practices from 22 international cities. The study features Cleveland, New York City and San Francisco. In a chart to accompany the report, all three U.S. cities scored relatively high compared to the other cities studied on smart, safe, and sustainable measures. Further, the study reveals that New York City and San Francisco are global models or “advanced smart cities.” Cleveland, while characterized as being behind a number of other cities in the study, is nevertheless identified as one to be watched as the city features a number of ambitious pilot projects.³⁴

Crown Castle highlighted a number of communities for their model conduct including: Cincinnati, Ohio, Chicago, Ill., Pittsburgh, Pa., Minneapolis, Minn., Louisville-Jefferson County Metro Government, Kentucky, State College, Pennsylvania, Brookfield, Wisconsin, Little Elm, Texas, The Colony, Texas, Texas City, Texas, New York City, NY, Philadelphia, PA., and the Borough of Sea Bright, New Jersey.³⁵

So not only were the number of named communities complained about in the Mobilitie docket small, there are almost an equal number of communities that industry commenters praise and recommend to others that they serve as models to be followed, or best practices to be emulated in this developing market. The Mobilitie docket’s record not only shows that the claims of “barriers” are not founded, it also demonstrates that localities are able to craft creative solutions that allow rapid deployment within the public rights-of-way once basic design parameters are established. The City of New York, for example, has developed standards for

³³ Comments of Nokia in the Mobilitie docket (filed Mar. 8, 2017) (“Mobilitie Docket Nokia Comments”).

³⁴ Mobilitie Docket Nokia Comments.

³⁵ Mobilitie Docket Crown Castle Comments at pp. i-ii, 5 and 8.

placement of facilities on its proprietary property that are designed to ensure that small cells visible in the public rights-of-way remain small (with equipment cabinets under 3 cu. ft).³⁶

4. *Industry Players Sometimes Have Inconsistent Views Of the Same Communities in the Mobilitie Docket.*

One revealing feature of the industry comments in the Mobilitie docket, and a reflection of the challenges facing local governments as they seek to meet the needs of the community and industry, are the inconsistent views of a given community in the industry comments.

Chicago,³⁷ San Francisco,³⁸ and New York City³⁹ were simultaneously praised as models by some commenters (*See, e.g.* Nokia, Sprint and Crown) and criticized by others such as the Competitive Carriers Association “for demanding unreasonable annual and escalating pole attachment fees.”⁴⁰ Smart Communities member Atlanta, Georgia was praised by Mobilitie as a model city for deploying small cell wireless technology,⁴¹ while Crown Castle would list Atlanta in the bad actor category for an overly expensive fee ordinance that it has yet to pass.⁴² Crown

³⁶ The New York City DoITT standards appear as appendices to the eight mobile franchises issued by the City, which can be found at <https://www1.nyc.gov/site/doitt/business/mobile-telecom-franchises.page>

³⁷ Mobilitie Docket Crown Castle Comments at p. i-ii.

³⁸ San Francisco finds itself praised by Nokia as a model for other cities of the world, but criticized by Crown Castle (Mobilitie Docket Crown Castle Comments at p. 15) and T-Mobile (Comments of T-Mobile in the Mobilitie docket (filed Mar. 8, 2017) (“Mobilitie Docket T-Mobile Comments”) at pp. 2-3) and being regulatory over bearing.

³⁹ Comments of Sprint in the Mobilitie docket at p. 18 (filed Mar. 8, 2017) (“Mobilitie Docket Sprint Comments”) describes New York City as responding to the needs of its residence by adopting a streamlined application process.

⁴⁰ Comments of Competitive Carriers Association in the Mobilitie docket at p. 17 (filed Mar. 8, 2017) (“Mobilitie Docket CCA Comments”). *See also* Mobilitie Docket T-Mobile Comments at pp. 2-3 which criticizes San Francisco for adopting “...an ordinance that singles out wireless facilities in public ROWs for discretionary pre-deployment ‘aesthetic’ review not imposed on similarly-sized landline or utility facilities.”

⁴¹ Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> (“Jabara Interview”).

⁴² Mobilitie Docket Crown Castle Comments at p.12 – The City of Atlanta files as part of the Mobilitie Docket Smart Communities Reply Comments as Exhibit 1 a Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O’Rielly (“Atlanta Letter”) that provides a different story. (“The City of Atlanta, specifically the City’s Utilities Committee, is considering an ordinance that would establish reasonable fees for wireless pole attachments in the City’s public right-of-way. Before moving the legislative proposal out of Committee, the City invited the Georgia Wireless Association (“GWA”) to engage in discussions

Castle criticized communities for *even considering* ordinances identical to ordinance adopted by San Diego.⁴³ Yet, CTIA's Accenture Study holds San Diego out to the world as a model for integrating smart technology into its Smart Lighting initiative, which includes wireless service.⁴⁴

5. *Communities Want and Support Wireless Infrastructure in Their Planning and are Changing Processes to Accommodate Need and Increased Demands.*

As Commissioner O'Rielly recognized recently, communities see the benefits of wireless connectivity and have been working to accommodate the need and increased demands of the wireless industry, while protecting important community values.⁴⁵ Comments filed in the Mobilitie docket by a diversity of communities reflected this fact – and all showed that wireless deployment is proceeding apace.

CTC Technology & Energy ("CTC") is an independent communications and IT engineering consulting firm with more than 30 years of experience with public sector and non-profit clients throughout the nation. A leading example of their work can be seen in the Washington, D.C. area's regional wired and wireless communications interoperability initiative funded by the U.S. Department of Homeland Security.

about the proposed ordinance. As a GWA member, Crown Castle has participated in three meetings at City Hall during a five week period, with a fourth meeting scheduled to occur in two weeks. The meetings were hosted by City officials from the Mayor's Office and the Department of Public Works, and attended by approximately 20 industry representatives from GWA. In response to industry's input, including that of Crown Castle, during the first three meetings, the City substantially restructured the proposed ordinance. None of this information, however, was included in Crown Castle's description of the City's ordinance that was shared with the Commission.")

⁴³ Mobilitie Docket Crown Castle Comments at p. 20. "For example, the cities of Vista, California, and Palos Verdes Estates, California, are considering draft ordinances (virtually identical to ordinances adopted in Irvine, Santa Monica and San Diego) governing the review process for wireless facilities that include an 'amortization' provision effectively prohibiting the grant of new EFR permits for an existing facility."

⁴⁴ CTIA *Ex Parte* Letter to Marlene Dortch in the Mobilitie docket (filed Jan. 13, 2017), Accenture Study at p. 7.

⁴⁵ On the day that Comments were filed in the Mobilitie docket, Commissioner O'Rielly updated the Senate Commerce Committee on the status of wireless broadband infrastructure deployment. He reflected that "...the vast number of communities see the benefit of broadband deployment and welcome providers seeking to serve their citizens...Oversight Of The Federal Communications Commission," Testimony of Commissioner Michael O'Rielly before the Senate Commerce Committee (March 8, 2017) http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0308/DOC-343816A1.pdf.

In his Declaration⁴⁶ included in Smart Communities’ opening Comments in the Mobilitie docket, CTC’s Afflerbach explained, many communities are working with industry to develop new approaches to deployment that take wireless into account as part of the development processes associated with new subdivisions, roadway widening, or as part of a general planning processes that is designed to provide some certainty for both localities and for providers as to what may be installed, and where.⁴⁷ This process may take some up front time, and is distinct from the procedures that apply once an application is received under Section 332(c)(7) or Section 6409.

This preliminary planning work may appear to result in a delay in deployment, as communities gather all industry players together to attempt to develop a cooperative solution. But the “upfront” time may translate into faster consideration of individual applications over the longer term, as providers and communities alike, gain a better understanding of what is required of them, and providers submit applications that are tailored to community requirements. These local consultative processes ought to be encouraged, and certainly provide no basis for additional federal regulations.

Smart Communities are committed to developing processes that encourage deployment of advanced wireline and wireless systems. Not only do we understand that our citizens increasingly depend on access to broadband; the efficient operation of our communities and the future economic health of our communities also depend on taking advantage of the opportunities presented by new wireline and wireless technologies. While different communities will take advantage of these technologies at different paces, local governments, road agencies and special districts recognize the powerful opportunities the IoT and wireless technologies present for

⁴⁶ Mobilitie Docket Smart Communities Comments, Ex. 1, CTC Declaration.

⁴⁷ Mobilitie Docket Smart Communities Comments, Ex. 1, CTC Declaration, at pp. 23-25.

delivering public services more efficiently, improving public health and safety, and attracting new businesses. We are watching and adopting technologies that will permit us to, among other things, reduce energy consumption while improving street light efficiency; read meters wirelessly; identify and respond to problems with sewer and water lines; and provide more efficient public transit. The City of Los Angeles, for example, was the first city in the world to deploy Philips/Ericsson SmartPole technologies, which turn street lights into hubs for existing and future wireless technologies.⁴⁸

Similarly, the City of Yuma, Arizona is in advanced talks with Siemens Industries and anyCOMM to undertake a LED streetlight conversion project that would not only convert streetlights to more energy efficient fixtures, but also incorporate wireless sensor devices atop the streetlights that would be capable of providing next generation wireless as well as WiFi internet access throughout the City, and other smart city applications. The City is leveraging its ownership of street light poles and an extensive fiber network to facilitate the project, and anyCOMM would be bringing “\$10 million worth of investments to Yuma, including a network operations center and 300-high paying jobs.”⁴⁹

We do not believe the IoT depends on the authorization of the towers Mobilitie and others seek to deploy (the CTC Declaration submitted in the Mobilitie docket, and attached here,⁵⁰ along with our own experiences, explains why it does not). Nor do we believe that regulating placement of wireless facilities or charging for use of the public rights-of-way or other public property such as water towers or street lights, is inconsistent with effective and efficient

⁴⁸ For more information see <https://www.ericsson.com/networks/cases/networks-cases/philips-smartpole-with-ericsson> (last accessed 3/7/2017).

⁴⁹ For more information see http://www.yumasun.com/news/company-s-plan-may-bring-jobs-to-yuma-software-sensors/article_254e0fe8-4e26-11e7-9e8c-dffb779ef76d.html

⁵⁰ CTC Declaration at p. 15.

deployment of wireless technologies. As the expert reports attached hereto explain, given the potential safety issues associated with public right-of-way deployment; the potential negative impacts on property values; and, the predictable negative economic effects that would flow from further cost and fee regulation, local review and local charges actually *encourage* efficient deployment of advanced wireless technologies.

6. *The Mobilitie Docket Showed Delays in Deployment are Most Often Attributable to Incomplete Applications.*

The NPRM here, much like the Notice in the Mobilitie docket cites to delays and potential delays in siting 5G technology as its predicate for action. Industry commenters in the Mobilitie docket, however, fail to prove that claimed delays are occurring, and more importantly, the record in Mobilitie docket reveals that the large majority of delays are attributable to incomplete applications.⁵¹

The NPRM asks whether there are “ways in which applicants are causing or contributing to unnecessary delay in the processing of their siting applications? For example, to what extent have delays been the result of incomplete applications or failures to properly respond to requests to the applicant for additional information.”⁵² As members of this coalition showed in the Mobilitie docket, incomplete applications continue to be a major problem.

⁵¹ The only time any Mobilitie docket industry commenter approached the presentation of any data of delay was Sprint which stated: “Mobilitie has sought access agreements in hundreds of jurisdictions. Of those, 343 have taken more than six months to reach agreement. Of those 343 jurisdictions, 75 have taken more than a year, 11 have taken more than 18 months, and two have taken more than two years.” (Sprint Comments at p. 22) Sprint does not tell us how many were granted in less than 6 months, nor the reason for any delays, i.e., how many of these were the fault of Mobilitie, and the poor engineering that we and other local government commenters demonstrated was endemic in Mobilitie applications. For instance, as to any pending applications in Montgomery County, the County’s Mobilitie docket filing documents the 10 month struggle it has engaged in with Mobilitie and its ever changing staff to develop a complete application. In addition, a number of the applications submitted by Mobilitie to Montgomery County were for locations that were in municipalities and not even subject to the County approval process. (See Mobilitie Docket Montgomery County Comments at pp. 12-20)

⁵² NPRM ¶ 7.

Once an application is received, it must then be reviewed before it can be approved. As the CTC Declaration explains, to the extent that there are “delays,” most delays in processing an application are caused by incomplete applications.⁵³

As discussed in Smart Communities’ filings in the Mobilitie docket, Mobilitie unfortunately provides the paradigmatic example of an entity that causes its own delays – and in the course of doing so, increases the costs of regulatory review. While Mobilitie has actually deployed facilities in some of the Smart Communities, and is entering into agreements to do so in others, its record in many communities is not pretty.

(i) *Mobilitie submitted applications before it had legal authority to operate, or containing false claims regarding Mobilitie’s legal authority.*

In early 2016, several subsidiaries of Mobilitie began submitting applications to place towers in the public rights-of-way in communities across the country. The applications were essentially cookie cutter applications, and were submitted initially with letters claiming that the subsidiary was certificated by the state public service commission and had the right to use the public rights-of-way. In many cases, however, the subsidiary was not even licensed to do business in the state, and had not filed an application with the public service commission at all. An example involving Centerville, Georgia is attached in Exhibit 6.⁵⁴

⁵³ CTC Declaration at p. 20.

⁵⁴ The proposal is for a 120’ tower on a narrow street; it is not clear the structure could even be placed at the location proposed without blocking the sidewalk. In early 2016 in Georgia, applications were received from either Network Utility Technologies of Georgia, LLC or Interstate Transport and Broadband, LLC. Neither of these companies had a GPSC certificate; Mobilitie did, but it did not even file to transfer that certificate to its subsidiaries until after filing applications with localities. Other names under which Mobilitie sought applications included names which appeared to be designed to convince localities that it was a functionary of the state:

Alaska Utility Pole Authority
Arizona Utility Pole Authority
Arkansas Utility Pole Authority
Florida Utility Pole Authority
Illinois Utility Pole Authority
Indiana Utility Pole Authority
Minnesota Utility Pole Authority

In cases where it *was* licensed to operate, Mobilitie made false claims about its rights to enter onto municipal property. For example, on December 20, 2016, the Michigan Public Service Commission ruled and granted the applications requested in two cases, U-18067 (Mobilitie Management LLC’s application to provide basic local exchange services) and U-18125 (Utility Network Authority MI, LLC’s application to provide basic local exchange services), but had to remind the applicants that a license to provide basic local exchange service does not constitute authority for providing other services, such as DAS networks, and does not circumvent the requirement to obtain the necessary permits from municipalities to access their public rights-of-way.⁵⁵ Nonetheless, applications submitted to localities claimed the MPSC license authorized right of way entry.

In these situations, localities must spend time and effort notifying Mobilitie that it should have authorizations to operate in a state, or it must obtain required consents. And in addition – even though the application is not remotely valid, the locality must detail other problems in the application, even where it is not clear the company will be in a position to pursue deployment.

Mobilitie submitted applications that omitted obviously required information, and that involved almost no field engineering. As a result, localities had to devote resources to reviewing

Missouri Utility Pole Authority
North Dakota Utility Pole Authority
Ohio Utility Pole Authority
Oregon Utility Pole Authority
Pennsylvania Utility Pole Authority
Rhode Island Utility Pole Authority
Vermont Utility Pole Authority
West Virginia Utility Pole Authority
Wisconsin Utility Pole Authority
Wyoming Utility Pole Authority

Even where it had obtained authority, Mobilitie caused delay and confusion by falsely claiming it had obtained rights to use rights of way in communities when it clearly had not.

⁵⁵The Orders are available at: <http://efile.mpsc.state.mi.us/efile/docs/18067/0026.pdf> and <http://efile.mpsc.state.mi.us/efile/docs/18125/0019.pdf>, respectively.

proposals that had, among other things obvious safety issues, were inconsistent with the ADA (blocking handicapped access), and involved placement of new 120 foot towers in historical districts or in front of historical structures. The Centerville responses in Exhibit 6 provide a good example of the problems with the sort of applications received from Mobilitie. While facilities are proposed to be placed in the public right-of-way, the drawings submitted do not show detailed foundation or pole depth specifications – facts obviously critical to public right-of-way safety.

In many cases facilities are proposed at locations that are plainly not viable locations. In Laurel, Maryland, for example, Mobilitie proposed to install a 75-foot tower in the Laurel Historic District, in front of the Citizen's Bank, in a 6'9" brick sidewalk near a handicapped access ramp. The proposal required the tower to be embedded 11' underground, even though underground utilities including electrical utilities are at that location. The proposal was submitted without any structural work or surveying to determine whether it could be safely installed as proposed.



Laurel Historic District

The Laurel application is attached as Exhibit 7. Laurel was required to spend staff time and effort to review an application that should never have been submitted for the location proposed. As detailed in the Smart Communities filing in the Mobilitie docket, other communities have faced similar problems.⁵⁶

(ii) *Application deficiencies are often followed by silence.*

Application deficiencies are often followed by extended silence. This was true, for example, with Monroe, Michigan, De Soto County, Mississippi, Frederick, Maryland, and numerous other local governments. Where there have been continued contacts, the siting process may involve what is effectively an entirely different proposal. For example, in Cary, North Carolina, Mobilitie originally submitted five “applications” in 2016 for 120’ towers in the public right-of-way. Following correspondence addressing the incompleteness of the application, Mobilitie and Town staff met in October of 2016 and again in February of 2017. While formal applications have not been filed, Mobilitie has indicated they now have plans for about twenty sites in the Town at elevations far less than 120 feet.

(iii) *Mobilitie and others often do not accurately identify the location of proposed facilities.*

The applications submitted by Mobilitie typically included a set of plans that might (but often do not) accurately identify the location of the proposed deployment. In many cases, the location sought for the tower was not within the jurisdiction of the government entity receiving the application.⁵⁷

⁵⁶ See Mobilitie Docket Smart Communities Comments and Mobilitie Docket Smart Communities Reply Comments.

⁵⁷ Sugar Land, Texas received requests for eight sites, of which seven were located on state rights-of-way. Consent to use the rights-of-way is required prior to approval from a state agency, the Texas Department of Transportation, in addition to compliance with City requirements, requiring detailed coordination between both jurisdictions on current and proposed road construction work in the area. Another example may be found in DeKalb County, Georgia where more than half of the requested sites were in Georgia rights-of-way. Still DeKalb and Mobilitie are

(iv) *The deficiencies in the applications suggest the company made almost no real effort to comply with local requirements.*

In many cases, no application fee accompanied these applications, but there was always a request for a community contact. The same application packet (or a virtually identical packet) was received across the country, regardless of local forms or any requirement that the forms be filed electronically. In many cases, communities received multiple applications, all of them incomplete.⁵⁸

Worse, in some cases Mobilitie built its facility without going through required federal, state or local requirements. Mobilitie installed a pole without going through this Commission's Section 106 process in a historic district in Denison, Texas, and then removed it (*see* Texas Municipal League's Comments for additional detail on Mobilitie in Denison, Texas and Section 106 issues). In Baltimore, Maryland, Mobilitie was required to remove a pole it placed in a sidewalk ramp that made the sidewalk non-ADA compliant. The cost of remediating these problems falls on local and state governments, and not just on Mobilitie, especially when important laws like the ADA are involved. And those costs incurred by local communities must be recoverable in full.

Smart Communities were not the only communities to report problems with Mobilitie and other providers. For instance, numerous parties commented in the Mobilitie docket that as a routine matter, the company submitted cookie cutter proposals for 100-120 foot towers in the

close to reaching a Master License Agreement on different terms from the Georgia Municipal Association Mobilitie agreement.

⁵⁸ In Montgomery County, MD, Mobilitie filed hundreds of applications in a single day; not one was complete. The separate comments of Montgomery County provide the detailed timeline — it took eight months before even a single complete test application was submitted. Los Angeles reports requests for 1,900 locations. In Boston, Mobilitie identified 219 locations for DAS/Small Cell installations, 204 of these on City Poles and 15 on Eversource/Verizon Poles. The City sent Mobilitie a DAS/Small Cell agreement and a Dark Fiber agreement on February 3rd for execution.

public rights-of-way, without doing any meaningful field engineering,⁵⁹ or making any significant effort to comply with state, federal or local requirements. Mobilitie CEO Gary Jabara may have explained exactly why so many Mobilitie applications looks the same, and repeat the same deficiencies. “At Mobilitie, we’ve done a good job of industrializing the process. We take 20 seconds to pop out a set of drawings based on algorithms and form factors.”⁶⁰ Community needs and safety considerations are not typically found in algorithms and form factors that can be addressed in 20 seconds.

The impact of these “20 second applications” on local governments is extended hours of work for local government reviewers. Most often these reviews result in the application being returned as incomplete with a detailed incompleteness notice, and a shifting of significant costs, both opportunity and real, not only to communities such as Smart Communities and other local government commenters,⁶¹ but also to other wireless applicants. This latter cost shift is as a result of the time and resources that might otherwise be available to process that applicant’s submission being consumed to address Mobilitie’s “20 second applications.”

Despite the problems identified above, local governments do continue to work with Mobilitie. The key point is that behavior like Mobilitie’s adds significantly to the cost, burden and time required to process small cell applications; localities are being asked to do work Mobilitie itself should have performed. And Mobilitie, while the worst offender, is by no means

⁵⁹ Comments of Michigan Road Commission (filed by Denise S. Donohue) in the Mobilitie docket at p. 1 (filed Mar. 9, 2017) (“Mobilitie Docket Michigan Road Commission Comments”). While Michigan’s local county road agencies and others recognize the importance of expanding wireless infrastructure, it is significant to note that nowhere in Mobilitie’s pending Petition for a Declaratory Ruling is safety either mentioned or addressed. *See e.g.* Mobilitie Docket Montgomery County Comments; Comments of Houston, TX in the Mobilitie docket (filed Mar. 8, 2017) (“Mobilitie Docket Houston Comments”); New York Comments in the Mobilitie docket (filed Mar. 8, 2017) (“Mobilitie Docket New York Comments”); Comments of Edina, Minn. in the Mobilitie docket (filed Mar. 5, 2017) (“Mobilitie Docket Edina Comments”) (City established a Master License Agreement to meet needs for deployment).

⁶⁰ Jabara Interview at p. 42.

⁶¹ Jabara Interview at p. 42.

the only applicant that causes excessive delays. The collective comments of local governments,⁶² road commissions and state highway officials,⁶³ as well as technical experts⁶⁴ in the Mobilitie docket are clear: where there appear to be problems with the speed of deployment of wireless facilities, they are most often the result of some shortcoming of an applicant that failed to file a complete application or in the alternative fails to acknowledge and address the safety concerns raised by deploying infrastructure within the public rights-of-way.

II. RATHER THAN IMPOSE NEW NATIONAL RULES MICROMANAGING LOCAL PROCESSES, THE COMMISSION SHOULD PROMOTE COOPERATIVE EFFORTS .

Smart Communities are disappointed and somewhat perplexed that the NPRM seeks comment on new rules with no reference to existing initiatives – and without any specific rules on which to comment.

A. The Existing Rules Require No Supplement: Public-Private Cooperation Is Working at the Local Level.

The NPRM asks commenters to “detail the extent to which the Commission’s existing rules and policies have or have not been successful in addressing local siting review challenges, including effects or developments since the 2014 Infrastructure Order, the Commission’s most recent major decision addressing these issues.”⁶⁵

The implicit assumption is one with which we do not agree – namely, that the rules were needed to address local siting review challenges. Setting that aside, the rules did establish a

⁶² See e.g., Mobilitie Docket Smart Communities Comments at p. 8 (“The Cities note their experience with incomplete or otherwise deficient applications slowing down (or preventing) deployment....These delays have impacted the City’s development and finalization of master lease agreements with providers for use of ROW and City-owned poles for small cell/DAS installations.”)

⁶³ Virginia DOT Comments in the Mobilitie docket (filed Mar. 8, 2017) (“Mobilitie Docket VDOT Comments”) at p. 7; See e.g., American Association of State Highway and Transportation Officials Comments in the Mobilitie docket (filed Mar. 21, 2017) (“Mobilitie Docket AASHTO Comments”).

⁶⁴ See e.g., Mobilitie Docket Smart Communities Comments, Ex. 1, CTC Declaration at p. 20. (Most delays in processing an application are caused by incomplete applications.)

⁶⁵NPRM ¶ 6.

deadline by which localities must act, or be presumed to be in violation of Commission rules. Litigation must be filed within 30 days of a failure to act. Based on the case law, there are *not* many instances where a locality has been found to have violated the presumptive timelines established by the Commission, or where a deadline violation is alleged. As explained in the Mobilitie docket, the current deadlines, because presumptive, have permitted localities and providers to address issues like the proper handling of bulk applications without the need for litigation or guidance from the Commission.

Smart Communities members have already met significant requests from numerous wireless providers and DAS companies for access to public rights-of-way, in addition to those discussed *supra*. Boston has approved nearly 400 DAS/small cell installations in the public rights-of-way with three neutral host companies.⁶⁶ Atlanta has approved 257 applications⁶⁷ and Houston has approved over 350 locations.⁶⁸ Demand is not expected to slow down. Houston, for example, believes that they will receive requests for as many as 800 additional locations in the not so distant future.⁶⁹ But it is not just the larger communities that are being challenged to meet demands for public rights-of-way access. Ann Arbor, Michigan, in just the last two years has dealt with more than 70 applications for small cell facilities.⁷⁰ Other communities are also

⁶⁶ Boston has agreements with Crown Castle, ExteNet and American Tower that provide that two-thirds of the installations will take place on City-owned Streetlights or traffic lights and the remainder on jointly-owned (Eversource-Verizon) poles. The majority of these installations have been in place for about eight years, but recent interest and engagement by carriers, as well as additional neutral hosts, indicate that number could treble in the next 2 years and again in 4 years.

⁶⁷ These approvals break down as 174 for Crown Castle and 83 for Mobilitie. Atlanta reports that Mobilitie has indicated a request for more than 200 sites within the city.

⁶⁸ Houston explains that in addition to the 350 locations already approved, they are anticipating as many as 800 more requests as Zayo, Crown Castle, Verizon, and Mobilitie each have expressed a desire to build out an entire network, which could be as many as 200 locations for each company.

⁶⁹ The City of Los Angeles reports that it has approved nearly 100 Mobilitie sites alone.

⁷⁰ Between 2015 and 2016, ACD.net filed applications for 29 locations with Ann Arbor, only to withdraw each of those applications and submit 18 new applications in late 2016 and early 2017. One day, when an individual at ACD.net tried resubmitting its applications with the required detailed drawings for each location and got a bounce

meeting these requests. For example, Verizon is deploying 400 small cells in San Francisco⁷¹ and planning more than 100 in Sacramento as a 5G “showcase city” to sell the concept in other markets.⁷²

The marketplace is working. The Commission at most should be identifying successes and encouraging additional cooperation. The Commission should not create disincentives to creative public-private solutions, as many of its rules would necessarily do. By complicating the deadline structure, or otherwise seeking to parse rules into smaller and smaller parts to address all the possible permutations of the wireless industry deployments, the Commission will add to the complications associated with local rules, regulations, processes and forms. The burden on smaller communities will be enormous, and will likely require special personnel who will need to be paid for by the industry.

As the CTC Declaration explains, deployment is most efficient when localities work with service and facilities providers to develop solutions for the problems presented by small cell deployment and particularly, small cell deployment in the public rights-of-way.⁷³ Additional rules will at best complicate existing powers and at worst will discourage cooperative approaches.⁷⁴

because of the email and attachment size, the individual at ACD.net resubmitted the same email and drawings two more times, crashing the Ann Arbor engineer’s mailbox, and causing the engineer’s computer to be down for all purposes for approximately six hours.

⁷¹ <http://www.fiercewireless.com/wireless/verizon-to-deploy-400-small-cells-san-francisco>

⁷² <http://www.sacbee.com/news/local/article153716914.html>

⁷³ CTC Declaration at pp. 22-23.

⁷⁴ As we have pointed out in this filing, and as CTC explains, the Commission’s 6409 rules are often a barrier to solutions in sensitive areas like residential areas because they permit small installations to grow in a manner that will be significant to residents. *See also* Burgoyne Declaration.

To the extent that the existing rules fail, it is because those rules prevent development of mutually agreeable solutions that allow deployment while protecting legitimate interests of the public and of communities.

1. *The Commission's 6409 rules interfere with resolution of siting issues, particularly in residential neighborhoods.*

Under Commission rules implementing Section 6409, with certain important exceptions, if a locality approves placement of a wireless facility in the public rights-of-way that has no concealment elements, that facility can grow at least ten feet in height; any number of six foot appurtenances can be added to the structure; and if any ground cabinet is authorized at a wireless facility, more can be added, even if (as is now being proposed) the wireless facilities are in someone's front yard. The Commission would have benefited from the advice of the Harvard Business Review,⁷⁵ or pitching great Bob Feller⁷⁶: "More is not always better." Many local governments are struggling to evaluate the impacts of so-called small cell deployments within the public rights-of-way that can grow unchallenged by such mass. The Commission needs to recognize this, and also address the fact that its rules implementing Section 6409 undermine the premise that deployment of small cell wireless infrastructure in public rights-of-way will be unobtrusive and insignificant. As the Burgoyne Declaration originally submitted in the Mobilitie docket explains, there is no reason to believe that the impacts of the sort of large deployments allowed by Commission rules are inconsequential.⁷⁷

⁷⁵ <https://hbr.org/2006/06/more-isnt-always-better>

⁷⁶ While not nearly as quoted as Yogi Berra, legendary Indian pitcher Bob Feller is credited with "The difference between relief pitching when I did it, and today is simple, there is too much of it. It's one of those cases *where more is not necessarily better*." (emphasis added) The Athlete's Way: Training Your Mind and Body to Experience the Joy of Exercise (Christopher Bergland, St. Martin's Griffin Publishing, 06/10/2008, Page 290).

⁷⁷ Burgoyne Declaration at pp. 9-10.

Particularly for residential areas, and for areas where all other utilities are underground, the Commission should recognize that a change from a truly small facility to one that is substantially more massive *is* significant. If local governments can allow small cells and yet keep them small, the initial approval process is simpler. One way for the Commission to address the matter is to recognize that in particular areas, any changes beyond a small percentage change in any component is significant, as is the addition of ground cabinets. Given the examples we now have of the size of some “small cells,” this is actually critical to ensuring the Commission’s rules comport with the statute. But it also is important for the Commission to interpret Section 6409 in a way that makes it possible for localities to create and enforce safe harbors for dense deployment of wireless facilities. As the CTC Declaration explains, many communities are working to create development processes that allow for more straightforward deployment of wireless facilities, but the viability of those processes depends on being able to enforce adopted design standards for an area.⁷⁸

2. *New Shot Clock Rules Reward Incomplete Applications to the Detriment of Properly Filed Applications*

We have discussed problems with incomplete applications above. Smart Communities believe that some applicants are responding to the fact that the FCC rules reward an applicant that files an incomplete application.

Under the current rules, there is no penalty in time lost for an incomplete application, but there are rewards should the reviewing body miss their 30-day or subsequent 10-day shot clocks. In those cases, the period for review of the application cannot thereafter be tolled for incompleteness,⁷⁹ and even if the reviewing body does not miss the 30- or 10-day shot clock, an

⁷⁸ CTC Declaration at p. 23.

⁷⁹ 2014 Infrastructure Order ¶ 218.

application that is submitted for a 3rd time because of incompleteness could result in the reviewing agency having less than 12 days to review a 6409 application, 42 days to review a 332(c)(7) colocation application, or 102 days to review a new site request.

Moreover, the lost time due to reviewing the same incomplete applications over and over again is not just a loss to the reviewing body, it is also a loss to the service or infrastructure provider that files complete applications – both because the cost of review is increased overall by submission of incomplete applications, and because staff time that could be spent reviewing routine applications must be spent detailing all the flaws in an incomplete application. The Commission should be clear that localities can penalize repeated incomplete applications and applicants without violating the Act. The Commission should make it clear that its rules regarding incompleteness do not prevent a locality from simply rejecting an application and/or imposing upon the applicant a charge to recover the expenses incurred in addressing such omissions, and should allow localities to dismiss a dormant application after a period of time without a hearing or a written decision. And at the very least, it should do nothing to prevent localities from taking steps to prevent submission of incomplete applications, by permitting pre-application meetings that do not count against the shot clock (see discussion below).

3. *Section 6409 Rules Should Be Clarified to Ensure Public Safety in Public Rights-of-Way is Preserved*

Finally, the Commission should make it clear that among conditions enforceable against an applicant under its Section 6409 rules are not merely adopted safety codes, but also practices and guidelines for deployments that address issues as to which there may be guidelines, but no specific rules (because of the many variations among deployment situations). An example are

AASHTO guidelines for placement of structures along the rights of way, which are not codified, but are critical to road safety.⁸⁰

4. *The Commission Should Address a Barrier to Public Acceptance of Widespread Small Cell Deployments – Outdated RF Emissions Standards.*

There is one topic which we continue to urge the Commission to address – that is, updating standards to address public concern about RF emissions. Smart Communities and other local governments routinely receive public comments expressing RF radiation concerns about wireless applications. As small cell deployments anticipate many more installations in public rights-of-way much closer to the public in many more locations, Smart Communities anticipate increased public awareness and concern. Smart Communities cannot act on that basis of RF concerns, but we also recognize that successful deployment requires adoption; and the public is reluctant to accept deployments that it knows, and the Commission knows, are tied to outdated standards.

More than four years ago (March 29, 2013), the Commission opened a proceeding to address changes in the RF emissions standards related to human exposure that received nearly a thousand comments totaling more than 20,000 pages but has yet to take action to complete its review of its RF emission rules and determine if any updates were necessary. In response to the Mobilitie Petition Notice’s open invitation to list actions the Commission might take to assist the deployment of wireless broadband infrastructure, Montgomery County,⁸¹ members of this coalition and no less than eight-five percent of the parties filing in this proceeding called on the Commission to finish its work on the 2013 RF NOI.

As Montgomery County shared in its comments in the Mobilitie docket:

⁸⁰ See Puuri Declaration and Mobilitie Docket AASHTO Comments.

⁸¹ Mobilitie Docket Montgomery County Comments at p. 28.

The Commission's failure to act on RF rulemakings is resulting in growing public concern and potential opposition to 5G deployments in residential neighborhoods. The Commission has exclusive jurisdiction to regulate RF emissions.⁸²

Commission action is particularly important because there are recent studies describing the impact of small cell deployments on RF exposure that are simply not reflected in existing rules.⁸³ To put it another way: The basic predicate of this proceeding is that deployment of ultra-dense wireless networks is a public benefit. A further basic assumption is that such a deployment (which is designed to lead to greater use of wireless devices generally) does not endanger public health. Smart Communities believe it will be much easier to gain public acceptance and support for deployment of wireless facilities (which will in turn lead to more public and private properties being opened for placement) if the Commission acts to complete its 2013 RF proceeding. Indeed, it is arguably required to do so before preempting local authority any further.

B. The Commission Should Support Local Actions to Create Disincentives to Filing Incomplete Applications and to Terminate Inactive Applications

The Commission asks “what siting applicants can or should be required to do to help expedite or streamline the siting review process” and how Commission measures “ensure that applicants are responsible for supplying complete and accurate filings and information?”⁸⁴

As suggested above, the Commission's own incompleteness rules add to costs that otherwise apply, and can add to the time required for review. Those rules have the perverse effect of adding to the processing time and costs for applications, and create an incentive for applicants to file incomplete applications. This incentive may be amplified by the relationship

⁸² Mobilite Docket Montgomery County Comments at p. 28.

⁸³ <http://onlinelibrary.wiley.com/doi/10.1002/bem.22045/full#references>;
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4377923/>.

⁸⁴ NPRM ¶ 7.

between wireless service and facilities providers, which the Commission should investigate as part of this NPRM, should it wish to proceed further. If, for example, an infrastructure provider is paid on milestones (when an application is filed for example) there will be an additional financial incentive to file without doing the work required to prepare a complete application.

C. Pre-Application Processes Improve the Quality and Completeness of Applications; Existing Rules Discourage These Processes.

The Commission seeks information on whether there are “steps the industry can take outside the formal application review process” or “siting practices” that may facilitate faster local review.⁸⁵

We believe that participation in a pre-application process that does not count against the shot clock can be helpful, and may be particularly helpful where an applicant proposed a large project that may implicate a variety of environmental and historical reviews. Not only does such a meeting help ensure that the application, once submitted, will be complete; it also helps identify practical timelines and reviews required for a project, and identify sites that may present particular issues. To be clear: by “facilitating faster local review,” we do not mean that a shorter set of “shot clocks” may be set for projects where there is a pre-application review. We mean that pre-application reviews may result in a given project being reviewed more quickly – and one hopes, more cheaply, than would otherwise occur. By contrast, if the pre-application counts against the shot clock, localities are actually disincentivized to meet and cooperate with companies.

D. The Commission Does Not Need To Address State and Local Moratoria.

The Commission, among other things, asked commenters to submit specific information about moratoria and to describe the impact of such moratoria on them. The FCC proposed to

⁸⁵ NPRM ¶ 7.

take any additional actions necessary, such as issuing an order or declaratory ruling providing more specific clarifications of the moratorium ban or preempting specific State or local moratoria.

The FCC's rules are clear that moratoria do not stop the shot clock. What a moratorium may do is to prevent rights from vesting under state law, and permit localities time to adjust rules so that applications can be treated in a non-discriminatory fashion. The ability to develop appropriate rules is, of course, a critical part of the local decision-making process. Because moratoria by definition do not delay action on applications within a reasonable period of time, the Commission has no legal authority to preempt them.⁸⁶ We do not understand them to be in widespread use, in any case.

E. Flexibility And Communication Have Been Helpful In Deployment Tensions; Strict Federal Rules Are Not.

The NPRM seeks information on “the specific steps that various regulatory authorities employ at each stage in the process of reviewing applications, and which steps have been most effective in efficiently resolving tensions among competing priorities of network deployment and other public interest goals.”⁸⁷

Where a land use approval is required – whether for smaller or larger facilities – the process may require some form of public hearing and notice; as well as a process for appeal of decisions. The Commission should recognize that the placement of facilities in the public rights-of-way or other public property may require additional or different approvals.

In addition to necessary land use approvals, an applicant who seeks to place facilities on private land will require the landowner's permission. The same is true for facilities in the public

⁸⁶ Of course, for reasons suggested above, it would be counter-productive for the Commission to prevent providers and localities from working together to adjust existing laws and processes to reflect changes in cellular technology.

⁸⁷ NPRM ¶ 6.

rights-of-way or other public property. The permission of the landowner or trustee for the property – which will either be the local government or the state – must be obtained. Hence, in states where the right to use the public rights-of-way is subject to local consent (whether in the form of a license or franchise) the applicant must have the authority to use the public rights-of-way. Similarly, if the applicant wishes to occupy other public property (parks, buildings, easements, etc.) it will need to have authority to use that property. The location may then affect whether additional land use requirements apply or not. There may be no additional land use approval requirements for some locations or some types of installations (a city park, or a right of way may not be subject to land use regulations in many communities). The choice to deploy on property other than privately-owned land and buildings may thus trigger other requirements that affect deployment. It is helpful to localities, and speeds deployment, when provider seek and obtain these approvals *before* applying for approval of specific applications, or at least at the same time.

Local processes are constantly evolving and changing as technologies and deployments evolve. Localities either originally wrote ordinances to provide enough flexibility to distinguish among installations based on impact or are modifying or have modified ordinances to distinguish between facilities that are small and less visible, and those which are not. Land use ordinances typically identify factors (*e.g.*, whether a proposed structure is consistent with the design of a particular neighborhood; or whether a proposed structure is the least intrusive required) that would necessarily take into account the size, appearance, and physical characteristics of a proposed facility. It is certainly true that many local ordinances were originally written for macrocells, and incorporate provisions that may be appropriate for a fenced facility, but are not appropriate for a facility on a utility pole. But as a general matter, land use ordinances provide

sufficient flexibility to distinguish among types of facilities based on their physical characteristics (as opposed to the technical classifications suggested by the NPRM⁸⁸).

What is noteworthy is that processes and ordinances are often being revised in consultation with industry.⁸⁹ As the CTC Declaration explains,⁹⁰ many communities are working with industry to develop new approaches to deployment that take wireless into account as part of the development processes associated with new subdivisions, roadway widening, or as part of a general planning processes that is designed to provide some certainty for both localities and for providers as to what may be installed, and where. We expect that given the opportunity, localities and providers may be able to develop solutions that rules could not anticipate, and may discourage. This process may take some up front time, and is distinct from the procedures that apply once an application is received under Section 332(c)(7) or Section 6409. This preliminary work may appear to result in a delay in deployment, as communities gather all industry players together to attempt to develop a cooperative solution. But the “upfront” time may translate into faster consideration of individual applications over the longer term, as providers gain a better understanding of what is required of them, and submit applications that are tailored to community requirements. This consultative process ought to be encouraged, and certainly provides no basis for additional regulations.

F. The Commission Should Encourage Further Cooperative Efforts Through Existing Mechanisms.

There are numerous existing bodies that are readily available and tasked with addressing issues related to wireless deployment. Requests or suggestions for partnerships in developing

⁸⁸ See discussion *infra* regarding new types of shot clocks.

⁸⁹ See e.g. description of City of Atlanta in Atlanta Letter of ordinance process and the intimate participation of industry in the proceedings.

⁹⁰ CTC Declaration at pp. 23-25.

model ordinances, model master license agreements, model public right-of-way franchises, best practices for responding to common challenges,⁹¹ and preferred deployment methodologies are many of the goals that Chairman Pai outlined in his vision for the Broadband Deployment Advisory Committee (BDAC) which do not appear in the NPRM.⁹²

The recent robust response of local elected and appointed officials to Chairman Pai's call to serve on BDAC is further evidence that we understand the need for such non-regulatory responses.⁹³ While Smart Communities joins with others in local government in expressing our disappointment at the composition of the BDAC,⁹⁴ we remain as committed to workplace and cooperative solutions.⁹⁵

⁹¹ See e.g. Comments of the Georgia Municipal Association, Inc. ("GMA") in the Mobilitie docket (filed February 28, 2017) ("Mobilitie Docket GMA Comments"). GMA shared with the Bureau a copy of a model master license agreement, a model wireless access to the rights of way ordinance and a model agreement for placement of equipment that the association negotiated with Mobilitie. While Smart Communities does not necessarily endorse the products, it is important to note that given time and lack of interference from parties such as the FCC, local governments and industry can reach agreements as we have a common goal of ensuring the residents of a community are connected.

⁹² The BDAC "is intended to provide an effective means for stakeholders with interests in this area to exchange ideas and develop recommendations to the Commission on broadband deployment... Issues to be considered by the Committee may include, but are not limited to, drafting for the Commission's consideration a model code covering local franchising, zoning, permitting, and rights-of-ways regulations; recommending further reforms of the Commission's pole attachment rules; identifying unreasonable regulatory barriers to broadband deployment; and recommending further reform within the scope of the Commission's authority (to include, but not limited to, sections 253 and 332(c)(7) of the Communications Act and section 6409 of the Spectrum Act." FCC Announces the Establishment of the Broadband Deployment Advisory Committee and Solicits Nominations for Membership, Public Notice, DA 17-110 (rel. Jan. 31, 2017).)

⁹³ The members of this coalition nominated no less than five official and appointed officials and supported the nominations of several others to serve on the BDAC. We are proud that Smart Communities Member Kevin Pagan, the City Attorney of McAllen, Texas is a non-voting member of BDAC. In addition, Smart Communities are represented on the FCC Intergovernmental Advisory Council.

⁹⁴ Adam Bender and Howard Buskirk, "Local Officials Worry About BDAC Composition," Communications Daily, Vol. 37, No. 106, p. 1.

⁹⁵ Additionally, there are also various activities going on at the state level. For example, concerned about the proliferation of poles in public rights-of-way, the California Public Utilities Commission recently opened a proceeding seeking comment on whether urban streetscapes can accommodate more pole attachments, the replacement of existing poles with larger poles, and possibly an increase in the number of poles. Some of the concerns raised by the CPUC included: (1) whether there is sufficient space and load-bearing capacity on the stock of existing utility poles to support additional telecommunications attachments, including wireless pole attachments, that may be necessary to provide ubiquitous, competitive, and affordable telecommunications services; and (2) what additional regulations that may be necessary, if any, to ensure that telephone companies' wireless pole attachments are designed, constructed, operated, inspected, and maintained to protect worker and public safety and preserve the

There was also the twenty-one page report to the Commission by the Federal Communications Commission's Intergovernmental Advisory Committee (IAC) delivered in June of 2016 addressing challenges and possible solutions to siting wireless communications facilities.⁹⁶ This local government work effort is not referenced in the NPRM.

The failure of the NPRM to encourage commenters to explore, let alone, promote partnership opportunities to examine the challenges being faced by all concerned with small cell and DAS deployments is disappointing and a potential missed opportunity. We sincerely hope that Commission will focus on cooperative and collaborative initiatives in existing for a rather than continuing to pursue unnecessary preemptive actions.

III. NO "DEEMED GRANTED" REMEDIES CAN OR SHOULD BE ADOPTED UNDER SECTION 332(C)(7)

Having established no predicate for action, the Commission nonetheless proposes various new measures, none of which are accompanied by any actual proposed rules, a problem in and of itself.

A. The Commission Lacks Any Factual Support or Legal Basis for Adopting "Deemed Granted" Remedies Under Section 332(c)(7).

Twice before the Commission has examined and determined that it has no authority to impose a "deemed granted" remedy for shot clocks under Section 332(c)(7).⁹⁷ As the Commission explained in 2009:

reliability of co-located utility facilities (e.g., power lines and telephone lines). In addition, the CPUC took the unusual step of reaching out to local governments to participate — directing that notice of the Order be served on all California counties and incorporated cities and towns, as well as requiring outreach efforts to local government associations. (<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M183/K273/183273369.PDF>)

⁹⁶ Report on Siting Wireless Communications Facilities available at <https://transition.fcc.gov/statelocal/IAC-Report-Wireless-Tower-siting.pdf>

⁹⁷ *Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd 13994 (2009) ("Shot Clock Order") and *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, Report and Order, 29 FCC Rcd 12865 (2014) ("2014 Infrastructure Order").

Section 332(c)(7)(B)(v) states that when a failure to act has occurred, aggrieved parties should file with a court of competent jurisdiction within 30 days and that “[t]he court shall hear and decide such action on an expedited basis.” This provision indicates Congressional intent that courts should have the responsibility to fashion appropriate case-specific remedies. As the Petitioner notes, many courts have issued injunctions granting applications upon finding a violation of Section 332(c)(7)(B). However, the case law does not establish that an injunction granting the application is always or presumptively appropriate when a “failure to act” occurs. To the contrary, in those cases where courts have issued such injunctions upon finding a failure to act within a reasonable time, they have done so only after examining all the facts in the case. While we agree that injunctions granting applications may be appropriate in many cases, the proposals in personal wireless service facility siting applications and the surrounding circumstances can vary greatly. It is therefore important for courts to consider the specific facts of individual applications and adopt remedies based on those facts.⁹⁸

The Commission went on to define its authority under Section 332(c)(7) as limited to clarifying ambiguous terms in the statute (except with respect to RF emission). Thus, even under the Commission’s own view of its authority, the Commission cannot limit the scope of local authority, compel particular results, or “grant” a permit even temporarily.

Undaunted by the past, the Commission takes a “fresh look” and seeks comment on a “deemed granted” remedy for shot clocks under Section 332(c)(7)(B)(ii). Of course as noted earlier, the Commission appears to have prejudged the need for the remedy as it only “invite[s] commenters to address whether we should adopt one or more of the three options discussed below regarding the mechanism for implementing a ‘deemed granted’ remedy[,]” and “seek[s] comment on whether there are other options for implementing a ‘deemed granted’ remedy.”⁹⁹ There is no factual record to demonstrate the need for any new remedy. As noted earlier, there is an utter lack of Shot Clock violations being alleged in courts around the country.

⁹⁸ Shot Clock Order ¶ 39.

⁹⁹ NPRM ¶ 9.

Moreover, none of the new “options” proffered to support a deemed granted remedy under Section 332(c)(7) are viable. The Commission has no authority to issue local land use permits, safety inspections, or other necessary local approvals. Congress does not have the “ability to commandeer local regulatory bodies for federal purposes.”¹⁰⁰

1. *Option 1’s Proposed Irrebuttable Presumption Is Untenable.*

In Option 1, the Commission suggests it can change the shot clocks’ current rebuttable presumption to an irrebuttable presumption taking the view that Sections 332(c)(7)(B)(ii) and (v) are not “materially different” from the Spectrum Act in this regard.¹⁰¹ This is not correct. Section 332 is very different from Section 6409. Section 6409(a) states “a State or local government may not deny, and shall approve, any eligible facilities request” but Section 332(c)(7) does not contain the phrase “shall approve.”¹⁰² The Commission was given explicit authority to implement Section 6409’s mandatory approval language. It has none in Section 332, which by definition does not compel approval, and leave remedies to the Courts:

This provision indicates *Congressional intent that courts should have the responsibility to fashion appropriate case-specific remedies*. [T]he case law does not establish that an injunction granting the application is always or presumptively appropriate when a “failure to act” occurs. To the contrary, in those cases where courts have issued such injunctions upon finding a failure to act within a reasonable time, they have done so only after examining all the facts in the case. While we agree that injunctions granting applications may be appropriate in many cases, the proposals in personal wireless service facility siting applications and the surrounding circumstances can vary greatly. It is therefore

¹⁰⁰ *Cablevision, Inc. v. Public Improvement Comm’n*, 184 F.3d 88, 105 (1st Cir. 1999) (citing *Printz v. United States*, 521 U.S. 898, 934, 138 L. Ed. 2d 914, 117 S. Ct. 2365 (1997) (“The Federal Government may [not] issue directives requiring the States to address particular problems”); *id.* at 961 (Stevens, J., dissenting) (agreeing that the notion of “cooperative federalism” does not include a direct “mandate to state legislatures to enact new rules”); *id.* at 975 (Souter, J., dissenting) (agreeing with the majority that “Congress may not require a state legislature to enact a regulatory scheme”).

¹⁰¹ NPRM ¶ 13.

¹⁰² *Cf.* 47 U.S.C. § 1455(a) with 47 U.S.C. § 332(c)(7).

important for courts to consider the specific facts of individual applications and adopt remedies based on those facts.¹⁰³

The Fifth Circuit in *City of Arlington* explicitly found that the shot clock provisions adopted by the Commission valid in light of the fact that they were a presumption only to be used in fact-finding by the courts.¹⁰⁴ Nothing in the Fourth Circuit’s decision upholding the Commission’s “deemed grant” in Section 6409 suggests the Court thought that its ruling somehow defined the proper role of the Commission under Section 332.¹⁰⁵ “The general principle is ‘that Congress cannot compel the States to enact or enforce a federal regulatory program.’”¹⁰⁶ “The doctrine explicitly does not affect ‘the power of federal *courts* to order state officials to comply with federal law’ because ‘the Constitution plainly confers this authority on the federal courts.’”¹⁰⁷ Congress delegated to the courts the right to enforce Section 332, thus ensuring that the appropriate branch of government would be in the position to direct the grant of a particular local land use permit.

Objections raised in the NPRM to the “presumption” approach previously adopted by the Commission are themselves questionable. First, the statutory language provides that a local authority must act within a reasonable period of time “after the request is duly filed with such government or instrumentality, *taking into account the nature and scope of such request* .” By definition, an irrebuttable presumption does not take into account the “nature or scope” of the request. Moreover, the legislative history makes clear that this “reasonableness” standard is not intended to push wireless applications to the “front of the line” for zoning; given the

¹⁰³ Shot Clock Order ¶ 39 (emphasis added).

¹⁰⁵ *Montgomery County v. FCC*, 811 F.3d 121, 129 (4th Cir. 2015).

¹⁰⁶ *Dakota, Minn. & R.R. Corp. v. South Dakota*, 362 F.3d 512, 518 (8th Cir. 2004) (quoting *Printz*, 521 U.S. at 935, reaffirming *New York*, 505 U.S. 144, 161 (1992)).

¹⁰⁷ *Dakota, Minn. & R.R. Corp. v. South Dakota*, 362 F.3d 512, 518 (quoting *New York v. U.S.*, 505 U.S. 144, 179 (emphasis in the original)).

constitutional and economic impacts of requiring preferences be given to one class of land users¹⁰⁸, the contrary reading urged by the Commission now is not justifiable. The legislative history to Section 332(c)(7) notes specifically:

Under subsection (c)(7)(B)(ii), decisions are to be rendered in a reasonable period of time, taking into account the nature and scope of each request. If a request for placement of a personal wireless service facility involves a zoning variance or a public hearing or comment process, the time period for rendering a decision will be the usual period under such circumstances. It is not the intent of this provision to give preferential treatment to the personal wireless service industry in the processing of requests, or to subject their requests to any but the generally applicable time frames for zoning decision.¹⁰⁹

Indeed, an irrebuttable presumption would mean that applications would be deemed approved even if local procedures requiring hearings could not reasonably be conducted within the time set by the Commission given the nature of the project, or if appeals rights from administrative actions for applicants required by state or local law prevented final action within the mandatory time frames.¹¹⁰ And of course, the same legislative history is equally clear that Congress intended to strictly limit FCC intrusion into “[s]tate land use decisions...except in the limited circumstances set forth in the conference agreement.”¹¹¹ An irrebuttable presumption fundamentally alters land use authority and processes in a way Congress cannot be presumed to have intended.

2. *Option 2’s Lapse of Local Authority Is Illogical.*

¹⁰⁸ At the very least, the Commission would need to add to its Initial Regulatory Flexibility Analysis an impact of delays in siting for, *inter alia*, small businesses; developers; and all others whose applications now move to the back of the line.

¹⁰⁹ 1996 S. Conf. Rpt. 104-230 at p. 208

¹¹⁰ For a similar reason, we believe it is clear that the Commission lacks authority to issue what are effectively

¹¹¹ 1996 S. Conf. Rpt. 104-230 at pp. 207-208

In Option 2, the Commission takes a contorted view of the preservation of local authority language in Section 332(c)(7), to suggest that failing to act on a request within a reasonable period of time can somehow result in a lapse of local authority over such applications “(i.e., lost the protection of Section 332(c)(7)(A), which otherwise would have preserved such authority), and at that point no local land-use regulator would have authority to approve or deny an application. Arguably, we could establish that in those circumstances, there is no need for an applicant to seek such approval.”¹¹² This interpretation defies logic. All that the requirements of Section 332(c)(7)(B) do is “limit or affect” local authority. Nothing in the statute supports the concept that a failure to comply with the limitations nullifies local authority or causes it to lapse. To the contrary, the statute clearly states that a “failure to act” gives rise to a court remedy. The Commission’s interpretation would render the court remedy provisions of Section 332(c)(7) completely superfluous.

3. *Option 3’s Resort to General Rulemaking Authority Cannot Trump Specific Statutory Directive to Court Remedy under 332(c)(7).*

In Option 3, the Commission asks why it cannot simply promulgate a rule to implement Section 332(c)(7), and whether the legislative history “standing alone, affect[s] our authority to adopt rules governing disputes about localities’ failure to comply with their obligations under Section 332(c)(7)(B)(ii) to act on siting applications within a reasonable time?”¹¹³ Of course the legislative history is important, but it is not the only basis for the Commission’s lack of authority, as the discussion above suggests. The plain language of the statute, and the court remedy contained therein, together prevent the Commission from effectively rendering the court appeals process a rubber stamp – and indeed creates significant separation of powers issues. The

¹¹²NPRM ¶ 14.

¹¹³NPRM ¶ 16.

Commission claims to be “mindful of the D.C. Circuit’s admonition that ‘a plain reading of an unambiguous statute cannot be eschewed in favor of a contrary reading, suggested only by the legislative history and not by the text itself,’ and that ‘[w]e will not permit a committee report to trump clear and unambiguous statutory language.’”¹¹⁴ Yet, it misdirects this as supporting the exercise of authority to issue regulations that would fly in the face of clear statutory language on remedies. While the legislative history in this case may not be dispositive per se, it does indicate that the proposed Commission action would amount to hiding a proverbial elephant in a mousehole.

IV. NO NEW OR SHORTENED SHOT CLOCKS SHOULD BE ADOPTED.

The Commission proposes several different bases for developing new shot clocks. These include harmonization of collocation shot clocks for all applications that are not subject to the Spectrum Act (or a subset of those applications) with those that are subject to the Spectrum Act. Another suggestion is to adopt different presumptively reasonable time frames for resolving applications for more narrowly defined classes of deployments based on height or location or other proposed developments, or other replacements or removals. Yet another is to align the shot clocks with NEPA/NHPA categories of deployments. Again, these are all solutions in search of a problem. There is no established need for adopting any of these rules.

Another angle explored is whether to establish different time frames for small cell or DAS deployments, or for requests that include multiple proposed deployments or, equivalently, “batches” of requests submitted by a single provider to deploy multiple related facilities in different locations. This is not a new proposal, but rather one that was proposed in the Notice for the Mobilitie docket. It is problematical, and the need is not supported in the docket. As the

¹¹⁴ NPRM ¶ 16.

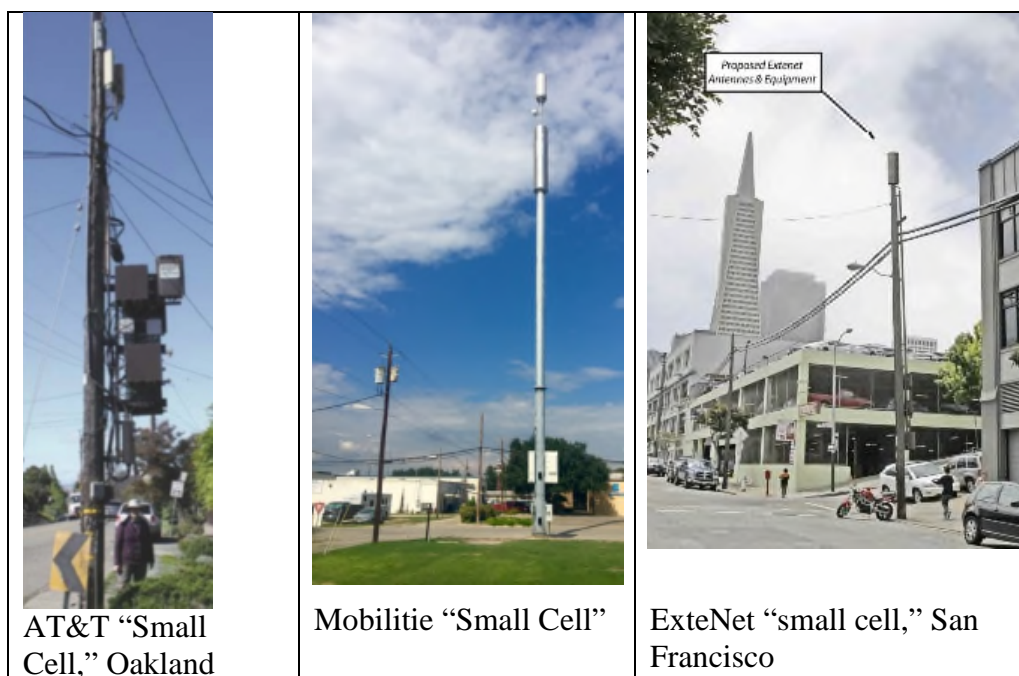
CTC report points out, most of what industry seeks to characterize as “small cell” deployments are not designed to serve areas that lack broadband service. Many of the deployments are occurring in areas where residents have multiple options for high-speed access to the Internet, whether via licensed or unlicensed frequencies. Many of the deployments (in Montgomery County for example) are occurring in areas where hundreds of facilities have already been authorized.¹¹⁵ The issue is usually the quality of the service, and in some cases, those concerns may have to do with the delivery of services (like video services) that are not the focus of Section 332(c)(7).

The term “small cell” is typically used to describe an installation that serves a small area – not to distinguish between facilities that are “small v. those that are large.”¹¹⁶ For purposes of this NPRM, it is important to recognize that what falls within the rubric of a “small cell” at any given site can actually involve many different pieces of equipment, some of which could be quite large and quite intrusive. Thus, as CTC explains, at any given location, a “small cell” may involve a support structure (ranging in size from a Mobilitie tower to a more conventional utility pole); an antenna; radio units; power supplies/electric meters/disconnects/cabling; and potentially back-up power supplies.¹¹⁷ Some of these facilities may be mounted on the tower or pole; some may be placed in a vault, and some may be ground-mounted. A facility might look like any of these:

¹¹⁵ See Mobilitie Docket Montgomery County Comments.

¹¹⁶ CTC Declaration at p. 2.

¹¹⁷ CTC Declaration at p. 6.



The CTC report includes additional examples. As CTC explains, small cell sizes may approach or exceed the size of many monopoles or macrocells.¹¹⁸ Indeed, many small cells may actually utilize the same equipment that is utilized on traditional macrocells, but the equipment may serve a smaller physical area because of placement or powering.

The problems presented by various “small cell” installations can vary dramatically and argue against adoption of a unique and shorter “shot clock” for these applications. The Mobilitie 120 foot “small cell” shown in the photograph above will require installation of a significant foundation that could extend well below ground level and require analysis of the soil underneath the facility and the support required to prevent the tower from falling. It could also, of course, raise Section 106 Historic Preservation Act issues.¹¹⁹ The AT&T facility pictured on the previous page may create significant aesthetic concerns if proposed in a residential area that

¹¹⁸ CTC Declaration at pp. 6-8.

¹¹⁹ **Exhibit 5** is a small cell proposal for a historic district in Monroe, Michigan and the City’s response to a facility 40” in diameter with a 50” base plate, and rises 100’ above ground. The tower and structure are proposed to be located very near a roadway, and with a foundation of unspecified size.

would not be presented if located in an industrial area. The placement of any new structure in the rights of way, whether categorized as a small cell or not, can raise significant issues for roadway engineering, safety, and coordination with other utilities.¹²⁰ The time required to address these issues is not easily limited by adopting a definition of “small cell” unless small is literally defined to exclude towers and new structures altogether, to only apply to modifications of existing utility poles where there is no need for any excavation or strengthening, and where all facilities associated with a structure are in fact “small” and not capable of expansion. A more favorable shot clock for “small cells” will add complications without accurately identifying a class of facilities for which review time may logically be shortened. It is worth emphasizing that there have been very few cases that in fact turn on a failure of a community to act in a timely way, particularly once the industry applicant acknowledges local governance rights over their public rights-of-way, and industry has never shown that a shorter time frame is required or would significantly to cut deployment times, given, for e.g., the time required prior to beginning construction (*e.g.*, for make-ready work).

As suggested above, as a factual matter, the deployment of small cells in the public rights-of-way presents problems, including safety problems, that are significant, and may involve significant externalities.

Thus, as Mr. Puuri points out, the placement of new structures in the public rights-of-way creates an ongoing risk to public safety that cannot be avoided.¹²¹ The installation of wireless facilities can also create long-term stresses on the road bed, interfere with drainage, and make it more expensive to maintain and expand the roadway, or to improve other utilities. The cost to

¹²⁰ Puuri Declaration at p. 2.

¹²¹ Puuri Declaration at p. 2.

local governments that result from the addition of new structures to the public rights-of-way may be millions or billions of dollars annually.¹²²

Moreover, the placement of small cells – depending on their size and visibility – may affect neighboring property values. As Mr. Burgouyne explains, the literature suggests that placement of utility infrastructure aboveground does affect property values.¹²³ That impact is related to the size and visibility of the installed structures. As even a small reduction in value of homes in a neighborhood may have multi-million dollar effects – it becomes very important to minimize the impacts of proposed installations.

This is particularly so since, as the CTC Declaration points out, providers often do have alternative placement options, and technology may permit provision of advanced services without the negative impacts.¹²⁴ Indeed, if localities can respond to the potential problems by establishing placement requirements, that may reward innovators who can design networks that minimize impacts. Rather than discouraging deployment, strong local standards may encourage companies who have traditionally designed and built municipal infrastructure to develop innovative designs for deployment of next generation wireless.¹²⁵

The stakes are enormous. Smart Communities call on the Commission to recognize that actions with a singular focus on facilitating deployment without any consideration of the

¹²² The costs associated with using the rights of way can be significant. The Puuri Declaration includes simple example of costs associated with making a roadbed and roadside safe for a single small cell installation where there are almost no competing utilities; the road is a rural road, and the design of the facility will not affect the roadway itself in any way; and no special construction is required for the facility. The costs listed are costs associated with modifying the roadside, and do not include costs associated with reviewing plans and developing specifications for the site; do not include costs associated with inspecting the installation during construction or periodically thereafter. The estimates do not include joint and common costs associated with maintaining the road and the roadside areas so that those are safe for all users, and it does not include special costs that may arise when the roadway or other utilities need to be moved. It does not reflect costs associated with responding to emergencies involving the structure. Those costs translate into time and effort required to review and process applications.

¹²³ Burgoyne Declaration at p. 3.

¹²⁴ CTC Declaration at p. 16.

¹²⁵ CTC Declaration at p. 22; ECONorthwest Declaration at p. 5.

community context could have enormous, and negative economic effects, affecting millions (if not billions) of dollars in community investments made not just for aesthetic reasons, but for financial and health and safety reasons.

To provide one example: Myrtle Beach is one of the nation's most popular tourist destinations, and the most popular destination in South Carolina, attracting more than 17 million visitors per year to a city with a permanent population of roughly 30,000. That tourism – primarily driven by the area's beaches, golf courses and attractions – has been the engine for tremendous growth in the City and the nearby entire Grand Strand, in both Horry County and Georgetown County. Myrtle Beach's unemployment rate is below the national average, while the metropolitan area growth rate is the second fastest in the nation (2014-2015 Census estimate).¹²⁶

Myrtle Beach accounted for nearly four percent (3.94 percent) of the state's 2014 retail sales. Tourism is South Carolina's main industry, and the Grand Strand is the engine behind it. Negative impacts on tourism in Myrtle Beach have a ripple effect across state government and state coffers, since Horry County and Myrtle Beach are "donor" locations within the state, providing state funds for other locations that do not have that tourism base. Conversely, positive impacts on tourism generate jobs, sales tax, accommodation taxes, hospitality taxes and economic stability both locally and statewide. The economic impact is astounding. In 2015, tourism generated \$20.2 billion in economic activity statewide, a 6.1 percent increase over 2014, and the fourth straight year of growth. Tourism is South Carolina's largest industry, supporting one in 10 jobs and generating \$1.5 billion in state and local tax revenues.¹²⁷

¹²⁶ See <http://www.myrtlebeachonline.com/news/local/article67886402.html>.

¹²⁷ <https://greenvillejournal.com/2017/02/22/officials-tourism-grew-to-a-20-2-billion-for-sc-in-2015/>

Maintaining and responding to that growth is a challenge. The City competes nationally with Las Vegas and Orlando at convention center level; but as it attracts most of its non-convention visitors from the East Coast, including the Midwest and Canada, it must compete with other coastal destinations along the east coast shoreline.¹²⁸ To compete, the City has developed a comprehensive and holistic approach to enhance its tourism economy that has steadily grown since the 1950s. The public investment includes more than \$80 million in the Myrtle Beach Convention Center, the Convention Center Hotel and the Myrtle Beach Sports Center. The City has planned, financed and worked hard to develop the 10 mile commercialized Ocean Boulevard, its public beaches and Boardwalk, investing more than \$100 million in public improvements to streets, sidewalks, the boardwalk, underground utilities, deep-water ocean outfalls, public parks, new streets and new recreational spaces. The City of Myrtle Beach partnered with the local electric utility, Santee Cooper, to fund the removal of overhead utility lines from major public streets and thoroughfares, spending more than \$30 million on that effort since 1999. The City has aggressively incorporated this holistic approach to growing its tourism economy through long-range capital improvement plans and budgets. The City incorporates aesthetic requirements into every development agreement, every Municipal Improvement District, every Tax Increment Financing District and every approval process. How Myrtle Beach looks is a key determinant of how well its economy will function and grow.

Moreover, and on a practical level, such a holistic approach is required for public safety. The area is subject to hurricanes, so it seeks to avoid preventable damage and limit repair time through strict building codes and adherence to FEMA's and other agencies guidelines. An

¹²⁸ <http://www.myrtlebeachareachamber.com/research/docs/24theditionstatisticalabstract.pdf>

obvious goal is to limit the number of structures that can create hazards to the public and to property during high winds. Moving utilities underground was part of those efforts.

Most of the tourists who visit Myrtle Beach arrive by automobile, but they rightly expect to walk and bicycle through the central beach areas and residential districts, which means that the City has a significant interest in minimizing obstructions in the public rights-of-way. Looking ahead, the City has identified as much as \$2 billion of required road improvements,¹²⁹ while facing significant reductions in available state and federal funding – additional infrastructure that may make improvements more difficult simply adds to those costs.

Indeed, understanding these future growth issues, the City met with all interested utilities during the underground conversion discussion to ensure that the underground infrastructure would include sufficient conduit and other structures to avoid future trenching, road blockages or other retrofitting.

The City is now receiving requests that it allow installation of above-ground towers on its beach public right-of-way. Installation in the public right-of-way is *not* needed to provide service. The beachfront is lined with multi-story buildings and private parking lots (with lighting structures) that could easily support placement of wireless facilities. In fact, off-road placement on private property may lead to more coverage, as it would enable a provider to better serve the hotels that line the beach. The main reason providers wish to use the public property appears to be cost – the idea that it will be cheaper for them to place facilities in the public’s public rights-of-way, rather than to secure appropriate private property, even if the impact on surrounding businesses, tourism and employment could have long-term negative consequences that are far greater than the cost of negotiating to use private property.

¹²⁹ <http://www.myrtlebeachonline.com/news/local/article67886402.html>

Based on that City's experiences, those costs could be significant. Nonetheless, the City is currently working with providers of infrastructure and services to create a development guide that would allow placement of some facilities in the public rights-of-way – the goal being to try to develop safe harbors to which all providers may design rather than dealing with applications on a case-by-case basis. This may involve (1) use of street lights or other structures that can be used to hide facilities; (2) limiting placement in the public right-of-way in sensitive areas to facilities that meet stringent design requirements, and otherwise requiring facilities to be first placed in locations where they are not going to create harms; and (3) limiting new facilities that are permitted, and limiting the height and placement to avoid risks to vehicles, pedestrians, and roadbeds.

Even this process is not simple. The use of street lights for placement of wireless facilities is not as simple as one may imagine. Street lights themselves are evolving, and may incorporate sensors and other infrastructure for government and public use. It is important that use by wireless providers not foreclose those other important uses. Moreover, the replacement of one street light structure with another heavier structure may create maintenance, replacement and safety issues that did not exist before. And, as street lights are often installed and maintained pursuant to complex tariffs that, among other things, effectively require separate metering for each powered user.

Myrtle Beach's experience, the experience of the other Smart Communities and the expert declarations indicate:

First, placement of wireless facilities has significant initial and ongoing impacts on the public rights-of-way. The impact may be focused on the antennas, but it is not limited to the antennas; for example, 120-foot poles could block the public right-of-way, create permanent

obstructions for placement of other utilities by virtue of the foundations required to support that structure, and create hazards that do not otherwise exist.

Second, the problems can and are being addressed, but addressing the problems may require coordination with other utilities and stakeholders that does require some time. Additional rules will not speed the process, and there is no reason to believe that a shortening of the shot clocks will provide a “reasonable” period of time for localities to act on applications.

Third, the Commission should recognize its own rules may be a barrier to creative solutions to deal with redeveloped areas, historical areas and residential areas (particularly underground areas). It ought to encourage approaches that allow for creation of safe harbors for conforming providers to place facilities in the public rights-of-way, while limiting the ability for those who place within the safe harbors to expand those facilities.

Before adopting any new shot clocks, the Commission needs to carefully consider the negative cost and impact of all those rules, and if the data is not clear, study those impacts in detail.

A. The Commission Should Not Be Setting Shorter Time Frames For Either Batch Or Small Cell Applications

Smart Communities would offer that while we have some concerns that more time is actually required, at least the Commission’s current time frames allow the parties, and ultimately the courts to assess the reasonableness of the time taken under the circumstances. We doubt the Commission can come up with a rational rule that harmonizes the time required to review 400 applications submitted in one day with submission of 2, nor should it attempt to.

Smart Communities believe that applications can be more easily considered in batches if localities can create “safe harbors” that allow entities to design to specifications created by the community, at least if the specifications are enforceable. But batch applications often exceed the

capacity of a locality to handle with existing staff, since in many cases, each site has to be independently evaluated and considered , and because modifications to one part of the batch (if, for example, installations are proposed in a historically protected area) may require changes to other proposed sites.¹³⁰

There are additional costs and additional time associated with consideration of batch applications that can potentially be addressed through local permitting fee mechanisms that permit speedier review, i.e. the applicant pays for the additional costs to the community (additional staff, for example) required to review the application.¹³¹ But federal rules here will not be very helpful, since the process is most easily worked out cooperatively at the local level for particular projects. And, if shot clocks are shorter, particularly in smaller communities, and even in many large ones, additional staff will be mandatory, and those costs, cause by the Commission, must be passed on to the applicant.

Moreover, setting aside the problems created by incomplete applications, the evaluation of applications for placement of “small cells” in the public rights-of-way is not simple, and does require a stringent review. The issues raised by Mobilitie’s proposed placement of 120-foot towers in the rights of way – are just one example. More generally, in contrast to applications for use of private land, the public right-of-way is a shared space, which must accommodate vehicle traffic, pedestrian traffic, and a large variety of utilities. The Puuri Declaration explains some of the problems presented by adding structures to public rights-of-way, and why it is critical that proposals for placement of facilities be carefully reviewed. As discussed below, many of the areas that are most trafficked and that are particular targets for small cell

¹³⁰ CTC Declaration at p. 21.

¹³¹ CTC Declaration at p. 21. The City of Los Angeles for instance affords applicants the opportunity to pay an additional fee to receive expedited service.

deployment are also areas where the city has spent millions of dollars beautifying the area to particular design standards. While certainly not impossible, it is often more difficult to disguise facilities, particularly where agreements on design require the consent of the wireless providers, the community, and a private utility that may have an interest in infrastructure. Moreover, the use proposed – installation of vertical structures that could be (and historically have been) placed outside the public right-of-way – is not a necessary public right-of-way use (normally public rights-of-way are dedicated to linear and transiting uses, and uses related to transportation). The placement of incongruent structures in the public rights-of-way creates different problems, and may create legal issues depending on any limitations on uses of the public rights-of-way or associated utility easements.¹³² Thus, applications for use of the public rights-of-way may require more stringent review than non-public right-of-way applications – which is to say, approval of small cells of the sort that are the focus of the NPRM may require as much or more time than approval of macrocells.¹³³ Those problems may be particularly significant in areas where all other utilities are underground, where the installation presents not only new safety but also aesthetic issues.

¹³² See *D'Andrea v. AT&T*, 289 Mich. App. 70 (2010). See also unpublished Opinion following post-trial appeal: *D'Andrea v. AT&T*, 2014 Mich. App. Lexis 1570 (2014). As Mr. Burgoyne explains, intrusive small cell installations may affect property values; even small reductions in property values could have significant economic effects. (Burgoyne Declaration at pp. 2, 8)

¹³³ The placement of a node may have significant ripple effects that are recognized in the Programmatic Agreements, are not typical of macrocells, and that are of appropriate concern in determining whether the placement should be authorized. Each node on a DAS system may require 4-6 dedicated fibers that connect to a larger fiber bundle. Placement of the fiber may require significant roadway trenching. The consideration and mitigation of those impacts may be time-consuming, particularly if each entity asserts the right to build the particular network facilities it wants, with the connectivity it desires, at the time it prefers, with no interest in collocation at any time...which is what Mobilitie is effectively asking the Commission to order. In Myrtle Beach, trenching along the Ocean Boulevard during summer could cause millions of dollars in losses to businesses and to hotels. To avoid the trenching problem, the City installed conduit in consultation with utilities to limit or avoid the need for disruption. That should speed deployment, but only does so if localities can require wireless service and facilities providers to use their assets, or otherwise act to protect against disruption.

Receiving applications in batch for small cells does not necessarily speed the process either. There may be some ways to manage batches of applications to speed certain aspects of the review. For example, if the same design is used in the same zoning area, that design may be approved for the entire area, subject to certain restrictions (e.g., a design generally appropriate may not be appropriate in front of an historic landmark). But the degree to which batching is helpful may depend on the structures proposed (new v. additions to existing facilities) and the size and visibility of the installations; and on the coordination required with other utilities. Mandatory federal rules will either be so complex as to dramatically add to compliance costs (and will require a careful Initial Regulatory Flexibility Analysis for small communities); or accomplish very little in terms of an improvement over existing rules.

PART 3: NOTICE OF INQUIRY

I. SECTION 253 DOES NOT APPLY TO PLACEMENT OF WIRELESS FACILITIES.

A. If Broadband Is Reclassified As An Information Service, Section 253 Would Not Apply.

The NPRM and NOI focus on the “regulatory impediments to wireless network infrastructure investment and deployment ... in order to promote the rapid deployment of advanced wireless broadband service to all Americans.”¹³⁴ The Commission, in the Open Internet docket, is proposing to reclassify broadband Internet access service as an information service, and no longer as a telecommunications service.¹³⁵ Section 253, by its terms, protects the provision of telecommunications service; even if it did apply to wireless facilities, it would not apply to broadband Internet access service, whether provided wireless or via wireline, if the Commission were to reclassify the service.

¹³⁴ NPRM ¶ 2.

¹³⁵ *In the Matter of Restoring Internet Freedom*, WC Docket No. 17-108 (rel. May 23, 2017) at ¶¶ 24-43.

B. Section 253 Does Not Apply to Wireless Facilities

To start its inquiry, the Commission seeks comment on the interplay between Sections 253 and 332(c)(7), specifically asking whether the substantive obligations of these two provisions differ.¹³⁶ The Commission has retread this ground several times over and it was recently addressed in the Mobilitie docket. As was made clear in that docket, Section 253 has no role whatsoever.¹³⁷ Section 332's plain language makes clear it is the only provision which applies to placement of personal wireless facilities, as does the statute's legislative history. Section 332(c)(7)(A) states plainly, that, except for four limitations at (7)(B):

nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.¹³⁸

And if there was any additional doubt as to the inconsistency between Section 332(c)(7) and Section 253, the Conference Report explained:

It is the intent of the conferees that other than under section 332(c)(7)(B)(iv) . . . the courts shall have exclusive jurisdiction over all other disputes arising under this section.¹³⁹

Consistent with these plain directives, the Commission has never used its authority under Section 253(d) to preempt any state or local action (or inaction) involving wireless facilities siting.¹⁴⁰ As the law specifically provides that nothing in the Act “shall limit or *affect* the authority of a State or local government or instrumentality thereof over decisions regarding the placement,

¹³⁶ NPRM ¶ 89.

¹³⁷ Mobilitie Docket Smart Communities Comments at pp. 50-52.

¹³⁸ The declaration is reinforced by Section 601(c) of the Telecommunications Act of 1996, stating that “the amendments made by this Act shall not be construed to modify, impair, or supersede Federal, State or local law unless expressly so provided”

¹³⁹ H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 208 (1996), 1996 U.S.C.C.A.N. 124, 221-22

¹⁴⁰ See *Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies*; *Mobilitie, LLC Petition for Declaratory Ruling*, Public Notice, 31 FCC Rcd 13360 (WTB 2016) (“Mobilitie Public Notice”) at n.33.

construction, and modification of personal wireless service facilities,” the Commission could not, for example, rely on Section 253 (or any other section of the Act) to prevent, impair or any way “affect” the exercise of that authority by limiting what localities may charge for review of applications – thereby preventing localities from engaging in an informed review of a proposed site.¹⁴¹

C. Section 253 Contemplates Case-By-Case Decision Making.

It is not generally appropriate for the Commission to use declaratory rulings to preempt under Section 253, even assuming it did apply. The statute, in Section 253(d), defines precisely how and under what circumstances the Commission may entertain a “prohibition” challenge under Section 253(a) (and precludes Commission resolution of issues that arise under Section 253(c). Section 253(d) envisions a case-by-case, tailored determination: the Commission must provide “notice and an opportunity for public comment” and then may only preempt “such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.” In a 1997 decision, the Commission explicitly rejected an argument that Section 253 preempts on a *per se* basis, and correctly ruled that the statute requires a factual showing:

We cannot agree that the City’s exercise of its contracting authority as a location provider constitutes, *per se*, a situation proscribed by section 253(a). The City’s contracting conduct would implicate section 253(a) only if it materially inhibited or limited the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment in the market for payphone services in the Central Business District. In other words, the City’s contracting conduct would have to *actually prohibit or effectively prohibit* the ability of a payphone service provider to provide service outdoors on the public rights-of-way in the Central Business District. As described above, the present record does not permit us to conclude that the City’s

¹⁴¹ If Section 253 did apply, it would not provide the Commission broad authority to regulate local zoning decisions, prices charged for review of applications, or even use of proprietary properties, for reasons more fully explained in the comments filed by Smart Communities in the Commission’s companion wireline proceeding (WC Docket No. 17-84).

contracting conduct has caused such results. If we are presented in the future with additional record evidence indicating that the City may be exercising its contracting authority in a manner that arguably “prohibits or has the effect of prohibiting” the ability of payphone service providers other than Pacific Bell to install payphones outdoors on the public rights-of-way in the Central Business District, we will revisit the issue at that time.¹⁴²

The Commission later reinforced the point:

With respect to a particular ordinance or other legal requirement, it is up to those seeking preemption to demonstrate to the Commission that the challenged ordinance or legal requirement prohibits or has the effect of prohibiting potential providers ability to provide an interstate or intrastate telecommunications service under section 253(a). Parties seeking preemption of a local legal requirement such as the Troy Telecommunications Ordinance must supply us with *credible and probative evidence* that the challenged requirement falls within the proscription of section 253(a) without meeting the requirements of section 253(b) and/or (c).¹⁴³

Since this NOI does not identify *any* particular ordinance, or even the communities that allegedly adopted invalid statutes or regulations, these requisites are not satisfied. Without particular facts the Commission is certainly not in a position to preempt only “to the extent necessary,” as the statute requires, to prevent a prohibition (particularly since there is no prohibition shown). As CTIA acknowledged in the Mobilitie docket, the Commission’s actions so far under Section 253 confirm this procedure; previous Commission decisions under Section 253 have been “confined to the facts in a particular jurisdiction, such as the language of the law or its impact on particular wireless providers.”¹⁴⁴

II. THERE IS NO NEED, AND LIMITED AUTHORITY, FOR THE COMMISSION TO CLARIFY THE MEANING OF “PROHIBIT OR HAVE THE EFFECT OF PROHIBITING” IN SECTIONS 253 AND 332(C)(7).

¹⁴² *California Payphone Association Petition for Preemption of Ordinance No. 576 NS of the City of Huntington Park, Calif.*, 12 FCC Rcd 14191, 14206, para. 38 (1997) (“California Payphone”) (emphasis added).

¹⁴³ *In the Matter of TCI Cablevision of Oakland County, Inc.*, Memorandum Opinion and Order, FCC 97-331, 12 FCC Rcd. 21,396 (September 19, 1997).

¹⁴⁴ CTIA Comments in the Mobilitie Docket (“Mobilitie Docket CTIA Comments”) at p. 20.

The Commission seeks comment on whether additional guidance to interpret the phrase “prohibit or have the effect of prohibiting” in both Section 253 and Section 332(c)(7) is needed, reviving, in part, a question it also asked in the *Mobilitie* docket.¹⁴⁵ No further guidance is needed because the courts have adopted the Commission’s formulations in both contexts and developed a rich case law applying those standards.

A. “Prohibit or Effect of Prohibiting” Sets a High Bar.

The courts have made clear that “prohibit or effect of prohibiting” in both statutes is a high bar –it does not mean impair, or make more expensive or difficult.¹⁴⁶ The statute’s terms mean what they say, “prohibit.” The Ninth Circuit’s interpretation of Section 253 demonstrates the high bar of “prohibit or effect of prohibit.” Specifically, in *Sprint v. San Diego*, the Ninth Circuit undertook an extensive analysis of Sections 253 and 332(c)(7) and concluded that:

Under both, plaintiff must establish either an outright prohibition or an effective prohibition on the provision of telecommunications services; a plaintiff’s showing that a locality could potentially prohibit the provision of telecommunications services is insufficient.¹⁴⁷

Further, while the Commission cites to a diversity of opinion as among the circuits, the correct reading is laid out clearly by the New York City Department of Information Technology & Telecommunications filings also cited in the *NOI*,¹⁴⁸ to wit: the Solicitor General posited in the United States’ brief on certiorari in *Sprint* and *Level 3*:

[S]ince the Second and Tenth Circuits’ decisions relying on *Auburn* were issued, the Eighth Circuit has declined to follow *Auburn*, and the en banc Ninth Circuit has overruled it. In light of those developments, it is unlikely that additional circuits will

¹⁴⁵ NPRM ¶ 91. Cf. *Mobilitie* Public Notice at p. 11.

¹⁴⁶ As explained above, Section 332(c)(7) bars application of Section 253 to wireless infrastructure, however, since the terms are identical in the two provisions, courts have tended to interpret them in a similar manner.

¹⁴⁷ *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571, 579 (9th Cir. 2008) cert. den. 129 S. Ct. 2860 (2009)

¹⁴⁸ Letter from Michael Pastor, General Counsel, New York City Dept. of Information Technology and Telecommunications, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79, at 1-3 (filed Apr. 12, 2017).

follow the repudiated *Auburn* decision, and those that already have done so may reconsider the issue. Indeed, even the petitioners here do not attempt to defend the interpretation of Section 253(a) articulated in *Auburn*.¹⁴⁹

No current diversity of opinion exists as the interpretations concluding that a state or local ordinance could violate the prohibit standard only if such ordinance “might possibility” result in a prohibition. For this reason, the Commission is not permitted, for example, to conclude that non-cost-based fees violate the statute because there is no clear connection between cost-based fees and the statutory focus on prohibition.¹⁵⁰ The standards adopted under this case law is interpreting the plain language of the statute, which limits the Commission’s authority under *Chevron*.¹⁵¹

As it happens, given the plain language of the statute, the courts are applying the Commission’s *California Payphones* standard. All agree that the pertinent question under section 253(a) is “whether an action ‘materially inhibits or limits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment.’”¹⁵² And in the *Mobilitie* docket, CTIA and Verizon cite approvingly to this standard.¹⁵³ Even if it could do so, it would make little sense to upset the *applecart* and reinterpret Section 253 after the vast majority of the federal judiciary has adopted the Commission’s view in *California*

¹⁴⁹ Letter from Michael Pastor, General Counsel, New York City Dept. of Information Technology and Telecommunications, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79, at 1-3 (filed Apr. 12, 2017) (quoting 2008 U.S. Briefs 626 at 17; 2009 U.S. S. Ct. Briefs LEXIS 1796 at 29).

¹⁵⁰ NPRM/NOI ¶ 93.

¹⁵¹ *Level 3 Communications, L.L.C. v. City of St. Louis*, 477 F.3d 528, 532-33 (8th Cir. 2007) (“under a plain reading of the statute”); *Sprint Telephony PCS v. County of San Diego*, 543 F.3d 571, 578 (9th Cir. 2008) (“our conclusion rests on the unambiguous text of § 253(a).”).

¹⁵² NPRM ¶ 90. See also *P.R. Tel. Co. v. Municipality of Guayanilla*, 450 F.3d 9, 18 (1st Cir. 2006) and *TCG N.Y., Inc. v. City of White Plains*, 305 F.3d 67 (2d Cir. 2002), both of which quote *California Payphone Association Petition for Preemption of Ordinance No. 576 NS of the City of Huntington Park, Calif.*, 12 FCC Rcd 14191, 14206, para. 31 (1997) (“California Payphone”).

¹⁵³ *Mobilitie* Docket CTIA Comments at p. 22; Verizon Comments in the *Mobilitie* Docket at p. 11 (citing *California Payphone* ¶ 31).

Payphone, as that would only serve to cause delay through uncertainty and litigation, while presumably dampening investment in advanced wireless networks. And while the Commission refers to some difference between the level of showing required to demonstrate a violation,¹⁵⁴ as the Commission stated in the *Mobilitie* docket: “[c]ourts generally agree that a carrier may establish that a land-use authority’s denial of its siting application ‘prohibits or has the effect of prohibiting’ the provision of service by showing that it has a significant gap in service coverage in the area and a lack of feasible alternative locations for siting facilities.” The marginal benefits of resolving the actual disputes among the Circuits – which may prove more apparent than real in application – are outweighed in this instance by the fact that providers and localities have developed solutions based on the solutions in their circuits.

B. Case-By-Case Decision Making is Qualitatively Better and Contemplated by Statute.

While the Commission may have the authority to adopt particular guidance pursuant to declaratory rulings under Section 332(c)(7), regarding the terms “significant gap” and “least restrictive alternative” tests developed by the courts (subject to the limits imposed by law), the application of a legal standard to facts is the precise scenario where case-by-case decision-making is required — not general standards or prescriptive national rules. Localized zoning decisions and their real-world impacts on provider offerings are well-suited to district court proceedings to ascertain facts and apply relevant legal standards. Section 332 contemplates this more particularized approach, explicitly directing parties dissatisfied under Section 332(c)(7) to commence an action in any court of competent jurisdiction,¹⁵⁵ and only grants authority to the

¹⁵⁴ NPRM/NOI ¶ 93.

¹⁵⁵ 47 U.S.C. § 332(c)(7)(B)(v).

Commission for considering disputes with regard to Radio Frequency (“RF”) emissions.¹⁵⁶ The Commission’s own rules presume a specific challenge to a specific provision:

In the case of petitions for declaratory ruling that seek Commission preemption of state or local regulatory authority and petitions for relief under 47 U.S.C. 332(c)(7)(B)(v), the petitioner must serve the original petition on any state or local government, the actions of which are specifically cited as a basis for requesting preemption.¹⁵⁷

That is, providing guidance without the benefits of specific facts seems both unnecessary (for reasons stated in the preceding section), unwise, and inconsistent with the Commission’s own rules.

III. PROPRIETARY/REGULATORY DISTINCTIONS SHOULD BE MAINTAINED

A. The Commission Should Reaffirm Its 2014 Infrastructure Order’s Clear And Proper Distinction Between State And Local Governments’ Regulatory Roles Versus Their Proprietary Roles As “Owners” Of Public Property And Resources.

The Commission must and should continue to respect the proprietary authority of local governments, consistent with its own precedent and well-established legal and constitutional principles.

The Commission begins its discussion of the proprietary/regulatory distinction (at paragraph 95 of the NOI) by seeking to draw a parallel between the language in Section 253 (permitting preemption of laws and legal requirements) and Section 332(c)(7)(b), which permits preemption of “regulations.” The discussion appears somewhat misplaced to the extent that it suggests Section 253 does apply to proprietary functions, but also because it requires the Commission to ignore pertinent language in Section 253. The operative language in Section 332(c)(7) begins in subsection (a), which prevents the Commission from taking any action that

¹⁵⁶ 47 U.S.C. § 332(c)(7)(B)(iv).

¹⁵⁷ Note 1 to 47 C.F.R. § 1.1206(a)

may “affect” a decision regarding wireless placements. Subsection (b) then permits preemption only where “regulations” of placement fail to meet certain standards. That is, Section 332(c)(7) only permits preemption of certain local regulatory decisions regarding placement; it protects from preemption any non-regulatory decisions, including decisions with respect to proprietary property.¹⁵⁸

In any case its 2014 Infrastructure Order, adopted October 17, 2014, the Commission appropriately concluded that the mandates in Section 6409(a), Section 253 and Section 332 apply only to State and local governments acting in their role as land use regulators and does not apply to such entities acting in their proprietary capacities. The Commission noted:

Like private property owners, local governments enter into lease and license agreements to allow parties to place antennas and other wireless service facilities on local-government property, and we find no basis for applying Section 6409(a) in those circumstances. We find that this conclusion is consistent with judicial decisions holding that Sections 253 and 332(c)(7) of the Communications Act do not preempt “non regulatory decisions of a state or locality acting in its proprietary capacity.”¹⁵⁹

The proprietary regulatory distinction is legally correct and consistent with constitutional principles. Any regulation of state property is, after all, an intrusion on important aspects of state sovereignty: the federal government cannot deprive a state (or its authorized subdivisions) of the power to control the property within its own borders without infringing upon the state’s sovereignty.¹⁶⁰ The Commission wisely declined to attempt to define the difference between

¹⁵⁸ The choice to charge rent, and what rent to charge is critical in making any decision to provide access to property for siting, just as they may be for private entities. At least with respect to wireless facilities, those choices are protected from preemption or complaint under any provision of the Acts.

¹⁵⁹ 2014 Infrastructure Order at ¶ 239.

¹⁶⁰ *United States v. Alaska*, 521 U.S. 1, 5 (1997) (ownership of lands is an essential attribute of sovereignty); *Pollard v. Hagan*, 44 U.S. 212, 224 (1845) (federal government’s exercise of a power of municipal sovereignty over lands within a state would be “repugnant to the Constitution”); *see also Building & Construction Trades Council of Metropolitan District v. Associated Builders & Contractors*, 507 U.S. 218, 231-232 (1993) (labor contract not

proprietary and regulatory functions, as it has no particular expertise to do so, and the issue is one of constitutional dimension, complex and affected by state law; it must refrain from doing so in this docket as well.

Courts have consistently recognized that in “determining whether government contracts are subject to preemption, case law distinguishes between actions a state or municipality takes in a proprietary capacity—actions similar to those a private entity might take—and actions a state or municipality takes that are attempts to regulate. The former type of action is not subject to preemption while the latter is.”¹⁶¹ Because the Telecommunications Act¹⁶² is subject to this maxim, it “does not preempt nonregulatory decisions of a local governmental entity or instrumentality acting in its proprietary capacity.”¹⁶³ Thus, when local governments enter into contracts for use of property they own (whether land, buildings, or infrastructure in public rights-of-way), neither Section 253 or 332t apply. For example, complaints about charges for access to light poles are not cognizable, because such contracts clearly fall outside of Section 253 (if wireline facilities are involved) and 332(c)(7) (if wireless is involved). Likewise, the Commission has no general authority to compel localities to grant access, any more than it has authority to compel private entities to grant access; and it has no authority to effectively turn local property into common carriage property.¹⁶⁴

preempted by National Labor Relations Act because it was not government regulation but rather constituted proprietary conduct).

¹⁶¹ *American Airlines v. Dept. of Transp.*, 202 F.3d 788, 810 (5th Cir. 2000).

¹⁶² 47 U.S.C. § 151 *et seq.*

¹⁶³ *Sprint Spectrum v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002); *American Airlines v. Dept. of Transp.*, 202 F.3d 788, 810 (5th Cir. 2000); *Qwest Corp. v. City of Portland*, 385 F.3d 1236, 1240 (9th Cir. 2004) (recognizing that Section 253(a) preempts only “regulatory schemes”); *Building & Construction Trades Council v. Associated Builders & Contractors*, 507 U.S. 218, 225 (1993) (pre-emption doctrines apply only to state regulation).

¹⁶⁴ *FCC v. Florida Power Corp.*, 480 U.S. 245 (1987).

B. There Are Good Public Policy Reasons For Maintaining This Distinction

1. *Local governments must retain their proprietary authority to satisfy their numerous duties to constituents.*

Local governments, including cities and counties, own and have responsibility for a wide range of valuable property, including lands, buildings, public works facilities, infrastructure in rights-of-way, and much more. Local governments effectively own and manage their property as a private owner would. As the owner, landlord and trustee of such public properties, local governments have a fiduciary duty to maintain their property and to protect the public safety and welfare of their residents. Additionally, the taxing and assessment authorities of local governments impose significant fiduciary obligations to make sure that public resources are used with care and accountability in the sole interest of the public. Thus, as a policy matter, local governments must retain control of their property. This is essential to maintain the condition and financial value of property, to ensure that government operations run smoothly on a day-to-day basis in the face of constantly shifting exigencies, and to protect against security and safety breaches that could harm local governments and the public.

With respect to the Commission's question about whether a distinction should be drawn based on whether State or local actions advance those government entities' interests as participants in a particular sphere of economic activity (proprietary) versus their interests in overseeing the use of public resources (regulatory). The question seems a bit convoluted. A private owner of a piece of property will necessarily have an interest in the property as a market participant, but will also have an interest in preserving and overseeing that property to maximize its value. An owner of a private subdivision, for example, may maximize housing values by requiring all utilities to be underground and by establishing uniform, aesthetic requirements. The owner of a mall may, to maximize rentals, oversee uses to ensure a diverse merchant base

attracts customers. That is, the line the Commission seeks to draw (being a participant v. overseeing use) is not the a sound one. It is why, as noted above, the Commission has traditionally left the distinction to the courts.

Local governments, including municipalities, agencies and special districts, must operate and manage their proprietary properties to meet their primary purposes, often while grappling with budgetary and staffing limitations. Any requirement that might force them to open their properties to other uses unrelated to the property's primary public purpose, such as accommodating wireless equipment placement, could have the effect of placing enormous stress and pressure on these properties that may exceed a local government's management capabilities and jeopardize their continued safe and optimal operation.

To be sure, local governments may determine that it is beneficial and in harmony with their fiduciary duties to the public to maximize use of their property and facilities through leasing and licensing arrangements. Such agreements constitute proprietary – not regulatory – leases and licenses that are indistinguishable in critical respects from private leases or licenses for access to privately owned property. Such agreements must consider, among other things, the availability of staff and resources to oversee the additional uses of the property, as well as safety and security risks associated with allowing third parties to access critical infrastructure. These agreements are necessarily ancillary to a district's duty to provide vital public services, such as delivery of potable water or sanitary sewer services, and to maintain the associated infrastructure.

2. *Special districts provide a window into the varied and unique responsibilities of local governments and their significant interest in ensuring their proprietary authority is not disturbed.*

Special districts are limited special purpose local governments, distinct from cities and counties. They provide within their jurisdictions particular public services, such as water, sewer,

fire protection, parks and recreation, or flood control. As with all local governments, special districts have significant and reasonable justification for seeking to retain their authority over the public property they control, especially in light of their unique purposes and limitations.

Special districts derive funding for their services through several sources, including fees and charges, property taxes and special assessments. For example, special districts that provide water, sewer and solid waste disposal services generally rely on fees and charges imposed on customers who directly receive such services. Like other local government entities, special districts are subject to strict state constitutional and statutory restrictions governing the rates they may charge for services such as water or sewer service expansion, as well as for other fees and charges they may impose for permits and regulatory matters. Additionally, as with many other local government entities, special districts face significant environmental regulation and operational requirements under law.

Many such districts have no zoning-type authority at all, and instead lease or license space to wireless providers and others in their role as owners of valuable public property . As noted above, the Commission's conclusion that Section 6409(a) does not apply to acts of property owners (including special districts that provide public services) was correct as a matter of law. It also was correct as a matter of policy.

Special districts, like all local governments, operate their property – including tanks, reservoirs, treatment facilities, pump stations, administrative buildings, maintenance yards, excess property owned in fee and pipeline infrastructure located in easements and in public rights-of-way – effectively as a private property owner would. This is consistent with the powers granted to special districts by their originating statutory authorities. In many cases, such districts possess property, easements and rights-of-way that are not generally open to the public for transit

or public use in the same way as a street, with many of the easements and rights-of-way subject to use restrictions.

As one example of the significant and unique obligations facing special districts, it is helpful to consider the case of water districts, which must, among other things, protect their clean water supply against security threats, tampering and disruption.¹⁶⁵ This may involve the use of sensors, gates, lighting and a host of other security measures designed to protect district property. Such districts must ensure they can easily access their facilities, and provide that such facilities are maintained in secure and reliable working order. For safety, operational and other reasons, such districts therefore, must be able to strictly control, on a case-by-case basis, the placement of any third party facilities on such public property. Because a facility's failure could profoundly affect water customers and the wider community, such districts cannot manage their property on a theory that any harms can be corrected later and are of little consequence.

As another example, special districts such as the North County Fire Protection District, which provides fire and emergency medical services in an approximately 132 square miles area in Southern California, must be able to strictly control, on a case-by-case basis, access to its property, and placement of any third party facilities to ensure the conditions and measures are in place to protect its property and to ensure any use of its property by third parties does not interfere with their services.

¹⁶⁵ The events of September 11, 2001, prompted enactment of two major laws that addressed the security of the nation's critical infrastructure: The Homeland Security Act of 2002 (107 P.L. 296, 6 U.S.C., § 101 *et seq.*) which broadly addressed critical infrastructure protection, and Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (107 P.L. 188, 42 U.S.C., § 300i), which specifically addressed improving the safety of drinking water supplies. To address risks, special districts have had to revise contract provisions associated with the placement and activities of wireless facilities so they do not interfere with the operation of water systems or create security risks. Contractual provisions and adjustments have included limitations on the hours sites can be accessed; increased monitoring; new supervisory requirements; prohibitions on assignment, transfer of interests or co-location of facilities; and strict limitations on the right of wireless carriers to modify a facility. It is critical for districts subject to these laws to be able to retain sole discretion over the use of the property in their control.

Importantly, because of the numerous restrictions on their ability to set customer rates, special districts use the funds they collect through such licensing or leasing their property to maintain affordable customer rates, to provide special services such as offsets for low-income customers, and to improve and maintain valuable infrastructure.¹⁶⁶

Finally, the lease of property for a telecommunications use is a secondary function. Making it a primary function by mandating access would impose significant staff and transactional costs; among other things, for example, the improvement of facilities would become more complex, because improvements would need to be coordinated with potentially multiple providers. It therefore becomes critical that special districts have maximum flexibility to grant or not grant access to facilities, at charges and rents and subject to terms set by the district – otherwise, the incentive will be to deny access altogether.

IV. UNREASONABLE DISCRIMINATION

A. “Asymmetric Treatment” That Imposes “More Burdensome Treatment” On Telecom-Related Deployment Than Non-Telecom Deployments Does Not Violate Sections 253 And 332(C)(7).

The Commission asks commenters to “identify any State or local regulations that single out telecom-related deployment for more burdensome treatment than non-telecom deployments that have the same or similar impacts on land use, to explain how, and to address whether this type of asymmetric treatment violates Federal law.”

We begin by noting that Section 253 does not apply to wireless deployments, and hence the only non-discrimination provision that applies to wireless refers to discrimination among

¹⁶⁶ See for example the following comments filed *In The Matter of Acceleration of Broadband Deployment Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting*, WT Docket Nos. 13-238, 13-32; WC Docket No. 11-59 (Apr. 7, 2011); Comments of The Valley Center Municipal Water District (filed Dec. 23, 2013); Reply Comments of The Valley Center Municipal Water District (filed Sept. 29, 2011); Comments of Sweetwater Authority (filed Feb. 3, 2014); Reply Comments of Sweetwater Authority (filed Sept. 27, 2011); and Comments of the Padre Dam Municipal Water District (filed Jan. 27, 2014).

“functionally equivalent” wireless providers (discussed in more detail in the following section). It also bears emphasizing that Section 253 only preempts regulations that prohibit the provisions of a telecommunications service. Presumably even the FCC does not believe all discriminations between wireline and wireless are prohibitory, since it suggests that undergrounding requirements, even if applicable to wireline, may not apply to wireless. If a prohibition is shown, then and only then would one ask whether a regulation fell outside the safe harbor or Section 253(c) because it was “discriminatory.”

In this case, the Commission’s question is answered by Section 253(a). Because the only regulations are those that prohibit the provision of telecommunications service; and because there is no obvious reason why treating a gas company differently than a telephone company prohibits the telephone company from providing telephone service, there is no reason why Section 253 would come into play.

And as a factual matter, telecommunications deployments are often subject to more favorable treatment, starting with the Commission’s shot clocks. Under many state laws, telephone companies pay less for access to rights of way than other companies, such as cable companies. Smart Communities will address the specifics of any requirements that may be identified in response to the Commission’s question.

Indeed, neither Section 253 nor Section 332(c)(7) require local governments to treat different types of telephone or personal wireless companies identically. The concern in Section 253(c)’s safe harbor is with rough parity between telecommunications competitors,¹⁶⁷ not

¹⁶⁷ The courts have recognized that local governments can charge providers different fees and still qualify for the Section 253(c) safe harbor. The Second Circuit has emphasized that “[t]he statute does not require precise parity of treatment.” Thus:

[A] city can negotiate different agreements with different service providers; thus, a city could enter into competitively neutral agreements where one service provider would provide the city with below-market-rate telecommunications services and another service provider would have to pay a larger franchise fee,

between telecommunications providers and non-telecommunications providers. Even if Section 253(c)'s safe harbor is applicable to "asymmetric treatment" between telecommunications and non-telecommunications providers, Section 253(c)'s safe harbor is applicable unless there is a significant imbalance; and if the difference in treatment is not justified.¹⁶⁸ Some cities, for example, grandfather existing facilities; distinguishing between existing and new facilities is not discriminatory.¹⁶⁹ As the Commission is aware, many ordinances provide for exceptions processes that permit, for example, wireless facilities to exceed height limits that otherwise apply, and with which wireline facilities do comply.

Section 253(c) is not suited to a *per se* rule that mandates equal treatment even if one could be established – and it cannot, consistent with the limits on Commission authority under Section 253(d).

B. Local Governments Have Spent Millions Of Dollars Implementing Their Undergrounding Programs Motivated By A Desire To Improve Their Communities, Not To Gain Revenues For Use Of Their Poles And Infrastructure.

The Commission seeks comment on the "extent to which localities may be seeking to restrict the deployment of utility or communications facilities above ground and attempt to relocate electric, wireline telephone, and other utility lines in that area to underground

provided the effect is a rough parity between competitors. (*In re Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements*, 15 FCC Rcd. 16720 at ¶ 23 (July 13, 2000) (it is not unlawful discrimination to "differentiate among users so long as there is a valid reason for doing so."); *see also Competitive Telecommunications Ass'n v. FCC*, 998 F.2d 1058, 1064 (D.C. Cir. 1993).)

¹⁶⁸ *In re Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements*, 15 FCC Rcd. 16720 at ¶ 23 (July 13, 2000) (it is not unlawful discrimination to "differentiate among users so long as there is a valid reason for doing so."); *see also Competitive Telecommunications Ass'n v. FCC*, 998 F.2d 1058, 1064 (D.C. Cir. 1993).

¹⁶⁹ *Cablevision of Boston, Inc. v. Pub. Improvement Commission of the City of Boston*, 184 F.3d 88, 103 (1st Cir. 1999) ("[a]s long as the City makes distinctions based on valid considerations, it cannot be said to have discriminated....").

conduits.”¹⁷⁰ The Commission also seeks comment on parties’ experiences with undergrounding generally and with undergrounding requirements, including how wireless facilities have been treated in communities that require undergrounding of utilities.¹⁷¹ The Commission states, “Obviously, it is impossible to operate wireless network facilities underground. Undergrounding of utility lines seems to place a premium on access to those facilities that remain above ground, such as municipally-owned street lights.”¹⁷² There are two implications inherent in this statement. The first is that the only way to provide service to an undergrounded area is to place wireless facilities aboveground in the public rights-of-way. That is not true. In many communities, wireless facilities could easily be placed on private property, or even on non-public right-of-way public property that would allow coverage in undergrounded areas (stealth facilities may be used, for example). As the report of Dr. Cahill explains, the right of way is not a monopoly resource.¹⁷³ Where there are no alternatives, the unserved area could be quite small – hardly enough to prevent an entity from providing wireless services. The second implication of this statement is undergrounding of utility lines and facilities has been motivated by a desire to target the wireless industry as a revenue source. That is simply not the driver for undergrounding requirements or projects. To the contrary, communities have spent hundreds of millions of dollars to implement undergrounding programs out of necessity and for the public benefit.

For example, as described earlier, Myrtle Beach, a city integral to South Carolina’s tourism industry, has planned, financed, and worked hard to develop a 10 mile commercialized Ocean Boulevard, its public beaches and Boardwalk, investing more than \$100 million in public

¹⁷⁰ NPRM ¶ 98.

¹⁷¹ NPRM ¶ 98.

¹⁷² NPRM ¶ 98 (citation omitted).

¹⁷³ ECONorthwest Declaration, at p. 14.

improvements to streets, sidewalks, the boardwalk, underground utilities, deep-water ocean outfalls, public parks, new streets and new recreational spaces. The City of Myrtle Beach partnered with the local electric utility, Santee Cooper, to fund the removal of overhead utility lines from major public streets and thoroughfares, spending more than \$30 million on that effort since 1999.

Most of the tourists who visit Myrtle Beach arrive by automobile, but they rightly expect to walk and bicycle through the central beach areas and residential districts, which means that the City has a significant interest in minimizing obstructions in the public rights-of-way. Looking ahead, the City has identified as much as \$2 billion of required road improvements, while facing significant reductions in available state and federal funding – additional infrastructure that may make improvements more difficult simply adds to those costs. Indeed, understanding these future growth issues, the City met with all interested utilities during the underground conversion discussion to ensure that the underground infrastructure would include sufficient conduit and other structures to avoid future trenching, road blockages or other retrofitting.

On a practical level, such a holistic approach is required for public safety. The Myrtle Beach area is subject to hurricanes, so it seeks to avoid preventable damage and limit repair time through strict building codes and adherence to FEMA's and other agencies guidelines. An obvious goal is to limit the number of structures that can create hazards to the public and to property during high winds. Moving utilities underground was part of those efforts.

In California, the California Public Utilities Commission ("CPUC") and utility companies established a program to underground utilities across the State of California in 1967. Under this program, utilities annually allocate approximately two percent of their electric revenue to communities to underground electric and telecommunications facilities, and upon

completion of an undergrounding project, utilities record their costs in their electric plant account for inclusion in its rate base. The CPUC then authorizes the utility to recover the cost from ratepayers until the project is fully depreciated.¹⁷⁴ Even with this program, the amount of undergrounding of existing facilities is minimal. The CPUC website states: “California has approximately 25,526 miles of transmission lines, approximately 239,557 miles of distribution lines, in which approximately 152,000 miles of distribution lines are overhead. Utilities convert less than 100 miles/year to underground. Therefore, if our program remains at the current progress, it will take over a thousand years to convert our entire distribution system to underground.”¹⁷⁵

Under the CPUC process, undergrounding projects are selected after consultation with the utility and after holding a public hearing. Projects must be determined to be in the public interest considering a number of criteria, including, but not limited to:

- Avoiding or eliminating an unusually heavy concentration of overhead electrical facilities.
- A street intensively used by the general public and carrying a heavy volume of pedestrian or vehicular traffic.
- A street passing through a civic area or public recreation area or an area of unusual scenic interest to the general public.
- A street considered to be an arterial or major collector.
- Projects that front city facilities such as parks, libraries, and fire stations.
- Projects in the downtown core.¹⁷⁶

As seen from these examples, local governments have spent a significant amount of funds and resources for their undergrounding programs with the goal of improving their communities, not to gain any rental revenues or to market the use of their infrastructure by wireless or DAS providers. Indeed the hundreds of millions of dollars spent on undergrounding highlight that the

¹⁷⁴ <http://www.cpuc.ca.gov/General.aspx?id=4403>.

¹⁷⁵ <http://www.cpuc.ca.gov/General.aspx?id=4403>

¹⁷⁶ <http://www.cpuc.ca.gov/General.aspx?id=4403>.

benefits to their communities, whether it is improving utilities services to residential and commercial areas, increasing safety for vehicular and pedestrian traffic, or improving the aesthetic quality of the neighborhood, are well worth the financial and administrative costs.

And regarding the Commission's concern, there is no evidence that the right-of-way management and undergrounding programs administered by localities have impeded wireless deployment. Rather, significant broadband and wireless deployment has been achieved without compromising other important policy goals that make those communities very desirable places to live and work. The Commission should keep in mind these undergrounding programs that provide such benefits are tailored to the unique needs and desires of the local communities. Thus, any attempt by the Commission to step in and apply a national one-size-fits-all regime that ignores the local needs and desires of individual communities would be a travesty – and certainly not consistent with the goal of protecting local authority.

C. Undergrounding Programs Do Not Result in a *Per Se* Effective Prohibition Because Wireless Facilities Can Operate Outside the Public Rights-of-Way.

The Commission asks whether there is a particular way Section 253 or Section 332(c)(7) should apply in circumstances where undergrounding appears to place a premium on access to above-ground facilities and whether “‘undergrounding’ plans ‘prohibit or have the effect of prohibiting’ service by causing suitable sites for wireless antennas to become scarce.”¹⁷⁷

We repeat: Section 253 does not apply at all. But as discussed in the preceding section, undergrounding programs could not possibly result in a *per se* effective prohibition under Section 253 or 332(c)(7) because though wireless services cannot operate underground, they can operate outside the public rights-of-way. What are at issue legally in Sections 253 and 332(c)(7) are prohibitions and effective prohibitions, not hindrances.

¹⁷⁷ NPRM ¶ 98.

It also does not follow that *complete* blanket bans on overhead facilities in certain limited areas constitute “prohibitions.” Neither Section 253 nor Section 332(c)(7) ensure that a provider will never have a service gap.¹⁷⁸ In many cases, a provider may be able to serve the same area by placing its facilities in less intrusive locations, in which case, no “gap” even occurs. Under a *per se* standard, a standard prohibiting facility placement on the National Mall would be *per se* unlawful (all utilities undergrounded), as would local rules that prohibit construction in an airline glide path, in historical areas, or in sensitive wildlife preserves. Sections 253 and 332(c)(7) do not give the wireless industry that sort of free rein, nor does it permit localities from placing certain areas off limits.¹⁷⁹

D. The Commission Has No Authority to Undo or Rewrite Undergrounding Laws.

Finally, as a legal matter, the Commission, has no authority to undo or rewrite undergrounding laws in communities across the country. If the Commission were to regulate public right-of-way practices, it would raise serious constitutional issues.

First, reading the Act to compel the government to provide access and to allow the FCC to limit compensation would create significant takings issues.¹⁸⁰ The Supreme Court has clearly recognized a local government’s “right to exact compensation” for such property uses:

¹⁷⁸ *360 Degrees Communs. Co. v. Board of Supervisors of Albermarle County*, 211 F.3d 79, 87 (4th Cir. 2000) (“The Act obviously cannot require that wireless services provide 100% coverage. In recognition of this reality, federal regulations contemplate the existence of dead spots.”).

¹⁷⁹ Additionally, there would be no effective prohibition even in those areas where undergrounding is required and wireless siting is forbidden. Communities that generally forbid siting in certain areas, such as residential areas, often provide that such limits are subject to a variance process. Under these processes, providers *can* place their facilities outside of public rights-of-way in these areas (e.g., on buildings adjacent to the public right-of-way or light poles on private parking lots), provided they can justify such a placement. This fits neatly with Sections 253 and 332(c)(7)’s “prohibition” law, which looks to the factual circumstances just as these local processes do.

¹⁸⁰ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 430-433 (1982) (state law requiring property owner to permit access to cable company to install lines on private property constituted a taking).

[W]hile permission to a telegraph company to occupy the streets is not technically a lease, and does not in terms create the relation of landlord and tenant, yet it is the giving of the exclusive use of real estate, for which the giver has a right to exact compensation, which is in the nature of rental.¹⁸¹

And the Court has also held that like private property owners, local governments have the same right to fair market value compensation for the federal government's taking of property as private property owners.¹⁸² It matters not that the intrusion may be relatively slight:

[P]ermanent occupations of land by such installations as telegraph and telephone lines, rails, and underground pipes or wires are takings even if they occupy only relatively insubstantial amounts of space and do not seriously interfere with the landowner's use of the rest of his land.¹⁸³

Second, the preemption of local right-of-way practices and compensation would also offend the Tenth Amendment and the Guarantee Clause of the Constitution. Under the Tenth Amendment, "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."¹⁸⁴ As part of the system of "dual sovereignty," the federal government "may not compel the States to enact or administer a federal regulatory program."¹⁸⁵ Even in areas where the federal government has authority to act, the Constitution only authorizes the federal government to regulate individuals, not States.¹⁸⁶ If the Commission were to assume control over right-of-way practices or compel local governments to provide access to rights-of-way on federally-prescribed terms, the

¹⁸¹ *City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92, 99 (1893), *op. on rehrg.*, 149 U.S. 465 (1893); *see also Cities of Dallas and Laredo v. FCC*, 118 F.3d 393, 397-98 (5th Cir. 1997) ("Franchise fees are . . . essentially a form of rent: the price paid to rent use of the public rights-of-ways.").

¹⁸² *United States v. 50 Acres of Land*, 469 U.S. 24 (1984).

¹⁸³ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 430 (1982).

¹⁸⁴ U.S. Const. amend. X.

¹⁸⁵ *Printz v. United States*, 521 U.S. 898, 918-19, & 933 (1997) (quoting *New York v. United States*, 505 U.S. 144, 188 (1992)).

¹⁸⁶ *Alden v. Maine*, 527 U.S. 706, 714 (1999) (citing *New York v. United States*, 505 U.S. 144, 166 (1992)).

Commission would unconstitutionally commandeer the local administration of public property in service of a federal regulatory program.

The preemption of local discretion regarding how to charge for use of its property also raises concerns under the Guarantee Clause.¹⁸⁷ The Guarantee Clause precludes the federal government from interfering with a State’s distribution of power among the various levels of government.¹⁸⁸ Where a State has decided to allow local governments to obtain certain fees, the Commission may not undermine the State’s decision by leaving the local government without a means to recover that compensation. While the Federal government may use its Commerce Clause authority to limit certain actions of State and local officers, it may not—consistent with the unqualified *guarantee* to the people of the States of “a Republican Form of Government”—curtail the fundamental powers or property rights of local governments as local governments.

E. The Term “Functionally Equivalent Services” Refers Only To Personal Wireless Services, Which Means Utilities Services And Wireline Services Are Not “Functionally Equivalent” For Purposes Of Applying Section 332(C)(7)(B)(I)(I).

The Commission seeks comment on what constitutes “functionally equivalent services” in Section 332(c)(7)(B)(i)(I) and whether entities that are considered to be utilities can be viewed as an appropriate comparison. The Commission also asks whether, for the limited purpose of applying Section 332(c)(7)(B)(i)(I), wireless and wireline services be considered “functionally equivalent” in some circumstances, and which types of discrimination are reasonable and which are unreasonable.

1. *The Term “Functionally Equivalent Services” Refers Only to Personal Wireless Services, Which Means Utilities Services Are Not An Appropriate Comparison.*

¹⁸⁷ U.S. Const., Art. IV, § 4.

¹⁸⁸ *City of Abilene v. FCC*, 164 F.3d 49, 52 (1999) (“interfering with the relationship between a State and its political subdivisions strikes near the heart of State sovereignty”).

According to the legislative history of Section 704 of the Telecommunications Act, one of the intentions behind Section 704 was to “insure that a State or local government does not in making a decision regarding the placement, construction and modification of facilities of personal wireless services described in this section unreasonably favor *one competitor over another*.”¹⁸⁹ The House Conference Report also states that the term “functionally equivalent services” refers “only to personal wireless services that directly compete against one another.”¹⁹⁰

One court actually cited the legislative history to help define the term. The court stated:

In our view, the phrase is reminiscent of the common question in antitrust cases whether two products are in the same relevant market. In each instance, the statute requires the decisionmaker to see if the two services (or products) are direct substitutes for one another and thus are in direct competition with one another. See also H.R. Conf. Rep. 104-458, at 208 (1996) (defining term to refer to services that directly compete against one another). In order to answer that question, it is common to compare the characteristics of the service or product, the price of each one, and the willingness consumers have shown to switch from one to the other when the price of one changes.¹⁹¹

Courts have interpreted the term in the following manner:

We think the equivalency of function relates to the telecommunications services the entity provides, not to the technical particularities (design, technology, or frequency) of its operations. The TCA clearly does not force competing wireless providers to adopt identical technology or design nor does it compel them to fit their networks of antennae into a uniform, rigid honeycomb of interlocking cells. Indeed, the FCC’s assignment of a different frequency and signal strength to each licensee renders such uniformity impossible. In this region, Sprint and Nextel provide the same service -- personal wireless communications

¹⁸⁹ H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 208 (1996), 1996 U.S.C.C.A.N. 124, 221-22 (emphasis added).

¹⁹⁰ H.R. Conf. Rep. No. 104-458, at 208, reprinted in 1996 U.S.C.C.A.N. at 222.

¹⁹¹ *Aegerter v. City of Delafield*, 174 F.3d 886, 891-92 (7th Cir. 1999).

services to remote users -- and therefore are functionally equivalent.¹⁹²

Thus, the legislative history and the courts indicate that the term “functionally equivalent services” encompasses personal wireless services that directly compete against one another, which would rule out public utilities that do not provide such services as being an appropriate comparison.

2. *The Term “Functionally Equivalent Services” Refers Only to Personal Wireless Services, Which Means Wireline Services Are Not “Functionally Equivalent” For Purposes of Applying Section 332(c)(7)(B)(i)(I).*

For the limited purpose of applying Section 332(c)(7)(B)(i)(I), wireless and wireline services cannot be considered “functionally equivalent” in some circumstances. Courts have correctly rejected arguments made by wireless providers who have alleged unreasonable discrimination by citing a local government’s differential treatment of providers of wireline services. For example, the Second Circuit held the following:

Sprint’s ability to compete with land-line based services simply is not part of the inquiry under subsection B [of Section 332(c)(7)]. Subsection B(i)(I) speaks only to Sprint’s ability to compete with “functionally equivalent services,” which does not include land-line services. See H.R. Conf. Rep. No. 104-458, at 208, reprinted in 1996 U.S.C.C.A.N. at 222 (“When utilizing the term ‘functionally equivalent services’ the conferees are referring only to personal wireless services that directly compete against one another.”). Because subsection B(i)(II) only considers whether a town’s decision will have the effect of prohibiting personal wireless services in a given area, Sprint’s reliance on that subsection to contend that it cannot be prohibited from competing effectively with land-line systems is misplaced.¹⁹³

Of course this does not mean that all providers must be treated identically. A locality

¹⁹² Nextel W. Corp. v. Unity Twp., 282 F.3d 257 (3d Cir. Pa. Mar. 5, 2002) fn. 13; see also Omnipoint Communs. Enters., L.P. v. Zoning Hearing Bd. of Easttown Twp., 331 F.3d 386 (3d Cir. Pa. June 4, 2003); New Cingular Wireless PCS LLC v. Town of Stow, No. 06-10659-GAO, 2009 U.S. Dist. LEXIS 58837, at *12 n.1 (D. Mass. July 9, 2009); Omnipoint Communs., Inc. v. City of Scranton, 36 F. Supp. 2d 222, 235 (M.D. Pa. 1999).

¹⁹³ *Sprint Spectrum, L.P. v. Willoth*, 176 F.3d 630, 639-40 (2d Cir. 1999).

could treat a large, visible proposed tower differently than a small one, and could require – as a least intrusive alternative – that a smaller less intrusive facility be used to minimize impacts. As the House Conference Report states:

The conferees also intend that the phrase ‘unreasonably discriminate among providers of functionally equivalent services’ will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under the generally applicable zoning requirements even if those facilities provide functionally equivalent services. For example, the conferees do not intend that if a State or local government grants a permit in a commercial district, it must also grant a permit for a competitor’s 50-foot tower in a residential district.”¹⁹⁴

PART 4: INITIAL REGULATORY FLEXIBILITY ANALYSIS

For reasons suggested above, any shortening or alteration of the Commission’s existing shot clocks (and especially any deemed granted remedy); any limitation on proprietary properties or regulation of their use will affect small local governments, special districts, property owners, and small developers and others harmed by placing everyone but wireless providers at the back of the permitting line. At a minimum, the cost will be in the hundreds of millions of dollars, to the extent it disrupts beautified neighborhoods, increases costs, or prevents development.

V. CONCLUSIONS

For the reasons discussed above, and in the expert declarations and reports, the Commission should not adopt additional rules or shot clocks directed at local governments; nor should it adopt additional deemed granted remedies or attempt to regulate proprietary property of any public agencies, local governments, or special districts.

It should work with industry and local governments on consultative processes like BDAC to develop models and best practices for deployment. It may also wish to clarify its rules to

¹⁹⁴ H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 208 (1996), 1996 U.S.C.C.A.N. 124, 221-22.

ensure that service and facilities providers are not incentivized to file incomplete applications; clarify its Section 6409 rules so that small cells remain small and subject to safety guidelines applicable to roads; and move forward to update its rules governing RF emissions.

Respectfully submitted,

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June 15, 2017

EXHIBIT F

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO	)	WT Docket No. 17-79
INFRASTRUCTURE INVESTMENT)	

ACCELERATING WIRELINE)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO)	WC Docket No. 17-84
INFRASTRUCTURE INVESTMENT)	

**REPLY COMMENTS OF SMART COMMUNITIES
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July 17, 2017

SUMMARY OF REPLY COMMENTS OF THE SMART COMMUNITIES AND SPECIAL DISTRICTS COALITION

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia. Smart Communities filed separate initial comments in each of the above-captioned proceedings. In these reply comments we respond to issues raised in both proceedings in a single filing submitted in both dockets as several of the comments to which we respond were filed verbatim in both dockets.

We begin by addressing our perspective on the lack of need for new federal rules or rulemakings, and articulates Smart Communities’ vision for how industry and regulators can most effectively move forward together to address the challenges and fulfill the promise of next generation wireless and wireline infrastructure. The record in these dockets reflects an industry response that is brimming with demands for federal action but woefully low on evidence of need or sound legal reasoning. Although local government filings in the *Mobilitie* docket included expert reports and the infrastructure Notices of Inquiry (“NOIs”) and Notices of Proposed Rulemaking (“NPRMs”) issued in these proceedings called for specificity, the industry comments did not include expert rebuttal and provided very few specific factual examples of problems claimed (but many unsupported claims to which it is impossible to respond). The Coalition’s unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;
- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;

- There is a significant expense associated with reviewing the applications that needs to be recovered;
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.

The implications should be obvious – the record does not support further Commission action espoused by industry.

By that we do not mean to say there is no work to be done to prepare for the next generation of deployments. To the contrary, Smart Communities recognize new types of deployments raise novel issues related to safety, aesthetics, permitting and related matters, but we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve these issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process. We are working on these issues and welcome further opportunities to participate in collaborative processes with industry that recognize and respect the unique roles of federal, state, and local governments in the regulation of wireless and wireline infrastructure.

We then reply to comments filed in the Wireless NPRM, particularly those addressing the proposed “deemed granted” remedy for the Section 332 shot clocks, modifications to shot clocks, and moratoria. No legal arguments raised by commenters who urge the Commission to change course and adopt a deemed granted remedy rest on sound principles. The Commission should reaffirm its prior rulings in this regard. The industry’s predictable calls for shorter shot clocks and other modifications should also be rejected as they are not supported by convincing legal or factual bases for action, and ignore that the legal focus of the statute is on what is a

“reasonable time” for completing the necessary regulatory action, not on an industry desire for speed to market. For actual, legal moratoria, the existing Commission’s rules are clear that moratoria do not stop the shot clocks and the record does not support a need for further action.

Finally, Smart Communities address industry comments raising myriad issues in response to the two infrastructure NOIs – specifically Part III of the Wireless NOI, and Part III.A of the Wireline NOI which also address various legal issues related to the scope of Communications Act provisions such as Sections 224, 253, and 332(c)(7). Industry comments in response to these NOIs read like wish lists. There are broad calls for preemption of local government authority to address issues from aesthetics to permits fees to undergrounding, calls for imposing new federal regulatory regimes on public rights-of-way and publicly-owned infrastructure such as utility poles and street lights, calls to overturn well-established court precedent, and the like. These demands for action are unaccompanied by a demonstration of meaningful harms or actual prohibitions or barriers to deployment. They lack sound legal support, and invite the Commission to violate basic Constitutional principles. Providers may not like that the law guarantees states and local governments a role in the deployment of wireline and wireless facilities, but that alone does not entitle them to federal preemptive action. In sum, industry filings and the record are devoid of solid legal or factual foundations for any declaratory rulings, rulemakings or even further exploratory proceedings. The Commission should not engage in further regulatory proceedings on the topics in the NOIs. It would be arbitrary, capricious, and counter-productive to impose additional federal regulations – there is no reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

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**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO)	WT Docket No. 17-79
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)	
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REMOVING BARRIERS TO)	WC Docket No. 17-84
INFRASTRUCTURE INVESTMENT)	

**REPLY COMMENTS OF SMART COMMUNITIES
AND SPECIAL DISTRICTS COALITION**

I. INTRODUCTION

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia.¹

¹ The Smart Communities and Special Districts Coalition is comprised of the following members:

Individual members: Ann Arbor, MI; Atlanta, GA; Boston, MA; Cary, NC; Corona, CA; Dallas, TX; District of Columbia; Elsinore Valley Municipal Water District (CA); Frederick, MD; Gaithersburg, MD; Greenbelt, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; Marin Municipal Water District (CA); McAllen, TX; Montgomery County, MD; Myrtle Beach, SC; North County Fire Protection District (CA); Ontario, CA; Padre Dam Municipal Water District (CA); Portland, OR; Rye, NY; Santa Clara, CA; Santa Margarita Water District (CA); Sweetwater Authority (CA); Valley Center Municipal Water District (CA); and Yuma, AZ.

Organizations Representing Local Governments: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of Michigan cities that focuses on protection of their citizens’ governance and control over public rights-of-way. The Michigan Townships Association (“MTA”) promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position. The Michigan Municipal League (“MML”) is a non-profit Michigan

II. SUMMARY

Smart Communities filed separate initial comments in each of the above-captioned proceedings.² In these reply comments we respond to issues raised in both proceedings in a single filing submitted in both dockets, as several of the comments to which we respond were filed verbatim in both dockets.³

We begin by addressing our perspective on the lack of need for new federal rules or rulemakings, and articulates Smart Communities' vision for how industry and regulators can most effectively move forward together to address the challenges and fulfill the promise of next generation wireless and wireline infrastructure. The record in these dockets reflects an industry response that is brimming with demands for federal action but woefully low on evidence of need or sound legal reasoning. Although local government filings in the *Mobilitie* docket included expert reports and the infrastructure Notices of Inquiry ("NOIs") and Notices of Proposed Rulemaking ("NPRMs") issued in these proceedings called for specificity, the industry comments did not include expert rebuttal and provided very few specific factual examples of problems claimed (but many unsupported claims to which it is impossible to respond). The

corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance.

The Kitch Firm represents PROTEC, MML, MTA and Public Corporation Law Section of the State Bar of Michigan. Best Best & Krieger represents the others in the Smart Communities coalition.

² Comments of Smart Communities and Special Districts Coalition, WC Docket No. 17-84 (Jun. 15, 2017) ("Smart Communities Wireline Comments"); Comments of Smart Communities and Special Districts Coalition, WT Docket No. 17-79 (Jun. 15, 2017) ("Smart Communities Wireless Comments").

³ In addition to the issues discussed below, the Commission has proposed a wholesale reversal of network change notification requirements to consumer, safeguards that were adopted in the 2015 Technology Transitions order. While Smart Communities supports the important transition to IP-based networks, such change should not come at the expense of important functions served by local government, nor at the expense of local businesses and residents who make up the constituencies Smart Communities represent. Our constituents, corporate, institutional, and individual, rely on a robust and reliable telecommunications network, and network changes and copper retirement notifications play a critical role in preserving the stability of that network. Smart Communities opposes the Commission's proposal to abandon these rules, and echoes the arguments made in defense of the 2015 Tech Transitions Order proffered by Public Knowledge and others. *See, e.g.* Comments of Public Knowledge, WC Docket No. 17-84 (Jun. 15, 2017) ("Public Knowledge Comments").

Coalition's unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;
- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;
- There is a significant expense associated with reviewing the applications that needs to be recovered;
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.

The implications should be obvious – the record does not support further Commission action espoused by industry.

By that we do not mean to say there is no work to be done to prepare for the next generation of deployments. To the contrary, Smart Communities recognize new types of deployments raise novel issues related to safety, aesthetics, permitting and related matters, but we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve these issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process. We are working on these issues and welcome further opportunities to participate in collaborative processes with industry that recognize and respect the unique roles of federal, state, and local governments in the regulation of wireless and wireline infrastructure.

Section IV of this filing replies to comments filed in the Wireless NPRM, particularly those addressing the proposed “deemed granted” remedy for the Section 332 shot clocks,

modifications to shot clocks, and moratoria. No legal arguments raised by commenters who urge the Commission to change course and adopt a deemed granted remedy rest on sound principles. The Commission should reaffirm its prior rulings in this regard. The industry's predictable calls for shorter shot clocks and other modifications should also be rejected as they are unsupported by convincing legal or factual bases for action, and ignore that the legal focus of the statute is on what is a "reasonable time" for completing the necessary regulatory action, not on an industry desire for speed to market. For actual, legal moratoria, the existing Commission's rules are clear that moratoria do not stop the shot clocks and the record does not support a need for further action.

Section V addresses industry comments raising myriad issues in response to the two infrastructure NOIs – specifically Part III of the Wireless NOI, and Part III.A of the Wireline NOI which also address various legal issues related to the scope of Communications Act provisions such as Sections 224, 253, and 332(c)(7). Industry comments in response to these NOIs read like wish lists. There are broad calls for preemption of local government authority to address issues from aesthetics to permits fees to undergrounding, calls for imposing new federal regulatory regimes on public rights-of-way and publicly-owned infrastructure such as utility poles and street lights, calls to overturn well-established court precedent, and the like. These demands for action are unaccompanied by a demonstration of meaningful harms or actual prohibitions or barriers to deployment. They lack sound legal support, and invite the Commission to violate basic Constitutional principles. Providers may not like that the law guarantees states and local governments a role in the deployment of wireline and wireless facilities, but that alone does not entitle them to federal preemptive action. In sum, industry filings and the record are devoid of solid legal or factual foundations for any declaratory rulings,

rulemakings or even further exploratory proceedings. The Commission should not engage in further regulatory proceedings on the topics in the NOIs. It would be arbitrary, capricious, and counter-productive to impose additional federal regulations – there is no reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

III. THE RECORD SHOWS THERE IS NO NEED FOR MORE FEDERAL RULES OR RULEMAKING PROCEEDINGS

A. The Record Reflects A Lack Of Evidence Of Actual Harms Or Prohibitions On Deployment, Showing That There Is No Need For Further Commission Action

1. Industry Filings Don't Comply With Commission Requirements And Don't Demonstrate Widespread Problems.

The issues raised in these dockets are virtually identical to those raised in the pending *Mobilitie* docket⁴ and as a result, at the time they filed comments in these dockets, supporters of additional Commission regulations and federal takings of property for the benefit of companies who are assuming no obligations to provide service to the public, were well aware that there was substantial opposition to additional rules based on (a) economic, safety, and other studies demonstrating that the sorts of rules proposed would not advance the public interest, and could lead to substantial harms that would delay 5G deployment; (b) information that showed that some wireless providers and some wireless infrastructure providers were seeking to install, and were installing intrusive and unsafe wireless installations as “small cell” installations; (c) a careful rebuttal of claims by the wireless industry of widespread abuse. Commenters also noted that industry had by and large failed to provide specific, supported examples of significant deployment problems caused by states or localities.

⁴ *Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling*, WT Docket No. 16-421 (“*Mobilitie* petition”). The comments filed by Smart Communities in the *Mobilitie* docket are referred to herein as “*Mobilitie* Docket Smart Communities Comments” (filed March 8, 2017) and “*Mobilitie* Docket Smart Communities Reply Comments” (filed April 7, 2017).

Among other things, members of this coalition, their experts and other local public agencies submitted substantial facts and evidence in the Mobilitie docket⁵ and again in comments in these dockets which demonstrated that where delay has been documented, the vast majority of delay can be attributed to incomplete applications and siting requests that are improperly made, not to local barriers.

Having already seen those filings, and in light of the language of the NOIs and NPRM issued in this proceeding, one would have expected for the initial industry comments to include some expert rebuttal, specific factual examples of problems claimed (rather than unsupported claims to which it is impossible to respond). Instead, the record thus far reflects a startling absence of meaningful substantiation to support service provider assertions that substantial barriers exist to broadband deployment. Aesthetic requirements, duration of shot clocks, costs and fees, and other terms and conditions associated with accessing public rights-of-way and governmental infrastructure are broadly assailed in the record, but are rarely supported by citations to specific communities or policies or examples of actual harm arising from such policies.

To the extent relief rests on Section 253,⁶ the record even more convincingly fails to justify the oft-repeated assertions that these barriers rise to a level sufficient to satisfy Section 253's language regarding policies that prohibit or have the effect of prohibiting deployment. Commenters point instead to policies which may cause them to incur some costs as they seek to take advantage of municipal rights-of-way and municipal infrastructure, or that may inconvenience providers as they seek to gain access to municipal resources in order to offer service to consumers.

⁵ See generally *Id.*

⁶ 47 U.S.C. § 253.

With few exceptions, commenters seeking Commission action against local authority fail to respond to the Commission's requests, much less heed, the statutory language of Section 253(d) in their comments. Furthermore, Section 253(d) requires that, before the Commission may utilize its authority to preempt under Section 253(a) or (b), it must provide notice and seek comment on particular state or local policies, rules, or regulations at issue. The Commission asked commenters to "explain their concerns in sufficient detail to allow State and local governments to respond," yet the record remains light on particularized examples of complaints.⁷ As Smart Communities discussed at length in initial comments, and further examined below, Section 253(d) serves to limit the Commission's ability to engage in general rulemaking pursuant to Section 253's preemption authority. Particularized identification of policies at issue is required by statute, but the record is largely devoid of these essential details. Smart Communities trust that the Commission will disregard improperly formed claims for relief which fail to comply with Section 253(d). As a general matter, whether raised in the NPRM, in the NOIs or otherwise, such nameless and vague accusations are not "sufficiently supported and credible for purposes of decisional reliance" and thus should be ignored by the Commission.⁸

2. *Carriers Continue To Celebrate Their Accelerating Deployment, While Telling The Commission They Need Relief From Barriers Which Prevent That Deployment.*

Were the comments of wireless providers in these proceedings to be believed, a vast array of practices implemented by state and local governments are having a crippling impact on the ability of wireless providers to deploy new services to meet consumer demands and compete

⁷ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 17-79, ¶94 (rel. Apr. 21, 2017) ("Wireless NPRM/NOI").

⁸ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Order Denying Request for Extension of Time, WT Docket No. 17-79, FN 6 (rel. Jul. 13, 2017).

in the marketplace.⁹ The public statements of those same companies, however, suggest otherwise. All four major nationwide wireless carriers are engaged in aggressive deployment of innovative technologies at a breakneck pace, and take every opportunity to celebrate their deployment and innovation. To be sure, celebrating the important progress these companies are making in deploying wireless services is an essential part of their marketing and business strategies, but their statements and releases announcing deployment plans and success stories stands in stark contrast to the litany of complaints and claims of prohibitions upon deployment submitted here. Actual or *de facto* prohibitions – that narrow category of policies the Commission has authority to preempt – would surely prevent providers from achieving just the kinds of deployment and investment successes they so frequently celebrate.¹⁰

As stated in our initial comments, the designs and standards for true 5G have not been set, carriers are in the process of conducting technical trials, and test roll-outs, without any real indication that ultimate deployment will be delayed. In its 2016 Annual Report, Lowell McAdam, President and CEO of Verizon Communications, Inc., wrote “In 2016, we conducted successful technical trials of 5G infrastructure and will follow up in 2017 with pre-commercial pilots in 11 markets around the country in preparation for introducing fixed wireless service.”¹¹ In September 2016, AT&T announced that it was nearly ready for field trials of its Project

⁹ See, e.g. Comments of AT&T, WT Docket No. 17-79 at 2 (Jun. 15, 2017) (“AT&T Wireless Comments”); Comments of T-Mobile, WC Docket No. 17-84, WT Docket No. 17-79, at 3 (Jun. 15, 2017) (“T-Mobile Comments”); Comments of Sprint Corporation, WC Docket No. 17-84, WT Docket No. 17-79, at ii (Jun. 15, 2017) (“Sprint Comments”); Comments of Verizon, WC Docket No. 17-84, WT Docket No. 17-79, at 1 (Jun. 15, 2017) (“Verizon Comments”).

¹⁰ For purposes of this discussion, we are not distinguishing between a claim of effective prohibition under Section 253, and a claim of effective prohibition under Section 332. As we explained in our initial filing, where wireless siting is involved, Section 253 does not apply at all.

¹¹ Lowell McAdam, Chairman and Chief Executive Officer, Verizon Communications Inc., Annual Letter to Shareholders (Dec. 2016), *available at* http://www.verizon.com/about/sites/default/files/annual_reports/2016/letter.html.

AirGig technology to deliver wireless broadband using power line infrastructure, announcing that they “expect to kick off [their] first field trials in 2017.”¹²

Of course, most of the deployment now occurring does not involve 5G (although that is often a code word used to justify preemption); rather deployment today involves continued roll-out of fourth generation LTE technology and densification of 4G networks. That also proceeds apace.¹³ T-Mobile celebrated expanding its network by more than 2000 new cell sites over the course of 2016.¹⁴ Sprint routinely announces network densification efforts, including recent promises to bring “hundreds of network enhancements” to metropolitan areas like Milwaukee, Chicago, Detroit, and New Orleans, since March 2017 alone.¹⁵ These ongoing investments and densification efforts suggest a marketplace which is permissive, rather than prohibitive, where deployment is concerned.

If local policies rose to the level of prohibitions, this level of deployment simply would not be happening. Providers may not like that the law guarantees states and localities a role in the deployment of wireline and wireless technologies, but that does not entitle providers to

¹² Press Release, AT&T Labs’ *Project AirGig Nears First Field Trials for Ultra-Fast Wireless Broadband Over Power Lines*, (Sep. 20, 2016), http://about.att.com/newsroom/att_to_test_delivering_multi_gigabit_wireless_internet_speeds_using_power_lines.html

¹³ The wireless industry’s own data makes it clear that deployment is proceeding. Scott Bergmann Prepared Statement to House E&C, April 5, 2017: “In just seven years, wireless providers have blanketed the country with \$200 billion in network spending to deliver 4G LTE mobile broadband nationwide. Today, 99.7 percent of Americans have access to 4G LTE service, and 95.9 percent can choose from three or more 4G LTE providers.”

¹⁴ T-Mobile 2016 Annual Report (2017) (“We had approximately 66,000 cell sites, including macro sites and distributed antenna system network nodes as of December 31, 2016, compared to approximately 64,000 cell sites as of December 31, 2015”), available at <http://investor.t-mobile.com/Cache/1001223313.PDF?O=PDF&T=Y=&D=&FID=1001223313&iid=4091145>.

¹⁵ See, e.g. Press Release, *The Secret’s Out! Sprint to Illuminate Chicago with Thousands of Network Enhancements and 100+ New Stores* (May 8, 2017), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2017/The-Secrets-Out-Sprint-to-Illuminate-Chicago-with-Thousands-of-Network-Enhancements-and-100-New-Stores/default.aspx>; Press Release, *Sprint’s New Cell Sites Hit Network Coverage Out of the Park in Downtown Detroit* (Apr 3, 2017), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2017/Sprints-New-Cell-Sites-Hit-Network-Coverage-Out-of-the-Park-in-Downtown-Detroit/default.aspx>.

preemptive action. The law does not entitle carriers to relief from the costs of doing business – only from prohibitions.

3. *Industry Supporters Failed To Provide Any Expert Evidence To Back Their Claimed Impacts Of Local Regulation And Practices On Investment.*

The record developed in this proceeding fails to provide substantive economic analysis to substantiate alleged harms to providers or barriers which have the effect of prohibiting deployment. The Information Technology and Innovation Foundation’s submission, for example, speaks at length of the risks posed by “legacy, inefficient processes that are not well suited to modern network deployment” but then jumps straight to policy proposals to ‘solve’ the problem, without offering any clear examples of harm to substantiate those claims.¹⁶

Industry assertions that broadband investment and deployment is hampered by local policies remain largely unsubstantiated. Commenters generally fail to offer substantive economic analysis to support their assertion that, but for municipal policies, broadband deployment would be happening that simply isn’t happening today (and thus would satisfy Section 253’s requirements to justify preemption). Additionally, broadband providers fail to offer sworn statements from executives which might support their positions.¹⁷

Furthermore, the record reflects a striking lack of studies or independent analysis proffered by industry stakeholders in support of their demands and assertions. As discussed in

¹⁶ Comments of the Information Technology and Innovation Foundation, WC Docket No. 17-84, WT Docket No. 17-79, at 2 (Jun. 15, 2017) (“ITIF Comments”).

¹⁷ In contrast to the absence of substantive evidence presented by aggrieved parties in support of their claims in this proceeding, it is not uncommon for parties seeking to substantiate their assertions when requesting Commission relief, to substantiate their grievances with sworn declarations. *See, e.g.*, Comments of DISH Network, Declaration of Melisa Ordonez, Director, Local Programming, GN Docket No. 16-142 (May 9, 2017). In fact, sworn statements of precisely this nature have been submitted in the wireline proceeding captioned above. *See* Declaration of Susan M. Baldwin on behalf of the National Association of State Utility Consumer Advocates, et. al., WC Docket No. 17-84 (Jun. 15, 2017), No party claiming harm or requesting preemption in this proceeding has offered such a statement to support their claims.

the *Mobilitie* docket and Smart Communities’ initial filings, the Accenture report (reentered in this docket by the Free State Foundation¹⁸) lacks substantiation for its claims of 24-month delays in application processing, lacks specific examples or evidence to support claims of “challenges” facing small cell providers, lacks empirical analysis and evidence, and concludes that in any event, deployment is proceeding apace.¹⁹ The one new whitepaper submitted comes from Deloitte, regarding the future of broadband deployment.²⁰ While it identifies a number of policies which it alleges have a bearing on the future of broadband, its contents do not actually address prohibitions or barriers to deployment. It does not appear to discuss local policies at all. Indeed, when describing those federal and state (but not local) policies which are allegedly the source of problems, the report does not at any point describe them as barriers, prohibitions, obstacles, or impediments to the deployment of networks – wireline or wireless.²¹ Instead, it focuses on the *transition* to IP-enabled services; a distinct and separate issue raised by the Commission in the Wireline NPRM. It discusses rules and policies as “regulations that prevent IP migrations” but at no point offers even any text, let alone evidence or analysis which substantiates, a connection between those policies and allegedly reduced broadband deployment. The Deloitte report, in total, describes the future need for broadband infrastructure, but barely addresses or even suggests that any policies related to deployment pose so much as an inconvenience, let alone an outright prohibition.

¹⁸ See Comments of the Free State Foundation, WT Docket No. 17-79 (Jun. 15, 2017)

¹⁹ Accenture Strategy study, filed in a January 13, 2017 *ex parte* by CTIA entitled “Smart Cities; How 5G Can Help Municipalities Become Vibrant Smart Cities” (“Accenture Study”). The rebuttal was in the ECONorthwest Reply Report.

²⁰ Deloitte Report Entitled “Communications infrastructure upgrade: the need for deep fiber”, WT Docket No. 17-79 (Jul. 11, 2017).

²¹ *Id.* at 20.

Other groups which allege substantial barriers are similarly unable to offer substantiation for their assertions. The R Street Institute offers some examples, but fails to provide policy justification for the broad preemption and rulemaking-based approach it seeks, or to connect the dots between those particular data points it discusses, and any lost or prohibited deployment.²² At no point does the record provide any economic or other substantive evidence that broadband deployment that would otherwise be happening, is not moving forward due to the role of local governments. The absolute most any commenter is able to offer on this point are legal arguments in favor of an expansive interpretation of the Commission's statute. Such a reading is industry commenters' only hope of success precisely because they are unable to present any substantive proof to support their claims.²³

4. *The Coalition's Expert Reports Demonstrated New Rules Aimed At Local Governments Are Unnecessary And Could Be Counter-Productive Have Not Been Refuted.*

In the *Mobilitie* docket, members of this coalition submitted numerous expert reports, which were resubmitted in the comments round of these two proceedings, along with additional expert reports previously presented to the Commission.²⁴ No one provided expert evidence to challenge the conclusions of these reports in the *Mobilitie* docket or in the comments filed in the present dockets. The Coalition's unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;²⁵

²² See Comments of the R Street Institute, WT Docket No. 17-79, at 6-9 (Jun. 15, 2017) ("R Street Institute Comments").

²³ *Id.*

²⁴ See generally Smart Communities Wireless Comments at Exhibits 1-7; Smart Communities Wireline Comments at Exhibits 1-3.

²⁵ "Report and Declaration of Andrew Afflerbach For the Smart Communities Siting Coalition" (referred to herein as the "CTC Declaration"). The CTC Declaration was attached to the Smart Communities Wireless Comments as Exhibit 1; "Definitions of Small Cells, and the Review of Small Cell Applications, Supplemental Report" (referred to herein as the "CTC Reply Report"). The CTC Reply Report was attached to the Smart Communities Wireless

- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;²⁶
- There is a significant expense associated with reviewing the applications that needs to be recovered;²⁷
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;²⁸
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.²⁹

In contrast to the unsupported allegations of those seeking additional federal regulations, the Coalition’s expert analyses are the only analyses that are “sufficiently supported and credible for purposes of decisional reliance” and thus should be weighed heavily by the Commission when considering taking any actions in these dockets.³⁰ Those analyses show that it would be arbitrary, capricious and counter-productive to impose additional federal regulations – there is no

Comments as Exhibit 1A; “Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition”(referred to herein as the “Burgoyne Declaration”). The Burgoyne Declaration was attached to the Smart Communities Wireless Comments as Exhibit 3; “Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition” (referred to herein as the “Puuri Declaration”). The Puuri Declaration was attached to the Smart Communities Wireless Comments as Exhibit 4.

²⁶ CTC Declaration and CTC Reply Report.

²⁷ *Id.*

²⁸ “The Economics of Government Right of Way Fees” (referred to herein as the “ECONorthwest Declaration”). The ECONorthwest Declaration contains an economic analysis of the effect of limiting the amounts that may be charged for use of the public rights-of-way and concludes that the rulings sought by Mobilitee will not promote economically efficient deployment of public rights-of-way and will discourage innovation. The ECONorthwest Declaration was attached to the Smart Communities Wireless Comments as Exhibit 2. “Reply Declaration of Kevin E. Cahill, PhD, Regarding the Accenture Report and the Economics of Local Government Right of Way Fees” (referred to herein as the “ECONorthwest Reply Report”). The ECONorthwest Reply Report was attached to the Smart Communities Wireless Comments as Exhibit 2A.

²⁹ ECONorthwest Declaration and ECONorthwest Reply Report.

³⁰ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Order Denying Request for Extension of Time, WT Docket No. 17-79, FN 6 (rel. Jul. 13, 2017).

reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

B. Respect For The Federal System Of Government And Its Division Of Powers And Responsibilities Would Better Serve Communities And Industry

1. Placement Will Always Be A Fundamentally Local Endeavor

In crafting the Communications Act of 1934 (“Act”) and its subsequent amendments and revisions, Congress has always exercised particular care to respect the important roles played by states and local governments in the deployment and governance of communications technologies and services. This shared-jurisdiction framework ensures that an appropriate balance is struck between consistent national policy, respect for our system of laws and the role states play in that system, and the quintessentially local nature of infrastructure deployment and service delivery as it takes place on a community-by-community basis. Smart Communities reiterate their concern that the Commission, by its proposals, and industry supporters through their comments, either fail to recognize and respect this critical distinction, or seek to disregard the clear design of Congress by dismissing the role of states and local governments wherever it suits. Siting and deployment of wireless and wireline facilities will always be a fundamentally local matter, both in the law and in practice. Congress devoted sections of the Act to preserving and protecting that local role, and balancing it where appropriate, but at no point does the Act give the Commission the authority to simply clear localities out of the way for providers’ convenience.

2. The Commission Should Encourage Further Cooperative Efforts Through Existing Mechanisms.

In Smart Communities’ opening comments, we urged the Commission to encourage further cooperative efforts in fora already established such as the Broadband Deployment Advisory Council (“BDAC”) and the Intergovernmental Advisory Committee. While it is notable that industry support for such partnership opportunities in comments is often either

absent or vague,³¹ some in industry *did* express support for this approach at least to an extent.³²

We sincerely hope that Commission will focus on cooperative and collaborative initiatives in existing fora rather than continuing to pursue unnecessary and ultimately unnecessary preemptive actions.

This is particularly true with respect to comments urging the Commission to set the prices, terms and conditions for access to public property. As we pointed out in our initial comments, the Commission lacks authority to set those terms and conditions. The industry comments fail to actually acknowledge or even mention some of the actual complexities associated with requiring provision of access to street lights and other vertical structures at cost. One notable example of an incident where a wireless provider installed facilities itself without authorization was the *Malibu Canyon Fire of 2007*, which burned 3,836 acres, 36 vehicles and 14 structures, including Castle Kashan and the Malibu Presbyterian Church. The fire also damaged 19 other structures and injured three firefighters.³³ After almost six years, the California Public Utilities Commission approved a settlement over \$50 million, and imposed re-inspection requirements for utility poles.³⁴ The California Public Utilities Commission is now

³¹ Comments of Crown Castle, WC Docket No. 17-84, at 53 (Jun. 15, 2017) (“Crown Castle Comments”).

³² Comments of CALTEL, WC Docket No. 17-84, at 18 (Jun. 15, 2017) (“CALTEL Comments”) (“CALTEL believes that the development of recommendations and best practices by the Broadband Deployment Advisory Council (BDAC) is probably the most effective and efficient way to surface and resolve concerns about unreasonable terms and conditions, including local moratoria”); Comments of the Wireless Infrastructure Association, WT Docket No. 17-79, WC Docket No. 17-84, at 6, 25 (Jun. 15, 2017) (“WIA Comments”) (acknowledging a role for the BDAC in addressing wireless deployment obstacles and resolving fee disputes); Comments of Extenet, WT Docket No. 17-79, WC Docket No. 17-84, at 15-16, 51 (Jun. 15, 2017) (“Extenet Comments”) (suggesting BDAC role developing model safe harbor license or pole attachment agreements).

³³ Melissa Caskey, *CPUC Approves \$51.5 Million Malibu Canyon Fire Settlement*, The Malibu Times (Sep. 19, 2013), available at http://www.malibutimes.com/news/article_3d62067a-2175-11e3-86b6-001a4bcf887a.html.

³⁴ California Public Utilities, Data Request, (Jan. 27, 2017). Check D.13-09-026, D.13-09-028

pursuing several proceedings specifically to tackle issues related to reconciling competitive wireline and wireless access with utility pole safety.³⁵

All of this is to say, the installation of structures in the public rights-of-way, and the attachment of devices to those structures raises safety issues and inspection issues that must be addressed properly. Those include questions as to liability: who will pay for inspections (which themselves can be quite costly), who will pay for engineering analyses, and so on.³⁶ Any strict federal rule by the Commission would go beyond preemption (all that is permitted under Section 253 or Section 332), to effective *prescription*. Any rule which required taxpayers to effectively subsidize the lease of public property in any way – including by requiring them to assume an ongoing risk of error or to pay for inspections without full compensation – would not only require justification far beyond what is within this record, but would also raise significant issues under the Fifth and Tenth amendments, and would exceed any obvious source of authority. In addition, the use of local government structures can foreclose use of the structure for important public purposes because the space within and upon such structures is limited. Rules compelling access have significant future effects on infrastructure. Some of the elements that are criticized by commenters (requiring that attachers maintain an inventory of street poles³⁷) are actually critical to public safety: the types of poles required to support wireless installations are often not poles that are readily available to a locality, and if a street light is downed, and there is no

³⁵ Order Instituting Investigation into the Creation of a Shared Database or Statewide Census of Utility Poles and Conduit in California, I.17-06-027 (June 29, 2017); Order Instituting Rulemaking into Access by Competitive Communications Providers to California Utility Poles and Conduit, Consistent with the Commission's Safety Regulations, R.17-06-028, consolidated with R.17-03-009 (Order Granting Petition 16-08-016, and . . . Instituting Rulemaking to consider Amendments to the Revised Right of Way Rules Adopted in D.16-01-046 (WIA Petition/Rulemaking), issued on April 3, 2017).

³⁶ Giuseppe Parise, Luigi Martirano, and Massimo Mitolo, *Electrical Safety of Street Light Systems*, IEEE, April 29, 2011 (available at <http://ieeexplore.ieee.org/document/5756684/>). Attachments to street lights likewise create risks given that street lights themselves under fault conditions, present hazards to the public.

³⁷ Conterra-Southern Light-Uniti Comments at 12.

available pole, that creates an ongoing risk. Asking localities to maintain an inventory of spare poles that they would not normally have in order to lease those facilities to wireless providers at cost is nothing more than a tax on the public – a tax the Commission has no authority to impose, but should not impose as a matter of policy.

The details of access are not simple, and federal rules – even if they could be developed – would need to carefully balance and address many intersecting issues. Localities, states and industry are working to develop contracts and other rules that permit access to different types of vertical structures. Much like the perspective expressed by the National Association of Regulatory Utility Commissioners,³⁸ we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process.

3. The Commission Should Exercise Extreme Caution In Taking Any Actions As A Result Of These Proceedings.

Smart Communities note that a variety of parties have raised wide-ranging claims and arguments for preemptive actions against local governments in response to the Commission’s Wireless NPRM and the NOIs. This was perhaps inevitable because of the Commission’s decision to combine Notices of Inquiry and Proposed Rulemakings in consolidated dockets and comment cycles, and the open ended nature of some of the Commission’s questions.³⁹ However, this intertwined approach substantially increases the need to clearly distinguish between

³⁸ Comments of the National Association of Regulatory Utility Commissioners, WC Docket No. 17-84 at 2-3 (Jun. 15, 2017) (“NARUC Comments”) (referring to a resolution adopted at the February 2017 meetings in Washington, D.C., that “‘applauds the FCC and Chairman Ajit Pai for initiating the Broadband Deployment Advisory Committee and looks forward to an active role in that effort’ but also specifically ‘opposes further efforts in petitions asking the FCC to preempt the traditional authority of the State and local authorities by replacing intrastate regulation of rights-of-way, Pole Attachments, and other telecommunications facilities or services of public utilities with comprehensive federal mandates imposed by the FCC.’”)

³⁹ See, e.g. Wireless NPRM/NOI at ¶ 97-99; *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84 at ¶104-108 (rel. Apr. 21, 2017) (“Wireline NPRM/NOI”).

comments offered in reply to the Commission's rulemaking from any proposals or requests made in general response to the Notices of Inquiry. Smart Communities urge the Commission to recognize this critical distinction as it conducts its review of the record.

The Commission's authority to act pursuant to some of the proposals is clearly constrained, not only by statute but by its own practice and precedent. As Smart Communities noted in initial comments, for instance, the Commission has limited authority to proceed pursuant to the Notice of Inquiry.⁴⁰ While the agency has broad authority to choose how to proceed, some of the comments seem to envision precisely the sort of action that the D.C. Circuit found requires notice and comment rulemaking.⁴¹ The Commission has also long recognized and respected restrictions on its ability to act pursuant to Section 332(c)(7), including recognizing that it cannot limit the scope of local authority or compel local action.⁴² Furthermore, the Commission should not proceed, as some parties have suggested, directly to the implementation of declaratory rulings about particular types of prohibitions.⁴³ Contrary to the assertions of T-Mobile, the proceedings thus far conducted do not provide sufficient information to support the issuance of a declaratory ruling.⁴⁴ This is in part due to commenters, including T-Mobile, having ignored the Commission's request for particularized information as required by Section 253(d) regarding local policies which allegedly prohibit deployment. As Smart Communities pointed out initially, the Commission's own practice regarding preemption under Section 253 requires "credible and probative evidence that the challenged requirement falls within the proscription of

⁴⁰ See, e.g. Smart Communities Wireline Comments at 5 (citing *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999)).

⁴¹ *American Mining Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1108-09 (D.C. Cir. 1993); *General Motors Corporation v. Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (en banc) (quoting *Noel v. Chapman*, 508 F.2d 1023, 1030 (2d Cir. 1975)).

⁴² Smart Communities Wireless Comments at 38 (citing Shot Clock Order at ¶39).

⁴³ WIA Comments at 29.

⁴⁴ T-Mobile Comments at 55-56.

section 253(a) without meeting the requirements of Section 253(b) and/or (c).”⁴⁵ No such evidence has been proffered in this record. Accordingly, the Commission cannot proceed directly, as the absence of particular evidence and commentary in effect deprives those local governments whose policies are challenged, with adequate notice that their rules may be subject to preemptive action.

Finally, Smart Communities reiterates that the sorts of relief sought by commenters in this proceeding are appropriate for notice-and-comment rulemaking, rather than declaratory action. As discussed above, the record before the Commission today reflects a near-total lack of particularized complaints. The requests made by carriers and infrastructure companies are more properly described as seeking the adoption of generalized nationwide standards impacting every state and local government. The Commission’s Notice appears to contemplate the adoption of similar nationwide rules, but fails to provide specifics on what its actual proposal might be. While the Commission certainly retains broad discretion in choosing how to proceed, the actions sought by commenters seem to be precisely of the sort that the D. C. Circuit has long held require notice and comment rulemaking.⁴⁶

IV. NO NEW RULES SHOULD BE ADOPTED IN THE WIRELESS NOTICE OF PROPOSED RULEMAKING

A. Commenters Fail To Justify Adoption Of “Deemed Granted” Remedies Under Section 332(c)(7)

Not surprisingly, industry commenters urge the Commission to adopt a deemed granted remedy for shot clocks under Section 332(c)(7). The policy and factual justification for this dramatic departure from the settled Commission position that deemed granted is not appropriate

⁴⁵ *In the Matter of TCI Cablevision of Oakland County, Inc.*, FCC 97-331, 12 FCC Rcd. 21,396, 21440 at ¶ 101 (Sept. 19, 1997).

⁴⁶ *American Mining Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1108-1109 (D.C. Cir. 1993); *General Motors Corporation v. Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (en banc) (quoting *Noel v. Chapman*, 508 F.2d 1023, 1030 (2d Cir. 1975)).

under Section 332(c)(7) is largely that it is expensive and inconvenient to sue local agencies for violations of the shot clock.⁴⁷ This policy justification ignores the importance of ensuring that local agencies have the ability to explain why the presumptively reasonable 150-day and 90-day time periods are inappropriate under the particular facts and circumstances of an individual case. This approach is required by the plain language of Section 332(c)(7).

Commenters seek to disparage this careful balancing test by suggesting that federal courts are not meeting their obligations. For example, Lighthouse attributes alleged shot clock violations to the “... fact that it is widely known that a rebuttable presumption is easy to overcome in federal court, essentially making the remedy so toothless that it can easily be ignored.”⁴⁸ This unsupported attack on the judiciary is misplaced. As explained in Smart Communities’ Opening Comments, the vast majority of agencies meet the shot clocks and take their obligations seriously.⁴⁹ If a dispute arises regarding whether a presumptively reasonable timeline is appropriate in a given instance, it is necessary for the courts to resolve that dispute. The fact that Lighthouse has apparently lost many of these cases does not render the shot clock toothless but calls into question the reasonableness of Lighthouse’s deployment strategy and application process.

Even if the Commission agrees with commenters that a deemed granted remedy under Section 332(c)(7) is advisable, the Commission is unable to adopt it. The Smart Communities

⁴⁷ Comments of CompTIA, WT Docket No. 17-79 (Jun. 15, 2017) (“CompTIA Wireless Comments”); Comments of Lighttower Fiber Networks, WT Docket No. 17-79 (Jun. 15, 2017) (“Lighttower Comments”); Comments of CCIA, WT Docket No. 17-79, WC Docket No. 17-84 (Jun. 15, 2017).

⁴⁸ Lighttower Comments at 7.

⁴⁹ Smart Communities Wireless Comments at 46.

outlined in our initial comments why the three alternatives proposed by the Commission for establishing a deemed granted remedy are unavailing.⁵⁰

Of the three alternatives, most commenters who urge the Commission to adopt a deemed granted remedy gravitate toward establishing the deemed granted remedy as an irrebuttable presumption. As an example, Verizon suggests that the Commission has the authority to adopt a deemed granted remedy as an irrebuttable presumption under Section 332(c)(7) under the Fifth Circuit's decision in *City of Arlington v. FCC*.⁵¹ Verizon reaches this conclusion on two bases: (1) the legislative history relied on by the Commission in the Shot Clock Order was not accepted by the Fifth Circuit and (2) adopting an irrebuttable presumption is consistent with the Commission action under Section 621 when generating a deadline for cable franchise negotiations.

Verizon's argument is unavailing because it fails to acknowledge the clear difference in statutory language authorizing Section 332(c)(7)'s "reasonable time" requirement and Section 6409's mandate that communities "shall approve" applications. Reference to the Fifth Circuit's analysis of legislative history does not modify this plain language. It also overemphasizes its point. The Fifth Circuit decided that legislative history was unclear regarding whether the Commission had any authority to adopt shot clocks. It did not decide that the legislative history was silent on whether Section 332(c)(7) authorizes the Commission to impose a deemed granted or similar remedy. In addition, Verizon's citation to Section 621 and cable franchises is unavailing. It ignores the statutory language in Section 332(c)(7) that requires localities to act within a reasonable period of time "after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request." By definition, an irrebuttable presumption does not take into account the "nature or scope" of the request.

⁵⁰ Smart Communities Wireless Comments at 37-43.

⁵¹ *City of Arlington v. FCC*, 668 F.3d 229 (5th Cir. 2012).

Similarly, this approach is inconsistent with the legislative history. This history expressly notes that Section 332(c)(7) is not intended to “give preferential treatment to the personal wireless service industry in the processing of requests, or to subject their requests to any but the generally applicable time frames for zoning decision.”⁵²

In addition, the Competitive Carriers Association (“CCA”) supports its call for the adoption of an irrebutable presumption by noting that the remedies provision in Section 332(c)(7) allows a local agency to petition the court for relief.⁵³ Citing the statutory language that “any person adversely affected by any final action or failure by a State or local government...may” seek redress, CCA notes that “person” could include a local agency if it felt that the irrebutable presumption “unduly constrained” the agency. While a local agency can certainly fall within the definition of “person,” CCA’s interpretation completely ignores the balance of the sentence that refers to a decision “by a State or local government.” Essentially, CCA’s argument is that one can interpret this sentence to allow a local agency as a “person” to sue itself (and presumably the applicant as a real party in interest) for being forced to approve a request based on an irrebutable presumption adopted by the Commission. This interpretation strains all credulity and must be rejected.

B. Industry Commenters Fail To Identify Any Factual Or Legal Basis For Modifying Existing Shot Clocks.

A number of industry commenters support the call for new and modified shot clocks. These include simply shortening existing shot clocks, redefining existing shot clocks to include time spent negotiating licenses or other agreements for use of public property, harmonizing collocation shot clocks for all applications that are not subject to the Spectrum Act (or a subset of

⁵² 1996 S. Conf. Rpt. 104-230 at 208

⁵³ Comments of Competitive Carriers Association, WC Docket No. 17-84, WT Docket No. 17-79, at 11-12 (Jun. 15, 2017) (“CCA Comments”).

those applications) with those that are subject to the Spectrum Act or establishing different time frames for small cell or DAS deployments, or for requests that include “batches” of requests submitted by a single provider. While industry commenters urge the Commission to adopt these proposals, they fail to articulate sufficient rationales, legal or otherwise, to do so.

1. A Shorter Time Does Not Mean A Reasonable Time

Many industry commenters request that the Commission adopt modified shot clocks generally to be 90 days for new applications and 60 days for all collocations, including those not subject to the Spectrum Act.⁵⁴ As an initial matter, any request to modify the existing shot clocks for new applications is beyond the scope of this NPRM. The Commission did not seek comments on any proposal to modify the existing 150-day shot clock for new applications.⁵⁵ That being said, the requests for establishing shorter shot clocks fail for another reason: commenters failed to articulate any factual or legal basis for these modifications.

Most commenters request shorter shot clocks simply to speed up deployment.⁵⁶ This is not a sufficient basis to modify the shot clocks.⁵⁷ Section 332(c)(7) requires localities to act on an application “... within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.” It is notable that textually, reasonableness turns on the “nature and scope” of the request; the business plans of the applicant are irrelevant. Hence, even if there were a business need for speed, the review period must be based upon the time required to review the request within the context of a

⁵⁴ See, e.g. Comments of CTIA, WT Docket No. 17-79, at 7 (Jun. 15, 2017) (“CTIA Comments”); Lighttower Comments at 12; ExteNet Comments at 8-11; T-Mobile Comments at 18.

⁵⁵ Wireless NPRM/NOI at ¶18.

⁵⁶ See, e.g., CTIA Comments at 2.

⁵⁷ Similarly, CTIA appears to suggest that delay in processing a wireless application can be an “effective prohibition” under Section 253. (CTIA Comments, p. 12.) This is a misapplication of the test under Section 253 as it requires an individualized examination of each agency’s practice before preempting the local agency.

discretionary land use or zoning process. The Section 332 shot clocks currently create presumptively reasonable time periods for agencies to review applications. Simply speeding up deployment for the sake of speeding up deployment without any consideration of countervailing factors, especially a community's ability to actually review an application within the requested time period, does not adhere to the plain statutory language.

Some commenters do attempt to articulate factual justifications for shorter clocks. For example, T-Mobile notes that communities now have more experience with wireless applications than when the initial shot clocks were adopted, and they should be able to more quickly review and approve them.⁵⁸ This suggestion assumes that processing a land use application is something akin to an inverse Moore's Law, where increased experience and knowledge will lead to exponential reductions in time that ultimately results in nearly instantaneous review. This is simply wrong. Cities and counties have reviewed wireless and land use applications for many years, and there are public noticing, hearing and other requirements that necessarily take time.⁵⁹ Increased "experience" cannot avoid these legal requirements. The argument also ignores the increasing complexity and volume of requests seen by local governments.⁶⁰

In another example, GCI suggests that shortened shot clocks are necessary due to the short construction season in Alaska (generally June to September according to GCI).⁶¹ While

⁵⁸ T-Mobile Comments at 20.

⁵⁹ See e.g., California Government Code, §§ 65090, 65091 (requiring notice before specified land use hearings).

⁶⁰ Pole owners express similar concerns about shortening shot clocks in the wireline docket. For example, AT&T expresses opposition to proposals to shorten the pole attachment application review and survey period, given the need to determine whether the pole can accommodate the attachment, and the increasing complexity and volume of pole attachment requests. See AT&T Comments at 8. The industry argument for shortened shot clocks based on "experience" might have a bit more force if one assumed that over the years, proposals had become identical or nearly identical, and submissions and analyses were routinized. In fact, the nature and volume of requests are changing, and while localities do make efforts to use experience to shorten review periods, their ability to do so depends on their ability to establish mandatory standards and design requirements. The current regulatory scheme (as explained in our initial comments) actually discourages streamlined approaches.

⁶¹ Comments of General Communications Inc., WT Docket No. 17-79, at 5 (Jun. 15, 2017) ("GCI Comments").

Smart Communities supports the deployment of wireless facilities throughout the country, including in Alaska, it is wholly illogical to determine what constitutes a reasonable time to review a wireless facilities based on the climatic difficulties of the country's least populous state. Moreover, it seems that GCI is mistiming its application process. Assuming Alaska has a June to September construction schedule, a complete application for a new facility filed in October must be approved or denied by February or March. If anything, GCI's comments support continuing or expanding the current shot clocks.

T-Mobile suggests that shorter shot clocks are reasonable because some jurisdictions have processed applications more quickly than the current deadlines. It notes that the Commission has recognized that some jurisdictions process collocations in 14 days or less and new facilities in 75 days or less.⁶² Communities that process applications as efficiently and quickly as possible should be applauded, but without context to explain how this was achieved in some instances and not in others, the number itself is of little value. As noted in its Opening Comments, Smart Communities strongly supports efforts by the Commission to encourage public-private cooperation and the development of model codes and other best practices. That being said, the legal standard (and the question in this NPRM) is not how quickly can local agencies process applications but what is a reasonable time for them to do so, taking into account the nature and scope of such request.⁶³

⁶² T-Mobile Comments at 19.

⁶³ The initial Section 332 shot clocks were based primarily on a review of the time for action on wireless applications under state laws; the shot clock was merely presumptive in part because the state laws relied upon allowed for longer periods of consideration where justified; that is, state laws and the Commission rules recognized that it was not "reasonable" to demand action by a date certain in all instances. The fact that some applications can be resolved sooner is simply an indication that some applications *are simpler to process*, and that localities are not using the shot clock to delay actions where approval is simple. But that does not mean that as a general matter, a shorter shot clock is appropriate. Indeed, the ability to process applications will in part depend not only on the simplicity of an application but the resources available to a community. Hence, if the Commission in any way limits the resources that a community may use (e.g., if it prevents localities from hiring and charging for the costs of

In addition, industry commenters cited several state statutes with “expedited time frames to lower siting barriers and speed deployment” as justification for shortening review periods for new wireless sites and collocations.⁶⁴ However, in at least three of the states mentioned, the statutes recognize the potential need for longer review periods by permitting localities to extend the required time frames. For example, the industry comments noted that Minnesota law requires any zoning application, which includes both collocation and non-collocation applications, to be processed within 60 days. The comments failed to mention, however, that Minnesota also permits parties to extend the timeline.⁶⁵ Similarly, the statutory 60-day completion period for small cell application approvals in Virginia may be extended for an additional 30 days,⁶⁶ and the statutory 45-day approval period in Wisconsin for collocations may be extended for an additional 45 days.⁶⁷

Lastly, even if the Commission wished to adopt shorter shot clocks, it could not do so based on the record in this proceeding. As noted above, simply seeking to speed up deployment is not sufficient, and any effort to adopt modified shot clocks on this basis would be arbitrary and capricious. “An agency acts arbitrarily or capriciously if it has . . . offered an explanation either contrary to the evidence before the agency or so implausible as not to reflect either a difference in view or agency expertise.” *Defs. of Wildlife & Ctr. for Biological Diversity v. Jewell*, 815 F.3d 1, 9 (D.C. Cir. 2016). The D.C. Circuit recently determined that the Commission failed to meet this standard when regulating rates for prison calls. *Global Tel*Link v. FCC*, No. 15-1461 (June 13,

additional employees or technical consultants to review applications), that limitation must also be taken into account in setting what is a “reasonable” time, and would render the existing shot clocks unreasonable.

⁶⁴ T-Mobile Comments at 19-20; CTIA Comments at 11-12.

⁶⁵ Minn. Stat. § 15.99(2)(a) and (3)(f).

⁶⁶ Va. Code Ann. § 15.2-2316.4(B)(1).

⁶⁷ Wis. Stat. § 66.0404(3)(c). *See also*, Va. Code Ann. § 15.2-2232(F) [90-day completion period for reviewing non-collocation applications may be extended by 60 days]; Wis. Stat. § 66.0404(2)(d) [90-day completion period for non-collocation applications may be extended by 90 additional days].

2017). In part, this decision invalidated Commission rate caps that were based on the “weighted average per minute cost.” This order sought to implement a statute that “each and every” call be fairly compensated. The Commission’s caps were set at levels where many calls were unprofitable but the majority of the Commission (Pai dissenting) justified its position on the basis that it would lead to efficiency for larger carriers. The court ultimately determined that the weighted average per minute cost standard was arbitrary because it did not adhere to the statutory language. The record reflected that cost was largely due to regional variation, and the caps would not result in all calls being fairly compensated.

Here, establishing shot clocks solely based on speeding up deployment would be arbitrary and capricious. While the Commission may have some latitude to establish a general standard for reasonable review, that time cannot be an absolute deadline, and must have a factual basis tied to the statutory standard, which does not empower the Commission to adopt standards that ensure the quickest or cheapest deployment of these facilities. Moreover, case law interpreting the Commission’s existing shot clocks upheld them based on the fact that 150-day and 90-day deadlines hewed to the statutory language of a “reasonable time.”⁶⁸ We encourage the Commission to adhere to this statutory language and to reject requests that it establish shot clocks designed solely to speed up deployment.

2. Various Other Requested Modifications Are Unwarranted

Commenters requested various other changes to the existing shot clocks. These include expanding the scope of agency actions subject to the shot clock, modifying how the clocks can be tolled by local agencies, adopting modified shot clocks for small cells or batches of similar

⁶⁸ *City of Arlington v. FCC*, 668 F.3d 229, 261 (5th Cir. 2012).

applications, and subjecting all utility poles (whether or not they currently house antennas) to Section 6409. These requests are unwarranted based on the record in this proceeding.

First, some commenters have requested that the Commission expand the scope of the shot clocks to include pre-application meetings and other preliminary efforts, any time spent negotiating a franchise or otherwise obtaining access to public property, especially the public right-of-way, and the issuance of any approvals of permits that typically come post-application like building permits.⁶⁹ As an initial matter, adopting a rule including additional authorizations or permits that may be needed within the existing shot clock is beyond the scope of this NPRM. The NPRM does request that commenters address when the shot clock should begin, but it does so in the context of regulatory “pre-application” meetings.⁷⁰ In any event, such action is also not supported by the record. If the Commission were to incorporate into the land use process that is the subject of Section 332(c)(7) all other application processes that are required before shovel turns dirt, it would need to take into account the additional work associated with those authorizations and permits and what is clear is that no one has shown that all the work can reasonably be completed within the current shot clocks.⁷¹

⁶⁹ AT&T Comments at 23; Crown Castle Comments at 31; Verizon Comments at 43; CTIA Comments at 15; Sprint Comments at 44-45; T-Mobile Comments at 19-12; Comments of Conterra, Southern Light, and Uniti, WT Docket No. 17-79, at 19 (Jun. 15, 2017) (“Conterra-Southern Light-Uniti Comments”); Comments of Mobilitie, WT Docket No. 17-79, at 6 (Jun. 15, 2017) (“Mobilitie Comments”) (seeking modified longer shot clocks for negotiating franchises).

⁷⁰ Wireless NPRM/NOI at ¶20.

⁷¹ For example, an application for DAS will often be filed before final make-ready or other engineering work is completed, and thus before the electric utility determines precisely how power will be brought to the system (preliminary work, is often performed, including structural analyses of the facilities to be used). The engineering work requires time and money, and some entities rightly argue that before determining what must be done to use a pole (and obtaining building, electrical and other required permits), it makes sense to determine whether and what installation will be approved for installation as a matter of land use. If, as some propose, all those permits must be issued along with the land use permits, then one of the following has to occur: (a) all engineering work, FAA and federal approvals, MISS Utility work, make ready planning and the like needs to be completed before the application is ever submitted; or (b) the time period must be substantially extended to reflect the time required for all these tasks to be completed *seriatim*.

Second, some commenters suggest modifying how shot clocks may be tolled. CGI proposes that shot clocks would no longer be tolled while applications remain incomplete. Specifically, CGI proposes that incomplete applications would be subject to a three-day grace period where applicants could provide supplemental information without tolling the shot clock.⁷² As explained in Smart Communities' Wireless Comments, communities routinely receive incomplete applications.⁷³ These applications require disproportionate attention and resources from local agencies that contribute to delays for other applicants. Creating a grace period for incomplete applications would simply encourage game-playing and lead to longer delays. Under CGI's proposal, applicants would have an incentive to submit applications in batches to receive multiple grace periods to slow "bleed" the shot clock. This perverse incentive would harm diligent applicants and divert local resources to monitoring these applications.

Third, commenters support creating separate shot clocks for small cells and processing batch applications. Commenters support shorter shot clocks for small cells based on the assumption that these facilities are less complex than macrocells or that traditional zoning processes are not applicable within the right-of-way. They assume batch applications will be easier to process due to the similarity.

These commenters are mistaken. Small cells, especially those within the right-of-way are not necessarily easier to process or review. As we pointed out in initial comments no one can seriously argue that the term "small cell" means "small physically" as opposed to "serving a small area."⁷⁴ Small cells may involve substantial amounts of equipment, including a support structure (ranging in size from a Mobilitie tower to a more conventional utility pole); an antenna;

⁷² GCI Comments at 5-6.

⁷³ Smart Communities Wireless Comments at 31-32.

⁷⁴ Smart Communities Wireless Comments at 44.

radio units; power supplies/electric meters/disconnects/cabling; and potentially back-up power supplies.⁷⁵ These sites can approach or exceed the size of many monopoles or macrocells.⁷⁶ In addition, small cells locating within the right-of-way can present unique challenges, and in many ways, these applications are as, if not more, challenging than traditional macrocells. These facilities can raise significant issues for roadway engineering, safety, and coordination with other utilities.⁷⁷

In addition, processing applications in batches does not warrant a shorter shot clock. Commenters suggesting that batch applications are necessarily easier to review gloss over the practical realities of most applications. While it may be possible to reduce review time for some aspects of batch applications (i.e., if the same design is used in the same zoning area, that design may be approved for the entire area), the majority of sites must be evaluated independently. This is especially true if applications within a batch are located on different structures (i.e., new poles vs. existing poles), differ in size or visibility and require coordination with other utilities (i.e., existing electric poles and underground utilities), and may require planning to avoid harming roadside trees and other vegetation.⁷⁸

Lastly, some commenters, most notably Crown Castle, suggest that the Commission should reverse its decision and expand the scope of “eligible facilities” under Section 6409 to include all utility poles, whether or not they currently contain transmission equipment. Crown Castle suggests, “[w]hether the equipment is being collocated on a pole currently used for telecommunications services or one used for some other purpose is a distinction without a

⁷⁵ Smart Communities Wireless Comments at 44-45; CTC Declaration at 6.

⁷⁶ CTC Declaration at 6-8.

⁷⁷ Puuri Declaration at 2.

⁷⁸ As we pointed out in our comments, the new large poles proposed by Mobilitie required sinking a pole a substantial distance into the ground, but even placement of ordinary utility poles must be planned so that they do not interfere with sewer lines, water lines and storm sewer drainage. Smart Communities Wireless Comments at 44-47.

difference.”⁷⁹ The plain language of the statute contradicts Crown Castle’s assertion. Section 6409 (47 U.S.C. § 1455) refers to actions affecting an “... existing wireless tower or base station that involves—(A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment.” The term “tower” has consistently been used to refer to a facility designed primarily to support a wireless facility; it would be stunning if Congress meant for the term to include every vertical structure. Likewise, the technical term “base station” could not sensibly be used to refer to structures that do not support wireless facilities. Setting aside the use of the term “existing,” statutory references to “collocation,” “removal” or “replacement” of equipment implicitly require that the tower or base station already contain transmission equipment. Indeed, the Commission has already considered this issue and rejected Crown Castle’s strained interpretation of the statute.⁸⁰ Crown Castle fails to articulate any new or compelling reasons for disturbing this settled issue.⁸¹

C. The Commission Does Not Need To Address Moratoria.

A number of commenters suggested that it is necessary for the Commission to reiterate that the shot clocks run regardless of any local moratoria. For example, Crown Castle noted that seven communities recently imposed moratoria on wireless applications. Based on this, it urges the Commission to “reiterate that even temporary moratoria are prohibited barriers to entry.”⁸² Commenters also focused on concerns related to claimed “de facto” moratoria where

⁷⁹ Crown Castle Comments at 48.

⁸⁰ In the matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238, ¶ 135 (rel. Oct. 21, 2014) (“2014 Infrastructure Order”).

⁸¹ *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 41–43 (1983).

⁸² Crown Castle Comments at iv.

communities have failed “... to act on permit applications, and [other] interminable delays that can extend more than a year.”⁸³

For actual, legal moratoria, the existing Commission’s rules are clear: that moratoria do not stop the shot clock. Any communities adopting moratoria are doing so to ensure that carriers do not obtain vested rights under state law. Any Commission admonishment or reiteration that moratoria do not toll the shot clock is unnecessary. For the asserted “de facto” moratoria, this is simply an attempt by industry commenters to erode the important regulatory and proprietary distinction. As explained in Section V.E.4(B), the Commission cannot require localities to lease public property to carriers. Those communities that wish to lease public property, including franchising use of the public right-of-way, are entitled to negotiate an arms’ length transaction with carriers. This process is not a moratoria but the same process carriers engage in with property owners when seeking to lease private property.

V. THE COMMISSION SHOULD NOT PURSUE MORE DECLARATORY RULINGS OR RULEMAKINGS BASED ON QUESTIONABLE LEGAL AUTHORITY

A. The Commission Must Consider Communications Act Provisions In Context With The Rest Of The Statute

While the Commission undoubtedly has broad authority to adopt rules to fill “gaps” in the Communications Act,⁸⁴ that authority is not unlimited, and the scope of that authority must be interpreted in context. For example, Section 201(b)’s broad grant of rulemaking authority cannot be utilized to address infrastructure attachment without consideration of the general grant of authority to the Commission, which does not give the agency authority over facilities which

⁸³ CTIA Comments at 7.

⁸⁴ *City of Arlington v. FCC*, 668 F.3d 229 (5th Cir. 2012).

may be useful in the provision of telecommunications services⁸⁵ and the limits of Section 224, which grants limited authority over privately owned utility infrastructure, and carves out particular rights for classes of attachers to infrastructure. Similarly, the Commission cannot, as commenters in this proceeding suggest,⁸⁶ largely disregard Congress' clear intent to preserve a robust role for state and local governments in regulating the deployment of telecommunications services under either section 253 (leaving, for e.g. management of the public rights-of-way to localities) or section 332 (preserving authority over wireless deployments except for those regulations which are applied in a manner specifically prohibited), or more broadly.⁸⁷ Which is to say, general grants of authority to make rules cannot grant substantive authority where none exists, and cannot trump the clear protections of state and local authority in, e.g. Section 253, Section 332.⁸⁸ The Communications Act has been structured deliberately to preserve state and local authority, rather than to give the Commission complete authority over all aspects of service regulation, and more importantly for this proceeding, all aspects of deployment of communications equipment, or all facilities or property that may be used in connection with that deployment. This not only reflects a conscious choice as to the distinctions between interstate and intrastate authority, but also recognizes that the deployment of these facilities implicates proprietary, sovereign and police power interests of states and their subdivisions (as well as interests of private property owners that cannot be ignored consistent with the Constitution.⁸⁹

⁸⁵ Smart Communities Wireless Comments at 11-14.

⁸⁶ T-Mobile Comments at 25-26; AT&T Comments at 7-12..

⁸⁷ See Telecommunications Act of 1996, Sec. 601(c)(1); See also Dissenting Statement of Commissioner Ajit Pai, *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375 (2015); *Global TelLink v. FCC*, D.C. Cir. No. 15-1461 (Jun. 13, 2017).

⁸⁸ See Telecommunications Act of 1996, Sec. 601(c)(1).

⁸⁹ See further Section V.D.

B. Section 253 Does Not Permit The Commission To Engage In Rulemaking-Based Preemption

Contrary to the assertions of numerous commenters, the Commission does not have the authority to undertake rulemaking action pursuant to Section 253(d). Verizon argues, for instance, that the Commission may proceed either through adjudication or rulemaking, citing *City of Arlington*'s statement that "Agencies typically enjoy 'very broad discretion [in deciding] whether to proceed by way of adjudication or rulemaking.'"⁹⁰ While true as a general principle, Section 253(d) does not present a typical scenario. Unlike the majority of statutes governing the Federal Communications Commission, Congress explicitly outlined particular procedures for the application of authority under Section 253(d) which the Commission must follow. Notably, the statute clearly and unambiguously directs the agency to provide "notice and an opportunity for comment" of a particular "statute, regulation, or legal requirement that violates subsection (a) or (b)" before the agency may act to preempt those laws. This process is the very essence of an adjudication, rather than a general rulemaking, and the deliberate inclusion of 253(d)'s procedural language establishes that, unlike typical situations, the agency may *not* exercise discretion in deciding how to proceed under this Section.⁹¹

Verizon also erroneously seeks to bypass the clear language of Section 253(d) by arguing that, in any event, Section 201(b) of the Act empowers the Commission to enact rules preempting state and local laws. While generally true, suggesting that fundamental principles of statutory interpretation indicate that simply reading 201(b) as an alternative path and dismissing 253(d) out of hand is to suggest that Congress needlessly added that language to the statute. As a

⁹⁰ Verizon Comments at 31.

⁹¹ *City of Arlington v. FCC*, 668 F.3d 229, 240 (5th Cir. 2012), *aff'd*, 133 S. Ct. 1863 (2013) ("Agencies typically enjoy 'very broad discretion [in deciding] whether to proceed by way of adjudication or rulemaking.'") (quoting *Time Warner Entm't Co. v. FCC*, 240 F.3d 1126, 1141 (D.C. Cir. 2001)) makes it clear that the general rule does not apply in all circumstances.

general matter, statutes are to be interpreted in their entirety, and where an interpretation of one section would render another section meaningless, that interpretation should be rejected. Verizon proposes to do the opposite, relying on *Brand X* to assert that, where the statute is ambiguous, Section 201(b) gives the agency authority to fill in the gaps with binding rules. The statute is not ambiguous here. If the Commission wishes to preempt state or local laws on the basis that they pose barriers to deployment of telecommunication services, the procedures of Section 253(d) must be followed.

Separately, AT&T argues that the Commission need not look beyond Section 253 to find a means to dispense with Section 253(d)'s unambiguous directives. AT&T maintains that Section 253(d) is, in essence, optional, and that it does not expressly or by implication suggest any limitation on the agency's ability to proceed with exercising 253(a) authority using 201(b) general rulemaking authority. AT&T's assertion fails for the same reason Verizon comes up short – their proposed interpretation of the governing statute effectively makes Section 253(d). Protections intentionally built into Section 253 by Congress (including the omission of Section 253(c), and the requirement that any preemption be as narrow as possible) would disappear if the section could be bypassed altogether. To dismiss the guiding statute and the express words of Congress in this manner falls well outside the deference any agency might hope to enjoy.⁹² That is particularly so because Section 253 and Section 332(c)(7) were adopted as part of the Telecommunications Act of 1996, and that Act itself limits the authority of the Commission to use its general powers to supersede state laws. Section 601(c) of the Act provides:

(c) FEDERAL, STATE, AND LOCAL LAW-

(1) NO IMPLIED EFFECT- This Act and the amendments made by this Act shall not be construed to modify, impair, or supersede Federal,

⁹² AT&T Wireless Comments at 69-71.

State, or local law *unless expressly so provided* in such Act or amendments.

(2) STATE TAX SAVINGS PROVISION- Notwithstanding paragraph (1), nothing in this Act or the amendments made by this Act shall be construed to modify, impair, or supersede, or authorize the modification, impairment, or supersession of, any State or local law pertaining to taxation, except as provided in sections 622 and 653(c) of the Communications Act of 1934 and section 602 of this Act.

In this case, the general provisions of Section 253(a) are subject to a specific procedural provision titled “preemption,” and to imply that Congress meant to grant the Commission unlimited authority to draw upon other provisions to limit local authority is inconsistent with this express directive.

CTIA appears to suggest that delay in processing a wireless application can rise to be an “effective prohibition” under Section 253.⁹³ As explained below, Section 253 simply does not apply to wireless applications, and CTIA’s comments merely underscore why that is so: Section 332 sets out the only permissible time limitation on local action on an application to site a wireless facility, and making the time subject to an additional Section 253 requirement cannot be squared with the plain language of Section 332. Moreover, even assuming that Section 253 does apply, delays that would be related to managing the rights of way in a non-discriminatory manner, or in ensuring that facilities installed subject to appropriate safety standards would fall within the safe harbors of Section 253(b) and (c), and CTIA’s own formulation (delay can amount to an effective prohibition) suggests that the reverse is also true. Because the existence of the prohibition may depend on facts; and because even if prohibitory, the action may be permissible, a blanket deemed granted remedy is not permissible consistent with Section 253(d).

⁹³ CTIA Wireless Comments at 12.

A blanket deemed granted remedy reaching lands owned by a state or its subdivisions is not available for another reason. Section 253 is only a preemptive statute: it does not give the FCC authority to grant property rights to any entity. The ability of a state to control its own property is the essence of sovereignty; the federal government is not given broad authority to control state lands, and only limited authority over lands that it owns, US Const. Art IV Clause 2. This is not a case where Section 253 provides an opportunity for the State to participate in a federal regulatory program in return for following federal standards; commenters, through the deemed granted remedy, are asking that the FCC grant them property interests in, or access to, sovereign lands of the state. Even if permissible, given the impact on state sovereignty of allowing a federal administrative agency to grant rights in stated land, *Pollard's Lessee v. Hagan*, 44 U.S. 3 How. 212 212 (1845) the right would need to be quite specific, and it is not.

C. Numerous Commenters Agree That The Commission Cannot Exercise Title II Authority To Preempt Local Governments If It Reclassifies Broadband Internet Access Service As A Title I Information Service.

As Smart Communities explained in detail, “Sections 253 and 201 . . . would not apply to broadband Internet access service if the Commission were to reclassify the service.”⁹⁴ A variety of industry commenters who oppose classification of broadband Internet access service as a Title II telecommunications service nevertheless seek to benefit from Title II’s provisions where it suits their interests.⁹⁵ T-Mobile urges the Commission to act immediately to “close the loophole that might open” if the Commission moves forward with its Restoring Internet Freedom proposal.⁹⁶ T-Mobile is wrong to assert, however, that the Commission can simply “clarify that Sections 253 and 332 apply to ‘mixed-use’ facilities” and subsequently disregard the clear

⁹⁴ Smart Communities Wireline Comments at 6.

⁹⁵ AT&T Wireless Comments at 69-71; T-Mobile Comments at 52.

⁹⁶ T-Mobile Comments at 52.

language of the statute.⁹⁷ Section 253 explicitly refers to “telecommunications services,” and the D.C. Circuit has already rejected arguments analogous to T-Mobile’s, as discussed in Smart Communities’ original comments.⁹⁸ CCA offers similar arguments in its comments, in an apparent effort to enjoy the benefits of common carrier status while vigorously objecting to any accompanying obligations or limitations.⁹⁹ Statutorily, however, local and state authority are prescribed under Section 253 only to the extent that they prohibit the provision of telecommunications services; they are not proscribed to the extent that they prohibit the provision of non-telecommunications services. Likewise, under Section 332, a regulation of the placement of wireless facilities is only preempted if it prohibits or effectively prohibits the provision of common carrier services (as all personal wireless services are by definition common carrier services.).¹⁰⁰ The issue is not whether a facility has a *mixed use*; it is whether the regulation has the specifically required effect. Hence, for example, if a wireless provider can offer its common carrier services via existing facilities, it cannot demand the right to place additional facilities in a manner inconsistent with existing state and local codes.¹⁰¹

Numerous other commenters share Smart Communities’ view on this matter, as well. We agree with Public Knowledge that “this proceeding relies on legal authority only available to the extent that broadband internet access remains classified as a Title II telecommunications

⁹⁷ *Id.*

⁹⁸ Smart Communities Wireline Comments at 6.

⁹⁹ CCA Comments at 23-24

¹⁰⁰ See 47 U.S.C. § 153(24) (definition of information service; 47 U.S.C. § 153(53) (definition of telecommunications service).

¹⁰¹ The issue, we stress, is one of the limits of the Commission’s preemptive authority, in light of the specific language of Section 332(c)(7) and Section 601. Localities are seeking ways to ensure that broadband is deployed throughout their communities; but the question before the Commission is whether deployment can be compelled where not required for the provision of common carrier services.

service.”¹⁰² Public Knowledge correctly notes that the statutory language of Section 253 is clear: the Commission may only exercise that authority in relation to telecommunications service, not information services.¹⁰³ The League of Arizona Cities and Towns, League of California Cities, and League of Oregon Cities also recognize this issue, pointing out that the Commission “makes no bones about its desire to reclassify broadband as an information service.”¹⁰⁴

Finally, the Commission must recognize and respect the striking logical inconsistency inherent in seeking to exercise Title II authority over, and in furtherance of, broadband internet access service, while simultaneously attempting to remove that service from its Title II jurisdiction. As the AZ-CA-OR Leagues of Cities note, “these simultaneously-held inconsistent positions would undermine any ‘rational connection between the facts found and the choice made.’”¹⁰⁵

D. There Is No Basis For The Industry’s Broad Interpretation Of What Is Regulatory As Opposed To Proprietary Action

1. *Industry Commenters Correctly Acknowledge That Publicly Owned Property Outside The Public Right-Of-Way Is Proprietary.*

While industry commenters argue that public rights-of-way and municipally owned property within public rights-of-way are non-proprietary (an argument with which we do not agree as discussed below), they at least acknowledge that Sections 253 and 332 in general do not apply to property owned by public agencies, such as buildings and parks.¹⁰⁶ For example, T-

¹⁰² Public Knowledge Comments at 13.

¹⁰³ Public Knowledge Comments at 14.

¹⁰⁴ Conterra-Southern Light-Uniti Comments at 1

¹⁰⁵ *Id.* at 2

¹⁰⁶ *See, e.g.*, T-Mobile Comments at 49; Crown Castle Comments at 49. This view is perhaps not fully shared by AT&T, which in its Wireline Comments, cited an 1880 Supreme Court decision, *Meriwether v. Garrett*, 102 U.S. 472, 513 (1880), which stated that a municipal corporation “[i]n its streets, wharves, cemeteries, hospitals, court-houses, and other public buildings ... has no proprietary rights distinct from the trust from the public.” AT&T Wireline Comments at 72, FN203.

Mobile notes cases in which the courts found a public agency's management of the placement of antenna on a school roof and in a city-owned park to be proprietary functions.¹⁰⁷ This view is consistent with statutory and constitutional principles and cannot be impeded.

2. *Commenters Incorrectly Urge The Commission To Determine All Public Right-Of-Way Decisions Are Regulatory*

Industry commenters request the Commission reverse long-standing policy and determine that the public right-of-way and access public facilities (i.e., lightpoles) within the public right-of-way are regulatory, not proprietary, decisions. Commenters articulate three reasons for this dramatic change: (1) the public right-of-way is an ideal place for small cell and similar facilities, (2) the regulatory/proprietary can be disregarded because the term "proprietary" does not appear in Sections 253 or 332 and (3) the public right-of-way is held in public trust for the provision of public service. Each of these reasons is insufficient, and the Commission must respect the property rights of local agencies by rejecting the requested change.

(i) *Convenience For Carriers Is Not A Sufficient Reason To Change Policy*

Commenters suggest that the Commission should clarify that access to the public right-of-way and facilities within the public right-of-way is a regulatory decision because the public right-of-way is a convenient and easy place to locate facilities.¹⁰⁸ For example, CCIA notes that, "Facilities in ROWs, like light poles, traffic light signals and poles, utility poles, and equipment cabinets usually have the necessary infrastructure for wireless service ... Put simply, siting facilities in ROWs is effective and could be a more expeditious way of building out a network"¹⁰⁹ Smart Communities does not necessarily disagree that placing facilities in the

¹⁰⁷ T-Mobile Comments at 49, citing *Sprint Spectrum L.P. v. Mills*, 283 F.3d 404, 419-21 (2nd Cir. 2002) and *Omnipoint Commc'ns, Inc. v. City of Huntington Beach*, 738 F.3d 192, 200-201 (9th Cir. 2013).

¹⁰⁸ See, e.g. T-Mobile Comments at 49-50; AT&T Wireless Comments at 11-12.

¹⁰⁹ CCIA Comments at 12.

public right-of-way is convenient for carriers. However, this is insufficient reason for the Commission to reverse long-standing policies respecting the rights of local agencies to control their property.

Localities must ensure that the placement of wireless facilities by wireless providers does not interfere with the primary use of the rights of way – which is for transit by vehicles and pedestrians, including persons with disabilities whose use of the rights of way would be blocked by the placement of the sorts of facilities actually proposed by wireless providers. Similarly, adjacent property owners have interests that may require protection. In addition, government agencies are themselves seeking to deploy equipment that will be used to speed traffic flows, and enhance public safety. They have an interest in ensuring that those systems may be deployed cost-effectively, and without interference. Local governments are not the only parties to recognize the significance of these policy considerations. The Communications Workers of America (CWA) has urged the Commission to “act with extreme caution in considering preemption of state and local government authority to manage and to receive fair and reasonable compensation for use of public rights-of-way, authority granted in Section 253(c) of the Act.”¹¹⁰ As CWA explained, “State sovereignty is a core principle in our federal system.”¹¹¹

Moreover, the very point of the argument concedes that in most, if not all instances, there are alternatives to the placement of wireless facilities in the public rights-of-way. Under the strict statutory and constitutional limitations on the Commission’s authority, discussed below, convenience is not enough to justify intrusion on local authority.

¹¹⁰ Comments of the Communications Workers of America, WC Docket No. 17-84, at 24-27 (Jun. 15, 2017) (“CWA Comments”).

¹¹¹ *Id.* at 24.

(ii) The Fact That “Proprietary” Is Not In Statutory Language Is Irrelevant

Some industry commenters argue that the regulatory/proprietary distinction is illusory and may be disregarded because Section 253 and 332 do not actually contain the term “proprietary.” As an example, AT&T notes, “this distinction finds no support in the text of Sections 253 or 332, which do not use the term ‘proprietary.’”¹¹² That term may not be used *per se*, but the sections – and particularly section 332 contain other words which do foreclose the interpretation urged.

We begin with the proposition that the Commission has ruled on the issue raised by commenters, and a decision by the Commission to reverse its established policy to respect public property rights would be subject to more specialized judicial review.¹¹³ Specifically, the Commission must adequately explain the reason for its change and must take into account legitimate reliance on prior interpretation.¹¹⁴ Here, it has always been convenient to locate facilities in the public right-of-way. Commenters have not articulated several reasons to deviate from established Commission policy.

The courts have uniformly recognized that there is a meaningful difference between regulatory/proprietary actions under the Telecommunications Act of 1996 that is of Constitutional dimension.¹¹⁵ While the Commission has the authority to preempt regulatory actions, preemption by definition does not reach non-regulatory actions.¹¹⁶ That distinction is

¹¹² AT&T Wireless Comments at 11.

¹¹³ *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 41–43 (1983).

¹¹⁴ *Smiley v. Citibank (s.D.), N.A.*, 517 U.S. 735, 49 (1996).

¹¹⁵ *Sprint Spectrum v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002); *Qwest Corp. v. City of Portland*, 385 F.3d 1236, 1240 (9th Cir. 2004) (recognizing that Section 253(a) preempts only “regulatory schemes”).

¹¹⁶ *Id. Building & Construction Trades Council v. Associated Builders & Contractors of Massachusetts/Rhode Island, Inc.*, 507 U.S. 218, 224 (1993).

compelled by the statutes that are the primary focus of this proceeding. Section 332(c)(7) “...indicates that Congress meant preemption to be narrow and preservation of local governmental rights to be broad, for subparagraph (A) states that ‘nothing’ in the [the Telecommunications Act of 1996] affects the “authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities” ‘except as provided in this paragraph.’”¹¹⁷ 47 U.S.C. §332(c)(7)(A) (emphases added). Section 332(c)(7) then draws a line between regulatory and other actions, requiring that the “regulation” of the “placement, construction, and modification” of wireless facilities meet certain standards.¹¹⁸ The fact that the statute does not use the term “proprietary” is irrelevant – the clause that empowers any intrusion explicitly refers to the regulatory functions of governments.

The argument is no stronger with respect to Section 253. Section 253 has no application to wireless facilities at all, so the issue is whether Section 253 prohibits proprietary control generally. As an additional argument in support of the incorrect premise that proprietary considerations are irrelevant, some industry commenters argue that the “legal requirement” language in Section 253(a) must be construed to conclude that this section applies to all exercises of governmental authority.¹¹⁹ That is not the case, and reliance on the *Minnesota* case is misplaced. In *Minnesota*, the state sought a declaration that a program under which it would provide one entity the right to place fiber within certain limited access roads was affirmatively permitted under Section 253. Without deciding the issue, the Commission essentially ruled that the answer to the question depended on a variety of factors, including how the program worked.

¹¹⁷ *Sprint Spectrum, supra*, 283 F.3d 404, 421.

¹¹⁸ *Id.*

¹¹⁹ Crown Castle Comments at 28-29 (citing “State of Minnesota,” 14 FCC Rcd 21697, 21705); *see also* WIA Comments at 61-62.

It concluded that “legal requirements” could include contractual provisions that had the same effect as a law that created exclusive rights in one entity. The point was explained in the Amigo.net case:

“To make this determination, we focus on the contract’s effect on the provision of telecommunications service – that is, whether the contract imposes a requirement that has the effect of prohibiting the provision of any telecommunications service. The Commission has indicated that a state could impose, as part of a contract to obtain telecommunications services, the type of legal requirement proscribed by section 253. The simple act of forming a contract, which typically excludes from its provisions all entities not party to the contract, does not necessarily implicate section 253, however. The Commission has drawn a distinction between a contract in which the state was “merely acquiring fiber optic capacity for its own use” and a contract in which the state was granting its contract partner exclusive access to freeway rights-of-way, which other carriers would need in order to provide fiber optic services. In this latter instance, the Commission found that the state’s contract might impose a legal requirement that would have the effect of prohibiting the ability of other carriers to provide service.”¹²⁰

In other words, the proprietary/regulatory distinction is not eliminated, even as to rights of way; what is subject to challenge are contract terms that effectively prevent a state from making resources required by wireline providers available to others. What is requested here, however, is far different, and far more expansive, and essentially requires the Commission to read Section 253’s legal requirements provision to forbid the right to deny access to public or

¹²⁰ *In re Amigo.net*, 17 F.C.C. Rcd. 10904, 10967.

private property altogether, except as the Commission may permit. The law does not bear that weight.¹²¹

3. A BLANKET, ONE SIZE FITS ALL APPROACH IS INAPPROPRIATE.

(i) Establishing a Blanket Declaration or Rule That All Right-of-Way Management is Regulatory Would Ignore The Distinct and Diverse Nature of Local Conditions.

The industry's desire for a one-size-fits-all declaratory ruling that states and localities are not acting in their proprietary capacity when acting on requests to place facilities on public rights-of-way or municipal poles would ignore an important reality — the wide diversity in local conditions that must be considered by States and local governments in adequately managing their public rights-of-way and property within public rights-of-way. A wide range of demographic, geographic, climate, aesthetic, and other considerations exist from place to place across the country. Because of these variations, different agencies would necessarily have different needs and requirements when leasing their public rights-of-way and municipal poles and infrastructure within public rights-of-way. As discussed in Smart Communities' Opening Comments, public agencies, including cities, counties and special districts, must retain control of their property to preserve the condition of the property and its financial value, to ensure daily government operations run smoothly, to provide services such as water, sewer, fire protection, parks and recreation and flood control, and to protect against security breaches that could harm their operations and the public. These goals often must be accomplished while grappling with

¹²¹ Section 253 does not just reach public property – it actually reaches laws and “legal requirements” regardless of the type of property to which those might apply. Hence, to read 253 to authorize the Commission to preempt laws requiring payments of rents, costs and the like, or to read Section 253 to preempt laws that require authorizations from a property owner before property can be occupied in effect reads 253 as an authorization to require dedication of public and private property to telecommunications uses. The law cannot constitutionally bear that weight. *FCC v. Florida Power Corp.*, 480 U.S. 245, 253 (1987).

budgetary and staffing limitations.¹²² When considering whether or not placement of third party facilities on their property can be accomplished without risk to the public safety and welfare, they must be able to take into account unique and highly sensitive safety and operational issues and their limited resources.¹²³ *Requiring* local governments or special districts to make facilities available, or to administer a federal program, would impose an undue burden on them and the public they serve.

Thus, any question about whether a State or local government is acting in violation of Section 253 must be addressed on an individual, case-by-case basis preemption analysis and determination.¹²⁴

The *Qwest Corp. v. City of Portland* case¹²⁵ illustrates the significance of this consideration. In this case, ten cities were involved in the litigation, each with unique franchise agreements and ordinances being challenged by Quest.¹²⁶ The district court concluded the cities' agreements and ordinances were not preempted by Section 253.¹²⁷ The appellate court, however, reversed and remanded, in part because the district court had failed to conduct an individualized preemption analysis of each city's challenged ordinances.¹²⁸ The court emphasized that such a generalized conclusion "is not conducive to effective review on appeal."¹²⁹ Here, the industries urge the Commission to form a generalized conclusion with a sweep that would include 50 states

¹²² Smart Communities Wireless Comments at 65-69.

¹²³ See Smart Communities Comments at 68 (water districts must ensure sensors, gates, lighting and other security measures are not disturbed by third parties to protect the public clean water supply; access to property of fire protection district must be strictly controlled on a case-by-case basis to prevent interference with vital services).

¹²⁴ *Quest Corp. v. City of Portland*, 385 F.3d 1236, 1242 (9th Cir. 2004), overruled on other grounds in *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571.(9th Cir. 2008).

¹²⁵ *Quest Corp. v. City of Portland*, 385 F.3d 1236, 1242 (9th Cir. 2004).

¹²⁶ *Id.* at 1240.

¹²⁷ *Id.* at 1242.

¹²⁸ *Id.*

¹²⁹ *Id.* at 1240.

and countless cities, counties, special districts and other local governments. It cannot do so consistent with the statute.

a. *Industry Arguments Urging A Blanket Preemption to Limit Compensation for Use of Public Rights-of-Way Ignores and Would Contravene Constitutional Principles.*

(1) *Limiting State and local ability to set compensation for use of public rights of way would raise serious Fifth Amendment concerns.*

In their initial comments, Smart Communities explained that the statute does not grant the Commission authority to set rates, and at most permits a court to preempt a local or state law related to charges if the charges fall outside a zone of reasonableness, which by definition permits rates that recover all costs and the market value of the property to be used; and if the charges actually prohibit the ability of some entity to provide service. Nonetheless, some commenters continue to ask the Commission to set rates at out-of-pocket, incremental costs or to limit charges associated with right of way use (such as permitting charges) to a fixed amount regardless of cost incurred in connection with the use of property.

Of course, if the federal government were to require a local government to place a wire on its property without compensation, it would constitute an unlawful taking under the Fifth Amendment.¹³⁰ The Supreme Court has clearly recognized a local government's "right to exact compensation" for such property uses:

[W]hile permission to a telegraph company to occupy the streets is not technically a lease, and does not in terms create the relation of landlord and tenant, yet it is the giving of the exclusive use of real estate, for which

¹³⁰ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 421, 433 (1982) (state law requiring property owner to permit access to cable company to install lines on private property constituted a taking).

the giver has a right to exact compensation, which is in the nature of rental.¹³¹

And the Court has also held that like private property owners, local governments have the same right to fair market value compensation for the federal government's taking of property as private property owners.¹³² It matters not that the intrusion may be relatively slight:

[P]ermanent occupations of land by such installations as telegraph and telephone lines, rails, and underground pipes or wires are takings even if they occupy only relatively insubstantial amounts of space and do not seriously interfere with the landowner's use of the rest of his land.¹³³

Reading the Act to both compel the government to provide access and to allow the Commission to limit compensation would create significant takings issues.¹³⁴

b. *Interfering with local public right-of-way management practices would raise serious issues under the Tenth Amendment and the Guarantee Clause.*

The preemption of local public right-of-way management practices would offend the Tenth Amendment and the Guarantee Clause of the Constitution. Under the Tenth Amendment, “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”¹³⁵ As part of the system of “dual sovereignty,” the federal government “may not compel the States to enact or enforce a federal regulatory program.”¹³⁶ Even in areas where the federal government has authority to act, the

¹³¹ *City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92, 99 (1893), *op. on rehrg.*, 149 U.S. 465 (1893); *see also Cities of Dallas and Laredo v. FCC*, 118 F.3d 393, 397-98 (5th Cir. 1997) (“Franchise fees are . . . essentially a form of rent: the price paid to rent use of the public right-of-ways.”).

¹³² *United States v. 50 Acres of Land*, 469 U.S. 24, 31 (1984).

¹³³ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 430 (1982).

¹³⁴ *FCC v. Florida Power Corp.*, 480 U.S. 245, 253 (1987).

¹³⁵ U.S. Const. amend. X.

¹³⁶ *Printz v. United States*, 521 U.S. 898, 918-19, 933 (1997) (*quoting New York v. United States*, 505 U.S. 144, 166 (1992)).

Constitution only authorizes the federal government to regulate individuals, not States.¹³⁷ If the Commission were to assert control over public right-of-way practices or compel local governments to provide access to public rights-of-way on federally-prescribed terms, the Commission would unconstitutionally commandeer the local administration of public property in service of a federal regulatory program. Here, it is important to distinguish the situation in which the Commission imposed a deemed granted remedy that only applies in situations where a government entity had already made a voluntary choice to regulate wireless services — in which case it could then be required to regulate in accordance with a valid federal scheme.¹³⁸ In the case of access to property, there is no preliminary choice to be made; an affirmative action is always required because, as a matter of law, no person has a right to occupy the property of another without the owner's permission.¹³⁹ In effect, the choice the commenters urge the Commission to give to State and local governments is the choice between granting access to property without conditions, or granting access subject to the conditions the Commission may prescribe. That is no choice at all.¹⁴⁰

The preemption of local discretion regarding how to manage of its property also raises concerns under the Guarantee Clause.¹⁴¹ The Guarantee Clause precludes the federal government from interfering with a State's distribution of power among the various levels of government.¹⁴²

¹³⁷ *Alden v. Maine*, 527 U.S. 706, 714 (1999) (citing *New York v. United States*, 505 U.S. 144, 166 (1992)).

¹³⁸ *Montgomery County v. FCC*, 811 F.3d 121, 129 (4th Cir. 2015).

¹³⁹ *FCC v. Fla. Power Corp.*, *supra*, at p. 253 (Property law “has long protected an owner’s expectation that he will be relatively undisturbed at least in the possession of his property.”)

¹⁴⁰ *New York v. United States*, 505 U.S. 144, 176 (1992) (two choices in take title provision of the Low-Level Radioactive Waste Policy Amendments Act of 1985 constituted “no choice at all” because “[e]ither way, ‘the Act commandeers the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program.’”).

¹⁴¹ U.S. Const., Art. IV, § 4.

¹⁴² *City of Abilene v. FCC*, 164 F.3d 49, 52 (D.C. Cir. 1999) (“interfering with the relationship between a State and its political subdivisions strikes near the heart of State sovereignty”).

Where a State has decided to allow local governments to obtain certain fees, the Commission may not undermine the State’s decision by leaving the local government without a means to recover that compensation. While the Federal government may use its Commerce Clause authority to limit certain actions of State and local officers, it may not—consistent with the unqualified *guarantee* to the people of the States of “a Republican Form of Government”—curtail the fundamental powers or property rights of local governments as local governments.

E. Industry’s Laundry List Of Requests For Action Pursuant To Sections 253 And 332 Are Rife With Problems

On issues related to effective prohibition in the context of Sections 253 and 332(c)(7), industry commenters largely repeat arguments made in the *Mobilitie* docket. Smart Communities’ comments in the *Mobilitie* docket addressed the arguments raised in that proceeding, and as the Commission will see, Smart Communities’ comments in these proceedings to a large degree anticipated and responded to arguments raised by industry commenters here.

1. *The Commission Should Not Harmonize The Interpretations Of “Prohibit Or Have The Effect Of Prohibiting” In Sections 253 And 332(C)(7)*

The industry asks the Commission to “harmonize the interpretations of “prohibit or have the effect of prohibiting” in Sections 253(a) and 332(c)(7) by applying its current interpretation of Section 253 to both statutory provisions.¹⁴³ Smart Communities argues that harmonization can only go so far, and in this case, harmonization makes very little sense.

Statutorily, both Sections 253 and 332(c)(7) use the term “effective prohibition,” but Section 332(c)(7) only reaches “regulations” that effectively prohibit the provision of “wireless services,” while Section 253 reaches laws and statutes that prohibit or effectively prohibit the

¹⁴³ Verizon Comments at 10.

ability of any entity to provide telecommunications services. In the former instance, the test can thus be focused on what would actually result in a prohibition of wireless service, while in the latter, what is a prohibition may be far more difficult to generalize.

The significant gap test recognizes that by its very nature, there are always gaps in wireless coverage, but those gaps do not prevent anyone from providing wireless services *per se*. On the other hand, courts have reasoned that if the coverage gaps are large enough, and involve high traffic areas that lack service from a provider (e.g., highways), the gap amounts to enough of an impairment to constitute a prohibition. While that test will no doubt evolve, it will only add to confusion – and raise questions about how the law applies – if one seeks to “harmonize” the standards to create a generalized test that applies to both wireline and wireless.

2. *Contrary To Industry Claims, Only Requirements That “Prohibit Or Have The Effect Of Prohibiting” May Be Preempted*

Verizon urges the Commission to define “effective prohibition as a regulation or action that “(1) significantly increases a carrier’s costs; or (2) otherwise meaningfully strains the ability of a carrier to provide telecommunications service.”¹⁴⁴ Verizon, in particular, cites to the *Puerto Rico Tel. Co. v. Guayanilla* case to argue that “because of the cumulative effect of ordinances and actions of multiple localities that limit carrier access to rights-of-way, the Commission should make clear that carriers can demonstrate that local requirements significantly increase costs, or otherwise meaningfully strain their ability to provide service, by showing the effect of numerous municipalities employing similar restrictions.”¹⁴⁵

Verizon suggests the First Circuit’s ruling in *Guayanilla* supports its proposed standard that a local regulation has the “effect of prohibiting” where it “(1) significantly increases a

¹⁴⁴ *Id.* at 11.

¹⁴⁵ *Id.* at 12.

carrier's costs; or (2) otherwise meaningfully strains the ability of a carrier to provide telecommunications service.”¹⁴⁶ It is not clear what the standard proposed by Verizon actually means — it appears to be the result of editing the decision of the First Circuit to create a standard that the First Circuit never actually adopted.¹⁴⁷ As far as it appears, the First Circuit was attempting to apply the standard proposed by Smart Communities, and reflected in the decisions of the Eighth and Ninth Circuits. Nor does *Guayanilla* actually support the “cumulative impacts” test proposed by Verizon, or a limitation of fees to costs. *Guayanilla* actually supports fees in excess of costs. In *Guayanilla* the problem was that the community could not support a claim that its charges even reflected the market value of the property used; rather, the community simply argued that the charges were inconsequential since they were small considering all the revenues that the provider obtained from *other* communities. The court's decision simply rests on the uncontroversial provision that if one wishes to measure impacts based on revenues from other

¹⁴⁶ *Id.* at 11.

¹⁴⁷ Verizon Comments at 11. (*Guayanilla*, 450 F.3d 9, 19 (1st Cir. 2006) found that it constituted an effective prohibition because it would “negatively affect [the provider's] profitability;” give rise to “a substantial increase in costs for [the provider];” and “place a significant burden on [the provider],” thereby “strain[ing the provider's] ability to provide telecommunications services.”). Not only is the Commission barred from adopting Verizon's proposal, but Verizon is incorrect in its interpretation of *Guayanilla* supports a broad rule which would be met if a rule “increased a carrier's costs.” This interpretation would be inconsistent with the Supreme Court's interpretation of the Act's language: the Court interpreted the word “impair” under the Communications Act to require more than a showing of an increase in costs, *AT&T v. Iowa Utilities Board*, 525 U.S. 366, 389-390 (1999). In *Iowa Utilities Board*, the Commission defined the term “impair” in a way designed to ensure companies could enter the market more easily to compete with incumbents by obtaining access to incumbent facilities. But the use of the term “impair” was meant to limit the circumstances under which a competitor could obtain access to incumbent facilities, and the Supreme Court found it was the Commission's duty to define “impair” in accordance with its ordinary meaning, and not simply to do whatever the Commission felt would best promote statutory goals. (*Iowa Utilities Board*, 525 U.S. at 389-390; see also *Util. Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2445 (2014)) The Court found that the mere fact that it might be more convenient for a competitor to enter the market under the Commission's rules was not a sufficient justification for the approach taken. (*Iowa Utilities Board*, 525 U.S. at 409) Thus the more-absolute term under the Act—effect of “prohibiting”—would require a telecommunications company complaining about a local requirement to show much more than that the local requirement increases its costs – even if doing so created a “strain” on the company. Moreover, Verizon is wrong to suggest a new test based solely on the facts in *Guayanilla* because under the facts of that case, the court accepted as given the untested assumption that the provider would see an 86 percent decrease in profit. Such a unique factual scenario is inappropriate for a generalized test to replace the widely-accepted *California Payphone* test.

communities, one must also consider the impact that would follow if the same fees were charged for use of public property in those communities.

At the outset, Smart Communities notes that what are at issue legally are prohibitions and effective prohibitions, and not hindrances or impediments, as the Commission seems to suggest in its Notice in the *Mobilitie* docket, or as CTIA suggests in its comments in this proceeding.¹⁴⁸ As we pointed out in initial comments, the term “prohibit” is not defined in the Act, but it has an ordinary meaning: to formally forbid (something) by law, rule, or other authority; or to “prevent, stop, rule out, preclude, make impossible.” A mere “hindrance” “is simply not in accord with the ordinary and fair meaning” of the term prohibit,¹⁴⁹ and can provide no basis for additional Commission intrusions on local authority over wireless facilities (under Section 332) or wireline facilities (under Section 253). Much of what industry commenters (such as *Mobilitie*) complain about is a “hindrance” at most (and usually a hindrance magnified by its own actions).

Verizon goes so far as to suggest that several Circuits courts treat actions that “may prohibit” as violations of Section 253; that the Eighth and Ninth Circuits have incorrectly interpreted the statutory standard; and incorrectly claim the Commission has authority to overturn these cases pursuant to *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967 (2005), and to declare that even *potential* prohibitions violate Section 253.¹⁵⁰ In fact, the Circuits are not in conflict: they have not recognized that what the act reaches are prohibitions, or laws and regulations that have the effect of a direct prohibition. The Eighth and Ninth Circuits decisions are explicitly based on the plain language of Section 253 where the Commission receives no *Chevron* deference. Moreover, these interpretations are consistent with

¹⁴⁸ CTIA Comments at 44.

¹⁴⁹ *AT&T v. Iowa Utilities Board*, 525 U.S. 366 (1999).

¹⁵⁰ Verizon Comments at 10, FN33, 15, FN52.

California Payphone so there is no need to clarify anything.

3. *No Further Interpretation Of Section 332(c)(7)’s Effective Prohibition Standard Is Necessary*

Industry commenters also urge the Commission to reject the “significant gap” standard that courts have articulated in Section 332 cases, primarily because they argue installations are now addressing capacity and not coverage.¹⁵¹ Some of them are proposing reinterpreting the standard.¹⁵² AT&T and CTIA fail to mention that commenters and the Commission itself agree that most courts, not “some courts” as they claim, have come to a common interpretation of Section 332(c)(7): “[c]ourts generally agree that a carrier may establish that a land-use authority’s denial of its siting application ‘prohibits or has the effect of prohibiting’ the provision of service by showing that it has a significant gap in service coverage in the area and a lack of feasible alternative locations for siting facilities.”¹⁵³ According to the Commission and industry commenters (e.g., CTIA), the courts have not necessarily developed consensus “about the showings needed to satisfy this standard.”¹⁵⁴ However, the application of a legal standard to facts is the precise scenario where case-by-case decision-making is required—not general standards or prescriptive national rules. Localized zoning decisions and their real-world impacts on provider offerings are well-suited to district court proceedings to ascertain facts and apply relevant legal

¹⁵¹ AT&T Wireless Comments at 10; WIA Comments at 38; CTIA Comments at 21. In its section addressing the significant gap test, CTIA claims, without any explanation, that “regulations that police the technology or service the provider seeks to deploy are clearly preempted by the Commission’s plenary jurisdiction under Title III of the Communications Act to regulate the licensing and operation of radio facilities.” (CTIA Comments at p. 27) CTIA is mixing apples with oranges. Title III regulation of licensing and operation of radio facilities is separate from the factors that go into siting an actual facility (e.g., the least intrusive means test), which is under local authority. The Commission’s authority under Title III to regulate licensing and operation of radio facilities does not preempt local siting considerations.

¹⁵² Verizon argues that should the Commission find that the “significant gap” standard is in fact the proper standard, then it should alter the standard so that a “significant gap” is a gap in an ever-increasing quality level of service. Verizon Comments at 18, FN56.)

¹⁵³ Public Notice at 10 (WT Docket No. 16-421); Verizon Mobilite Docket Comments at 21.

¹⁵⁴ Public Notice at 10 (WT Docket No. 16-421); Verizon Mobilite Docket Comments at 21. See also CTIA Comments at 21.

standards.¹⁵⁵

4. The Commission Should Not Adopt Or Rule In Favor Of Industry's Proposals That Certain Local Practices Are Effective Prohibitions

a. Compensation For Use of The Public Right of Way Should Be Priced at Fair Market Value

The industry argues that the Commission should limit public right-of-way fees to recovery of actual and reasonable costs for processing applications and managing the public rights-of-way.¹⁵⁶ The industry also argues that the Commission should clarify that “fair and reasonable compensation” under Section 253(c) means charges that enable a local government to recoup the costs reasonably related to reviewing and issuing public right-of-way permits as well as incremental public right-of-way management costs associated with adding a new wireless facility and applied equally to all public right-of-way users.¹⁵⁷

First, Smart Communities has shown in its comments that (1) the Commission does not have the authority to regulate these charges, much less require local governments to effectively subsidize applications; (2) there is a significant expense associated with reviewing the applications that needs to be recovered; and (3) that allowing localities to recover costs and obtain fair market value for property used will actually enhance deployment, and ensure that

¹⁵⁵ If the Commission wished to address the different standards, the standard that is better suited may be the one laid out in *360 Degrees Communs. Co. v. Board of Supervisors of Albermarle County*, 211 F.3d 79, 86-87 (4th Cir. 2000). In that case, the court held that neither Section 253 nor Section 332(c)(7) ensures that a provider will never have a service gap. (*Id.*) The court stated, “The Act obviously cannot require that wireless services provide 100% coverage. In recognition of this reality, federal regulations contemplate the existence of dead spots.” (*Ibid.*) The court also noted that the broader inquiry indicated by Section 332(c)(7) is: “Does the denial of a permit for a particular site have the effect of prohibiting wireless services?” (*Id.*) The court held that “this statutory question requires no additional formulation and can best be answered through the case-by-case analysis that the Act anticipates.” (*Ibid.*; citing *AT&T Wireless PCS, Inc. v. City Council of the City of Virginia Beach*, 155 F.3d 423, 428-429 (4th Cir. 1998). Smart Communities recognize that in some cases capacity shortages can amount to a prohibition (as where the absence of capacity results in dropped calls) without adopting a term “capacity” or a new standard that has no obvious tie to the Act. Notably, no cases are identified where the existing standards somehow results in a prohibition that a court simply did not recognize.

¹⁵⁶ Verizon Comments at 14-15; T-Mobile Comments at 31-33; AT&T Wireless Comments at 17.

¹⁵⁷ Verizon Comments at 14-15; T-Mobile Comments at 30-33.

advanced systems are deployed in a rational way. More generally, the arguments conflate the right to recover costs associated with management,¹⁵⁸ with the right to recover compensation, which is viewed as a “rent” for use of property that does not belong to the applicant.

Verizon suggests that “market forces” are sufficient to ensure reasonable rates in a competitive market, but it goes on to argue that such forces are not present when it comes to access to public rights-of-way because local governments have “monopoly control” of public rights-of-way and municipally-owned structures.¹⁵⁹ The proposition that a local government would exercise monopoly power and charge supra-competitive rates for public right-of-way access — even if it had such monopoly power—is *ipse dixit*, and nothing more. The only record evidence — the evidence submitted by Smart Communities — is to the contrary. Local governments compete vigorously with one another to attract and encourage deployment of advanced and reliable utilities that will in turn attract and support new industrial, commercial, and residential development. This is a strong incentive not to overprice right-of-way access.¹⁶⁰ In some cases where companies are claiming that they are being overcharged, the charges were proposed by the companies themselves, under contracts that they helped to draft.¹⁶¹

¹⁵⁸ Management costs may include initial engineering review, but also ongoing inspections and administrative reviewed. For example, while Crown Castle was required to inspect its facilities after its installations caused massive destruction to properties in Malibu Canyon, there would be a cost associated with reviewing the work done by Crown Castle, and those costs are properly borne by Crown Castle. It may be that these costs will prove to be quite high in some areas, but it is both appropriate as an economic matter, and permissible under the law to recover all of those costs.

¹⁵⁹ Verizon Comments at 14.

¹⁶⁰ ECONorthwest Report at 22.

¹⁶¹ See, e.g., *Petition by Level 3 Communications LLC*, WC Docket No. 09-153. In that case, the New York State Thruway Authority entered into a contract that provided access to NYSTA rights of way and facilities and allowed providers to make use of those facilities, including the right to enter and exit the property at specified points. Several providers, including Level 3’s predecessor, agreed to that contract. Subsequent to entering into that contract, Level 3 asked for additional exit points—unique treatment—and the NYSTA agreed to amend the contract after negotiations on terms similar to those proposed by Level 3, which reflected the value of the special rights sought, and the nature of the limited access roadway. Level 3 now asks the FCC to upset the agreement many years after it was executed. But doing so will only discourage future innovative arrangements for use of government property.

Verizon also argues that the legislative history of the Telecommunications Act supports a cost-based limitation under Section 253.¹⁶² Verizon states that “Senator Feinstein made clear in a floor statement that Section 253(c) would permit a municipality to “[r]equire a company to pay fees to recover an appropriate share of the increased street repair and paving costs that result from repeated excavation.” First, this excerpt is from a letter written by Louise H. Renne, City Attorney for the City and County of San Francisco that Senator Feinstein asked to be printed in the record. This excerpt was provided as an example of a routine requirement imposed by local governments in exercise of their responsibility to manage the public rights-of-way that communications companies would challenge under Section 253(d) on the grounds that it interfered with their schedules or convenience. It conflates the right to compensation, with the right to recover costs associated with management. As Smart Communities explained in its initial comments, the latter is often a function of the police power, and limited to cost, while the former is not. Secondly, the excerpt regarding management costs was only part of the debate over Section 253. While management costs certainly should be recovered, neither the Renne letter or other parts of the legislative history suggests that these were the only charges permitted.¹⁶³

Congressman Barton, one of the key architects of what became Section 253(c) noted:

[The amendment] explicitly guarantees that cities and local governments have the right to not only control access within their city limits, but also to set the compensation level for the use of that right-of-way. . . . The Chairman’s [Manager’s] amendment has tried to address this problem. It goes part of the way, but not the entire way. The Federal Government has

¹⁶² Verizon Comments at 15.

¹⁶³ 141 Conf. Rec. H8460 (1995) The Barton-Stupak amendment was proposed as an alternative that would have required localities to charge the same rate to every provider – the so-called “parity” amendment. That amendment was resoundingly rejected. But even the Barton-Stupak amendment’s opponents indicated that they did not intend to limit localities to recovery of costs. For example, Representative Schaefer acknowledged that local governments were already entitled to freely charge for rent; the parity amendment, he suggested, merely required them to charge each provider on an equal basis: “The bill philosophy on this issue is simple: *Cities may charge as much or as little as they wanted* in franchise fees. As long as they charge all competitors equal, the [Barton-Stupak] amendment eliminates that yet critical requirement.” (Statement of Rep. Schaefer.) (emphasis added).

absolutely no business telling State and local governments how to price access to their local public right-of-way.¹⁶⁴

Smart Communities has also shown in its comments in the *Mobilitie* docket that neither the terms of Section 253(c), the legislative history, or relevant case law require the fee charged by a local government for use of the public rights-of-way be restricted to the municipality's cost of maintaining the public rights-of-way. Nor does it require absolute parity among providers and utilities in setting compensation levels.¹⁶⁵ Indeed, obtaining fair market value for use of the public rights-of-way is by definition fair, and it is the normal measure of "just compensation" under the Fifth Amendment's Takings Clause. In this proceeding, as with the *Mobilitie* docket, the industry commenters appear to ask the Commission to regulate the costs that can be charged to it so that (1) it is not forced to bear the full costs associated with repeated applications, engineering, or land use reviews of its applications; and (2) it does not have to pay its fair share for the use of the public rights-of-way. This goes against one of Congress's principal purposes in adopting Section 253(c) – to ensure that Section 253 did not constitute an unfunded mandate and to prevent local governments from being required to subsidize telecommunications providers' costs.¹⁶⁶

¹⁶⁴ 141 Conf. Rec. H8460 (1995). Representative Stupak later added, "[W]e have heard a lot from the other side about gross revenues.... The other side is trying to tell us what is best for our local units of government. Let local units of government decide this issue." 141 Cong. Rec. H8461 (daily ed. August 4, 1995)(Statement of Rep. Stupak).

¹⁶⁵ Smart Communities *Mobilitie* Docket Comments at 60.

¹⁶⁶ 141 Cong. Rec. H8460 (daily ed. August 4, 1995) (statement of Rep. Stupak) ("It is ironic that one of the first bills we passed in this House was to end unfunded Federal mandates. But this bill, with the management's amendment, mandates that local units of government make public property available to whoever wants it without a fair and reasonable compensation. The manager's amendment is a \$100 billion mandate, an unfunded Federal mandate. Our amendment is supported by the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the National Conference of State Legislatures and the National Governors Association. The Senator from Texas on the Senate side has placed our language exactly as written in the Senate bill. Say no to unfunded mandates, say no to the idea that Washington knows best. Support the Stupak-Barton amendment.").

Recent decisions in state court are consistent with Smart Communities’ arguments here that states may choose to limit the ability of their subdivisions to charge for use of public property where that is constitutionally permitted, but unless the state lawfully chooses to limit those charges, the right to recover rents is inherent in the ownership of the property, and as compensation for a grant to use property, and distinct from the ability to recover fees associated with regulatory programs.¹⁶⁷

The Commission’s practice of engaging in spectrum auctions serves as a useful analogy that supports Smart Communities’ arguments that (1) compensation for use of the public rights-of-way should be priced at fair market value, (2) fair market value is fair and reasonable, and an efficient use of a finite government-owned resource. The history of the auctions as a means to achieve the fairest return for government is explained by the Commission:

In 1993 Congress passed the Omnibus Budget Reconciliation Act, which gave the Commission authority to use competitive bidding to choose from among two or more mutually exclusive applications for an initial license. Prior to this historic legislation, the Commission mainly relied upon comparative hearings and lotteries to select a single licensee from a pool of mutually exclusive applicants for a license. The Commission has found that spectrum auctions more effectively assign licenses than either comparative hearings or lotteries. The auction approach is intended to award the licenses to those who will use them most effectively. Additionally, by using auctions, the Commission has reduced the average time from initial application to license grant to less than one year, and the public is now receiving the direct financial benefit from the award of licenses.¹⁶⁸

The statement above falls in line nicely with recent remarks made by Chairman Pai on April 5,

¹⁶⁷ For example, since 2006, Kentucky state law has prohibited local governments from collecting franchise fees on cable and communications services. In June 2017, the Supreme Court of Kentucky issued an opinion in *Kentucky CATV Association Inc. v. City of Florence et al.*, holding that the Kentucky Constitution delegates to cities “control over the placement of utilities within their public spaces and rights-of-way; and the right to reap the long-term profits of that control through consideration paid by private franchisees to the municipality, i.e., franchise fees.” *Kentucky CATV Association, Inc. v. City of Florence et. al.*, 2017 Ky. LEXIS 277, *13 (2017).

¹⁶⁸ Federal Communications Commission, *About Auctions* (last accessed Jul. 17, 2017), available at http://wireless.fcc.gov/auctions/default.htm?job=about_auctions.

2017 regarding the importance of economic analysis at the Commission. In his remarks, Chairman Pai stated that “[s]pectrum license auctions are the most notable example of good economics guiding good policy at the Commission”.¹⁶⁹ Pai also cited Ronald Coase’s “seminal paper” in 1959 titled “The Federal Communications Commission” and his influence on the Commission eventual adoption of auctions for licensing spectrum.¹⁷⁰ In this paper, “Coase argued that the government should treat spectrum like other property, and allow markets to determine who gets to use it. As he put it, based on basic principles of economics, ‘it is not clear why we should have to rely on the Federal Communications Commission rather than the ordinary pricing mechanism to determine whether a particular frequency should be used.’”¹⁷¹

Chairman Pai also noted that Coase’s proposal was initially met with skepticism in the industry, Congress, and Commission but eventually “carried the day”, and now, spectrum auctions “have facilitated the explosion of wireless services that have created millions of U.S. jobs and improved the American people’s lives in countless ways.”¹⁷² In this proceeding, and in the *Mobilitie* docket, the industry and even the Commission appears to have a skeptical view on the current practices of local governments in obtaining the fair market value for use of the public rights-of-way. However, the current explosion in wireless services that Chairman Pai describes has happened because of, and not in spite of, such public rights-of-way practices. As Smart Communities has argued based on its own economic analysis and study, which is glaringly missing in comments by the industry, that such practices have facilitated, and will continue to

¹⁶⁹ “The Importance of Economic Analysis at the FCC”, Remarks of FCC Chairman Ajit Pai at the Hudson Institute, April 5, 2017.

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

facilitate, the innovation of new technologies and means of deployment and deployment in underserved areas, while preventing the exacerbation of marketplace inequities.¹⁷³

Sprint also argues that the Commission should endorse the approach taken by states that have enacted legislation addressing access, fee levels, and time frames related to communications facilities in the public rights-of-way. First, as discussed elsewhere in this reply, the Commission has no authority to regulate the rates charged for public property. Second, any Commission action compelling local governments to provide access to the public rights-of-way and to limit compensation would create significant takings issues because the Supreme Court has clearly recognized a local government's "right to exact compensation" for such property uses, which Smart Communities explains in its comments. Third, the Commission's preemption of local discretion regarding how to charge for use of its property and of local rights-of-way practices would offend the Tenth Amendment and the Guarantee Clause of the Constitution discussed elsewhere in this filing.

R Street Institute alleges that in addition to "unreasonably high fees," local governments "often impose additional terms and conditions on broadband providers that discourage infrastructure deployment", including "extracting" what it alleges to be "unreasonable contributions"¹⁷⁴ As an example, R Street cites the City of Portland requiring companies like

¹⁷³ The spectrum example also exposes the limitation of the "monopoly" argument. Normally a monopoly argument arises in a situation where one market participant is using its power in an economically defined market to gain an advantage over competitors, and to prevent them from entering or remaining in the market in competition with it. The United States was clearly the sole controller of spectrum within the United States, and there is also almost no cost to the United States as a governmental entity of creating that spectrum, and its cost of management are far less than the value of that spectrum. However, it had no incentive to prohibit competition (and more than do localities), and the question raised by the spectrum auction example is: what is the best way to allocate access to a resource? What the auctions recognize is that if given away, or given away at cost, there is little incentive to use the resource efficiently and no guarantee that broad deployment will result.

¹⁷⁴ R Street Institute Comments at 8. *See also* Verizon Comments at 7. Verizon complains that the District has released a supplemental agreement for installing wireless facilities that , " would give the city the ability to require applicants to install, for free, WiFi access points (provided by the city) on the poles used by the applicant and to run fiber to each access point." Verizon makes no reference to whether such a proposal allows for offsets elsewhere.

Qwest and Time Warner Cable “to make in-kind contributions to support the city’s effort to deploy and operate a competing broadband network.”¹⁷⁵ On this point, R Street cites *Time Warner Telecom of Or. v. City of Portland*. What R Street fails to mention is that the Ninth Circuit held that these in-kind requirements “do not have the effect of prohibiting the provision of telecommunications services.”¹⁷⁶ The Ninth Circuit affirmed the lower court’s opinion, which agreed with the City of Portland’s expert economist that the in-kind contributions were not “subsidies”, as alleged by Qwest, because “[f]ranchisees provide in-kind contributions to the City in exchange for the valuable right to use the City’s streets for telecommunications networks.”¹⁷⁷

Indeed, contrary to R Street’s arguments there really is no correlation between right-of-way rents or in-kind contributions and broadband deployment. It is important to note here that R Street simply states examples of in-kind contributions but does not take the additional and necessary step of correlating those in-kind contributions with a decrease in deployment or an effective prohibition. Furthermore, R Street does not provide any economic analysis supporting its unfounded claims. On the other hand, Smart Communities has already shown in its analysis by economist Alan Pearce, Ph.D., that even with Portland’s in-kind contribution requirements and fees for use of its rights-of-way, the city has a “relatively large number of competitive providers” when compared to other similarly situated cities that do not impose such right-of-way

Nor does Verizon assert that it is being overcharged in any way. Without such allegations, the Commission lacks the authority to review. Still, one should not allow to stand the indirect accusation that requiring in-kind compensation is either illegal or counterproductive as reflected in the text above. In-kind payments are not inherently inappropriate, and in many cases better serve the financial needs of the applicant while meeting needs of the community.

¹⁷⁵ R Street Institute Comments at 8.

¹⁷⁶ *Time Warner Telecom of Or. v. City Of Portland*, 322 Fed. Appx. 496, *4-5 (9th Cir. 2009).

¹⁷⁷ *Time Warner Telecom of Or. v. City of Portland*, 452 F. Supp. 2d 1103, 1105 (D. Or. 2006) [citing *TCG New York, Inc. v. City of White Plains*, 305 F.2d 67, 80 (2d Cir. 2002) (cities “retain the flexibility to adopt mutually beneficial agreements for in-kind compensation”).

compensation requirements.¹⁷⁸

R Street also claims that “[w]hile municipal networks theoretically can provide additional competition and augment broadband deployment, their track record of doing so has been abysmal.”¹⁷⁹ R Street’s claims are without basis. First, municipal networks *actually* provide additional competition and augment broadband deployment. It is not theoretical, as Smart Communities explained in its comments.¹⁸⁰ Second, the track record has not been abysmal. In their comments, Smart Communities explained how the City of Portland’s “Integrated Regional Network Enterprise” (IRNE) actually increased competitive alternatives by allowing customers to reach providers who do not have the resources to build out to the entire community.

b. *Undergrounding Requirements are Not An Effective Prohibition.*

T-Mobile and Verizon call on the Commission to declare and adopt rules stating that requirements that all wireless communications facilities be located underground constitute an effective prohibition of communications service.¹⁸¹ T-Mobile cites to Mobilitie’s filing in the Mobilitie docket, where it gives an example of a “California community” that requires all facilities to be located underground, “and thus does not allow even small cells attached to existing poles.”¹⁸²

First, the industry’s argument that the Commission should use its Section 253 and Section 332 authority to take such action is incorrect. Section 253 does not apply at all here. Second, the claim underlying the application of Section 253 to wireless is that wireless and wireline should be treated identically. The complaint here is that wireless needs to be treated differently – the

¹⁷⁸ Smart Communities Wireline Comments at 27.

¹⁷⁹ R Street Institute Comments at 8.

¹⁸⁰ Smart Communities Wireline Comments at 24-27.

¹⁸¹ Verizon Comments at 33; T-Mobile Comments at 38.

¹⁸² T-Mobile Comments at 38.

two claims do not sit together. Third, the industry continues to present a misleading and incomplete picture on the reality of wireless facilities placement as it relates to undergrounding requirements. What is being complained about are requirements that structures in the public rights-of-way be placed underground. These requirements are often driven by safety considerations, as well as important economic development considerations, and often require local property owners or communities to invest millions of dollars to place utilities below ground.¹⁸³ Undergrounding programs could not possibly result in a *per se* effective prohibition under Section 253 or 332(c)(7) because though wireless services cannot operate underground, they can operate outside the public rights-of-way either on rooftops or in stealth configurations.¹⁸⁴ What are at issue legally in Sections 253 and 332(c)(7) are prohibitions and effective prohibitions, not hindrances, and in this case, no prohibition can be presumed.

c. *Moratoria Complained of by Industry are not Effective Prohibitions.*

The industry, including Verizon, T-Mobile, AT&T, and the Competitive Carriers Association, argue the Commission should use its Section 253 and 332(c)(7) authority to find that moratoria are effective prohibitions and to adopt rules that preempt moratoria.¹⁸⁵ Industry commenters cast a wide net when identifying so-called moratoria that are alleged effective prohibitions. These include public right-of-way management practices such as an Illinois city's five-year moratorium on pavement cuts to roadways that have been resurfaced or

¹⁸³ Smart Communities Comments at 71-75.

¹⁸⁴ This is also true in response to the example provided by the court in *Sprint Telephony PCS, L.P. v. County of San Diego* of an effective prohibition: "If an ordinance required, for instance, that all facilities be underground and the plaintiff introduced evidence that, to operate, wireless facilities must be above ground, the ordinance would effectively prohibit it from providing services." *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008).

¹⁸⁵ Verizon Comments at 33; T-Mobile Comments at 36; AT&T Wireline Comments at 73; CCA Comments at 17.

reconstructed;¹⁸⁶ regulatory practices such as moratoria on approvals for substantial modifications or installations requiring a variance,¹⁸⁷ and moratoria on processing and approving small cell applications,¹⁸⁸ and proprietary decisions such as refusals to negotiate or consider access agreements for public rights-of-way or municipally owned structures in public rights-of-way.¹⁸⁹

We have already explained that, to the extent it applies, the shot clock is clear for *wireless facilities* that moratoria have no effect. Beyond that, one cannot conclude that other moratoria can be addressed under either Section 332 (for wireless) or 253 (for wireline). To take an example: moratoria on street cuts are public right-of-way management tools that have three functions (a) they prevent damage to roadways that have just been restored, which is important to preserving the life of the roadway, and limiting its deterioration – an important consideration since a community can only physically restore a limited number of miles of roadway per year; (b) encourage placement when the roadway is open and before it is restored; and (c) prevent repeated disruption of pedestrian and vehicular traffic, and the costs attendant on that disruption. Because it is a management function within the meaning of Section 253(c), it does not matter if it is prohibitory or not – it is protected. And it is far from clear that it is prohibitory: a company that chooses to ignore a roadway opening is “prohibited” only in the sense that it made a choice (or may not have been ready) to enter the market when it could and now has to wait. That choice is the provider’s own choice, and does not justify preemption.¹⁹⁰

¹⁸⁶ AT&T Wireline Comments at 74.

¹⁸⁷ T-Mobile Comments at 37.

¹⁸⁸ Verizon Comments at 6.

¹⁸⁹ *Id.* at 33.

¹⁹⁰ Indeed, the argument that delay equals a prohibition ignores the fact that delay is often a result of the actions of a provider, and not fairly attributable to a pre-emptible government law.

Equally off-base is the claim of the Critical Infrastructure Coalition that a state or local agency required pre-application process that effectively prevents an application from being filed should be seen as a de facto moratorium.¹⁹¹ First, it is unclear what the standard would be for determining when a pre-application process effectively prevents an application from being filed, and the Critical Infrastructure Coalition does not cite a single example of such a pre-application process. Second, Smart Communities has argued that pre-application processes may actually speed up deployment by improving the quality and completeness of applications and facilitating faster local review. In the end, having the pre-application process count against the shot clock will actually dis-incentivize local governments from meeting and cooperating with companies, and given the significant number of delays caused by incomplete applications filed by the industry, adopting the industry's definition of moratorium may be more inefficient in the long run for deployment.

d. *Regulation of Facilities in the Public Rights-Of-Way Based on Aesthetics is not an Effective Prohibition.*

T-Mobile states that the Commission should declare that “local procedures affording a locality unfettered discretion as to whether to grant or deny an application— including unnamed or undefined discretionary factors like aesthetics that do not pertain directly to the management or use of the ROW” constitutes an effective prohibition.¹⁹² The argument presumes – incorrectly that Section 253 applies to wireless placement. In fact, it simply underlines that as T-Mobile read Section 332, it means “nothing in this act restricts local authority over wireless placement, except those items listed below, and the additional restrictions the Commission chooses to impose.” That argument is inconsistent with the Commission’s own defense of its Section 332 regulations,

¹⁹¹ CIC Comments at 20.

¹⁹² T-Mobile Comments at 40.

which are based on the assumption that the *only* limits are those in Section 332, and that the Commission has authority to interpret those provisions, but not to add to them.

In any case, the arguments are not well-founded even under Section 253. As support, T-Mobile mentions a San Francisco ordinance that regulates telecommunications antennae near the public rights-of-way based on aesthetic concerns.¹⁹³ T-Mobile challenged this ordinance in court, but in its comments conveniently omit that the California Courts of Appeal upheld the ordinance, holding that the city’s authority to regulate the installation of telecommunications equipment near public roads allows the city to consider whether the equipment would “diminish the City’s beauty.”¹⁹⁴

In 2011, the city adopted an ordinance requiring a site-specific permit before the installation of certain telecommunications equipment on existing public rights-of-way.¹⁹⁵ In enacting the ordinance, the City Council recognized that “[t]he City’s beauty is vital to the City’s tourist industry and is an important reason for businesses to locate in the City and for residents to live [in the City].”¹⁹⁶ The ordinance was intended, in part, “to prevent telecommunications providers from installing wireless antennas and associated equipment in the City’s public right-of-way either in manners or in locations that will diminish the City’s beauty.”¹⁹⁷

Acknowledging the “tension” that sometimes “exists between technological advancement and community aesthetics,”¹⁹⁸ the court rejected the plaintiffs’ claim that the public right-of-way

¹⁹³ T-Mobile Comments at 40.

¹⁹⁴ *T-Mobile West LLC v. City and County of San Francisco*, 3 Cal. App. 5th 334, 340 (2016).

¹⁹⁵ *Id.* at 340-342.

¹⁹⁶ *Id.* at 340.

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 330.

is inconvenienced only by physical obstruction of travel.¹⁹⁹ Citing *Sprint PCS Assets, L.L.C. v. City of Palos Verdes Estates*, 583 F.3d 716 (9th Cir. 2009), the court explained that public use of the road encompasses “far more than getting from place to place,” and may include “social, expressive and aesthetic functions.” Rejecting the plaintiffs’ claims of preemption, the court explained that state law does not give telephone corporations unlimited rights to install their equipment in the public right-of-way.²⁰⁰ Rather, state law reserves to local government the police power to regulate against inconvenience of public use, a power that is “broad enough to allow discretionary aesthetics-based regulation.”²⁰¹

T-Mobile makes no argument as to why such regulation is “unfettered” and simply states that “aesthetics” is an “unnamed or undefined discretionary factor[] that does not “pertain directly to the management or use of the ROW” — a claim the court rightly and flatly rejected.²⁰² In a footnote later on, T-Mobile stated that the San Francisco ordinance “requires compliance with aesthetics-based compatibility standards, determined solely by the location of the facility.”²⁰³ Thus, T-Mobile recognizes that there are certain standards that the city must use when regulating wireless facilities based on aesthetics, and as the California appellate court has stated, such aesthetic-based compatibility standards pertain directly to management and use of the public rights-of-way.²⁰⁴

¹⁹⁹ *Id.* at 355-356.

²⁰⁰ *Id.* at 348-349.

²⁰¹ *Id.* at 346-347.

²⁰² T-Mobile Comments at 39.

²⁰³ T-Mobile Comments at 40, FN 173.

²⁰⁴ The cases cited do not involve a consideration of the scope of Section 253 or 332, but instead relate to California law provisions governing the use of the rights of way by wireless providers. In California, wireless providers obtain access to the rights of way under the same provisions that apply to wireline providers. The holding on aesthetics is thus not based on a distinction between wireline and wireless per se, but on a determination that management of the right of way often involves aesthetic considerations (as should be obvious where some undergrounding projects are concerned).

AT&T also claims that local governments have “enacted unreasonable aesthetic restrictions” that “can” have the effect of prohibiting “wireless small cell facilities”.²⁰⁵ Without naming any municipalities, AT&T lists several examples of “local governments” in different states that supposedly violate Section 253 and 332, alleging that such ordinances and local laws are “problematic because they are vague and often applied discriminatorily.”²⁰⁶ AT&T’s examples include requirements for stealth designs and prohibitions on siting in and around historic properties and districts.²⁰⁷ Aside from the fact that AT&T fails to name such local governments or to give them an opportunity to respond, AT&T fails to take into account that its list consists of examples that may be hindrances or added costs of doing business but are not effective prohibitions. Indeed, AT&T even says that “[a]s a practical matter, service providers must incur the added expense of conforming their equipment designs to the approved size and configuration ...”²⁰⁸ An added cost to conform to certain size and configuration standards or to paint facilities a color that blends with the surroundings is not an effective prohibition, and there is no economic analysis provided by AT&T or other industry commenters suggesting that such requirements are cost prohibitive under either Section 332 or (even if it applied) Section 253.

e. *Commenters Seeking Caps On Permit Fees Are Misguided; Cost-Based Fees Should Vary*

Cost-based fees, by their very nature, will be different in different communities and if anything, typically under-recover actual costs. Industry calls for seeking caps on permit fees are misguided. Pole owners understand this concept.²⁰⁹ So does Chairman Pai.²¹⁰

²⁰⁵ AT&T Wireless Comments at 16.

²⁰⁶ *Id.* at 17.

²⁰⁷ *Id.*

²⁰⁸ *Id.* at 16-17.

²⁰⁹ AT&T opposes a requirement for uniform make-ready costs as impractical and not recognizing that each make-ready is distinct.

Permit fees are based on costs. Not surprisingly, the frequency and detail with which costs are analyzed and fees set depends on the size and resources available to a community, as well as state or local requirements. But, there is certainly no reason to believe that the industry is being charged unreasonable fees, or that federal action would be appropriate or permissible. In our *Mobilitie* Reply Comments as well as in our opening comments in the Wireless Infrastructure proceeding we provided thumbnails as to the way a number Smart Communities such as Ann Arbor and Cary, North Carolina set fees based upon annual use levels and budgetary insights, not by whim.²¹¹

Atlanta, Georgia, a Smart Communities member, was praised by some in the *Mobilitie* docket (*see. e.g.* ,*Mobilitie*²¹²) as a model city for deploying small cell wireless technology. On the other hand, Crown Castle criticized Atlanta in the *Mobilitie* docket for an overly expensive fee ordinance that it has yet to pass.²¹³ Atlanta explained to the Commission as part of the Smart Communities' Reply Comments in *Mobilitie*²¹⁴ and in an April 5, 2017²¹⁵ letter to the Commission that:

[Atlanta]Committee, is considering an ordinance that would establish reasonable fees for wireless pole attachments in the City's public right-of-way. Before moving the legislative

²¹⁰ Dissenting Statement of Commissioner Ajit Pai, *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375 (2015).

²¹¹ Smart Communities Reply Comments [WT Docket No. 16-421] (filed April 7, 2017) at pg 50-51.

²¹² Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> ("Jabara Interview").

²¹³ Crown Castle *Mobilitie* Comments at p.12 – The City of Atlanta files as part of these Reply Comments as Exhibit 1 a Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O'Rielly ("Atlanta Letter") that provides a different story. ("The City of Atlanta, specifically the City's Utilities.

²¹⁴ Smart Communities Reply Comments in *Mobilitie* docket at p. 10.

²¹⁵ Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O'Rielly

proposal out of Committee, the City invited the Georgia Wireless Association (“GWA”) to engage in discussions about the proposed ordinance. As a GWA member, Crown Castle has participated in three meetings at City Hall during a five week period, with a fourth meeting scheduled to occur in two weeks. The meetings were hosted by City officials from the Mayor’s Office and the Department of Public Works, and attended by approximately 20 industry representatives from GWA. In response to industry’s input, including that of Crown Castle, during the first three meetings, the City substantially restructured the proposed ordinance. None of this information, however, was included in Crown Castle’s description of the City’s ordinance that was shared with the Commission.”²¹⁶

In this docket, while Crown Castle appears to recognize that its claims against Atlanta were wrong, and does not repeat those allegations, others have, citing to Crown’s Mobilitie Comments.²¹⁷ We call this incident to the Commissions attention to not only clarify for the record Atlanta’s exemplary outreach to the industry in establishing its pricing, but also to point out the echo chamber of complaint and the lack of credibility many of these complaints possess.

Crown Castle did malign Smart Communities member Gaithersburg for considering a master right-of-way use and franchise agreement that would impose a non-refundable application fee of \$500 for each new pole or collocation, an annual attachment fee of \$500 for each facility on which equipment has been installed, and a use fee of five percent (5%) of gross revenues.²¹⁸ Much like its allegations against Atlanta in the Mobilitie docket, Crown Castle fails to mention that the City of Gaithersburg provided a 30 day comment period on the franchise agreement and fees, of which Crown took advantage. Crown offered comments on the right of way and

²¹⁶ *Id.*

²¹⁷ T-Mobile Comments at 7.

²¹⁸ Crown Castle Comments in Wireless Docket (17-79) (Filed June 15, 2017) at 12

franchise agreement which are reflected in the final draft, but Crown Castle was silent as to the fees associated with the agreement. Their silence at the local level may be attributed to the fees being modeled upon agreement that the Gaithersburg City attorney's office was able to find between Crown Castle and other Maryland jurisdictions. Why Crown fails to share these additional insights with the Commission is troubling. Such additional information would paint a fuller picture of how painstaking local government are in establishing ordinances, and permit pricing levels. This should cause the Commission to pause when relying upon allegations from Crown as to improper pricing

Finally, a third member of Smart Communities that is maligned by Crown Castle regarding the costs of permit fees is Smart Community member Montgomery County, Maryland. Montgomery County is a member of Smart Communities, but also filed Supplemental Comments and Reply Comments in the *Mobilitie* docket,²¹⁹ in which the County documented that any claims of delay or excessive fees made against the County are dwarfed by its record of success, including:

- The County has reviewed 2,900 applications in 20 years, and currently has 1,121 wireless facilities deployed at 534 unique locations throughout the County;
- The County Department of Permitting Services processes over 60,000 permits and conducts more than 157,000 inspections annually.²²⁰

Moreover, the costs of processing applications in Montgomery County are set based upon

²¹⁹ Supplemental Comments of Montgomery County, MD (filed Mar. 8, 2017) ("Montgomery County Mobilitie Comments"). Supplemental Reply Comments of Montgomery County, MD (filed April 7, 2017) (Montgomery County Mobilitie Reply Comments.)

²²⁰ Montgomery *Id.* at i.

research, and for which there is a publically available audit,²²¹ and subject to the annual budgeting process in which carriers are welcomed to participate. In fact, a close review of the costs of addressing applications in Montgomery County versus the fees collected for these services reveals a loss as the costs of outside technical assistance is covered, but many times county administrative staff's time is not.

f. *The Commission Cannot Regulate Municipal Poles Under the Guise of an Effective Prohibition*

NCTA argues that Section 253 can be used to regulate municipal poles despite the clear language of Section 224 on the basis of an unsubstantiated claim of local government “abuse of monopoly power”.²²² CTIA argues that municipal poles are not excluded from the Commission’s authority under Section 253.²²³ As we noted earlier in Section V, the industry cannot make an effective prohibition claim with respect to access to municipal poles unless municipal poles somehow get captured by Section 253, and the only way this can happen is if the proprietary interests of localities in poles or similar infrastructure are ignored, which it cannot be. As importantly, the idea that the careful limitations struck in Section 224 were overturned by Section 253 do not stand up to scrutiny. Section 224 was amended and broadened in Section 703 of the TCA. Had Congress intended to eliminate the exemption for municipal infrastructure, it would have done so there. It did not. Nor can section 253 serve as a substitute for Section 224. Section 253, by its terms, allows for preemption of a law, regulation or legal requirement. What industry wants is not preemption, but grant of an affirmative right that does not exist (the right to attach); and it seeks that right at a rate prescribed by the Commission. But because the

²²¹ The Department of Permitting Services fee audit is at FN 17
<https://permittingervices.montgomerycountymd.gov/DPS/pdf/DPSFeeFinalReport2015.pdf>.

²²² NCTA 42-44

²²³ CTIA Comments at 13.

Commission is limited by Section 253 to preemption; and lacks the authority to either grant rights or provide access under Section 224, the relief sought is beyond the authority of the Commission to provide.

g. *The Commission Cannot Preempt State Franchise Fees or Regulations Applicable to Cable Operators Under the Guise of an Effective Prohibition*

NCTA urges the Commission, under Section 253 and 541, to “prohibit local governments from imposing fees for broadband or telecommunications services offered by cable operators that place no additional burden on the public right-of-way.”²²⁴ NCTA argues that where a cable operator already pays a cable franchise fee for use of the public rights-of-way, the addition of broadband and telecommunications services does not impose an additional burden on the public rights-of-way and should not be treated by local governments as a “revenue-generating opportunity.”²²⁵ Essentially, NCTA argues that cable operators should be treated differently because they already pay a cable franchise fee for use of the public rights-of-way, and so somehow because they are doing that, it would be an effective prohibition on telecommunications services to charge them more if there is no added burden on the public rights-of-way.

NCTA urges the Commission to adopt a position that has already been proven in court to be untenable and one that goes against the plain language in the Cable Act. In the *City of Eugene v. Comcast of Oregon II, Inc.*, 359 Ore. 528 (2016), the Supreme Court of Oregon correctly held that a license fee imposed by the City of Eugene on Comcast for use of the public rights-of-way to provide telecommunications service was not a franchise fee barred by the Cable Act. Looking to the plain language of the Cable Act, the court held that it was not a franchise fee because it

²²⁴ Comments of NCTA, WC Docket No. 17-84, at 23-24 (Jun. 15, 2017).

²²⁵ *Id.*

was not imposed on Comcast *solely* because of its status as a cable operator. The court stated the following:

The problem with Comcast’s argument...is that it fails to account for the phrase “solely because of” in 47 USC § 542(g)(1). Comcast argues only that the license fee is imposed on it for activity it performs as a cable operator. At most, that argument establishes that Comcast is a cable operator and that some applications of the license fee reach cable operators. But the statute requires more. Not all fees imposed on a cable operator are franchise fees. Instead, a fee is a franchise fee if it is imposed on a cable operator solely because of its status as a cable operator. Whether the fee is imposed on a cable operator is a different question from whether the fee is imposed solely because of a company’s status as a cable operator.

Comcast errs by focusing on its status as a cable operator rather than focusing on the scope of the license fee. The phrase “solely because of” is used to identify the reason that the fee is imposed on one company rather than another. *See Webster’s* at 2168 (defining “solely” as “to the exclusion of alternate or competing things (such as persons, purposes, duties) done solely for money a privilege granted solely to him rely solely on oneself”); *id.* at 194 (defining “because of” as “by reason of : on account of”). A fee is a franchise fee if it is imposed on a company because it is a cable operator and not for any other reason.

The city’s license fee does not meet that standard. The license fee is imposed on Comcast because it provides telecommunications services over the city’s public rights of way. The relationship between that reason and Comcast’s status as a cable operator is only incidental. Although one type of company that may provide telecommunications services is a cable operator, cable operators do not necessarily provide telecommunications services and non-cable operators may provide telecommunications services. Whether a company is a cable operator is therefore neither necessary nor sufficient to trigger the license-fee requirement.²²⁶

Thus, the issue here is not whether the additional broadband and telecommunications service adds a burden on the public rights-of-way (although it may in fact do so, since facilities not required for cable may be installed in connection with the provision of non-cable services). The Cable Act chooses to limit what may be charged for cable service, but by its terms does not pretend that this is intended as compensation for *all* uses of the right of way. Rather, the

²²⁶ *City of Eugene v. Comcast of Oregon II, Inc.*, 359 Ore. 528, 557-558 (2016)

franchise fee provision is written to permit a specified fee for cable service, and to permit other non-discriminatory fees for other services as part of the fees for use of the rights of way – as long as the fees are non-discriminator.

h. *Additional Local Practices Mentioned by Industry are not Effective Prohibitions*

Industry commenters to make several declarations that certain alleged practices by local governments constitute effective prohibitions. Verizon asks the Commission to use its Sections 253 and 332 authority to find that conditions on the provision of wireless service – such as “excessive separation requirements between facilities, overly restrictive equipment size limits, and unreasonable set-back requirements from residential properties – would similarly strain a carrier’s ability to provide service” and are therefore preempted.²²⁷ Mobilitie also states that minimum distance requirements prohibiting new poles are effective prohibitions under Section 253.²²⁸

T-Mobile asks the Commission to declare that “onerous” application processes that impose “burdensome requirements on applicants is an effective prohibition”, which would include submitting information or undergoing a review process that does not have anything to do with management or use of the public rights-of-way, submitting corporate policies, documentation of licenses, and other information unnecessary to meet objective public safety and welfare standards.²²⁹

AT&T also wants the Commission to declare limitations on competitors, prohibiting batched applications, and burdensome permitting requirements all to be effective prohibitions

²²⁷ Verizon Comments at 13.

²²⁸ Mobilitie Comments at 8.

²²⁹ T-Mobile Comments at 38-39.

under Section 253.²³⁰ Similarly, Verizon also argues that burdensome permitting requirements are effective prohibitions because they impose unnecessary and unreasonable delays in the permitting process.²³¹

The issue of whether a delay in processing an application is an effective prohibition has been litigated in courts. Courts, however, have found that an extensive delay can constitute an effective prohibition, but only in combination with other factors such as a city's discretionary authority to reject a franchise on *any* public interest factor.²³² At the outset, Smart Communities has shown in its comments that delays in deployment are most often attributable to incomplete applications.²³³ Moreover, what industry commenters often allege to be burdensome permitting requirements are in reality detailed application requirements that local governments use to fully and promptly evaluate the merits of an application, knowing the unique needs of the particular community at issue. The court in *Sprint Telephony PCS, Ltd. P'ship v. Cty. of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008) found the same.²³⁴

²³⁰ AT&T Wireless Comments at 3, 21-22.

²³¹ Verizon Comments at 12.

²³² *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67, 76-77 (2d Cir. 2002).

²³³ Smart Communities Wireless Comments at 17-24.

²³⁴ The court stated the following:

“Most of Sprint’s arguments focus on the discretion reserved to the zoning board. For instance, Sprint complains that the zoning board must consider a number of “malleable and open-ended concepts” such as community character and aesthetics; it may deny or modify applications for “any other relevant impact of the proposed use”; and it may impose almost any condition that it deems appropriate. A certain level of discretion is involved in evaluating any application for a zoning permit. It is certainly true that a zoning board could exercise its discretion to effectively prohibit the provision of wireless services, but it is equally true (and more likely) that a zoning board would exercise its discretion only to balance the competing goals of an ordinance--the provision of wireless services and other valid public goals such as safety and aesthetics. In any event, Sprint cannot meet its high burden of proving that “no set of circumstances exists under which the [Ordinance] would be valid,” Salerno, 481 U.S. at 745, simply because the zoning board exercises some discretion.

The same reasoning applies to Sprint’s complaint that the Ordinance imposes detailed application requirements and requires public hearings. Although a zoning board could conceivably use these procedural requirements stall applications and thus effectively prohibit the provision of wireless

It is notable that most of these arguments depend on the incorrect assumption that Section 253 applies to wireless siting decisions. It does not, and it is not seriously argued that the applications are inconsistent with Section 332(c)(7). As Smart Communities explained in Section V.D, there is no evidence to support any conclusion that such categories of practices, described without ambiguity and without any context, arise to the level of effective prohibitions in any way, shape or form. Nor, as we have discussed in Section II.D, is there any legal basis for taking action on these complaints. Moreover, some simply ignore the fact that Section 253 is itself limited to requirements that prohibit the ability of an entity to provide telecommunications services. Traditionally, access to rights of way to install permanent facilities has been limited to governmental agencies and utilities – entities that perform public functions and have obligations to serve the public. The argument, for example, that one cannot require licenses is actually an argument that Section 253 allows anyone to access the right of way for any purpose. It does not. The Commission should reject these complaints outright.

5. *The Record Does Not Support Establishing Shot Clocks Or Deemed Granted Remedies For Franchise Applications.*

Several commenters ask the Commission to expand its use of shot clocks, currently limited to some wireless siting and cable franchise matters, to all instances where permitting is required.²³⁵ Commenters also ask the Commission to use its authority to extend deemed granted remedies to all types of deployments. As we have noted repeatedly, Section 253 has no bearing

services, the zoning board equally could use these tools to evaluate fully and promptly the merits of an application. Sprint has pointed to no requirement that, on its face, demonstrates that Sprint is effectively prohibited from providing wireless services. For example, the Ordinance does not impose an excessively long waiting period that would amount to an effective prohibition. Moreover, if a telecommunications provider believes that the zoning board is in fact using its procedural rules to delay unreasonably an application, or its discretionary authority to deny an application unjustifiably, the Act provides an expedited judicial review process in federal or state court. See 47 U.S.C. § 332(c)(7)(B)(ii) & (v).” *Sprint Telephony PCS, Ltd. P’ship v. Cty. of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008).

²³⁵ Conterra-Southern Light-Uniti Comments at 17-20.

on wireless applications. However, it would not support applications of “shot clocks” even with respect to applications for other facilities. As discussed at length by Smart Communities in initial comments²³⁶ and in these reply comments, Section 253 does not support general rulemaking of this type, and does not permit any Commission action absent a finding that a particular practice “prohibit[s] or [has] the effect of prohibiting” the ability to deploy telecommunications services.²³⁷ Section 253 sets high bars, both procedurally and substantively, which must be cleared before Commission action could proceed, including Section 253(d)’s requirements of notice and opportunity to comment on the proposed preemption of a particular “statute, regulation, or legal requirement” alleged to violate Section 253(a) or (b).²³⁸

Commenters seeking expansive shot clocks and deemed granted remedies offer no evidence to support such a finding, however. In a joint filing, Conterra, Southern Light, and Uniti Group claim that “local franchising processes that exceed 120 days” meet the requirements of Section 253(a), but offer absolutely no evidence to support this assertion.²³⁹ Commenters repeatedly argue that any process which results in “delay” amounts to a prohibition, and that delays amount to “effectively preventing the provision of telecommunications service.”²⁴⁰ Smart Communities agree that pace of deployment is an important consideration – no community is opposed to the idea of broadband deployment. All evidence suggests that deployment is proceeding apace, however, and nowhere in the joint Conterra-Southern Light-Uniti filing is any example offered of an instance where delays resulted in failure, ultimately, to deploy service.

²³⁶ Smart Communities Wireline Comments at 6-11, 21.

²³⁷ 47 U.S.C. §253(a).

²³⁸ 47 U.S.C. §253d.

²³⁹ Southern Light Conterra Uniti at 18.

²⁴⁰ *Id.* At 20

Section 253 is unambiguous on this point – only policies which prohibit, or have the effect of prohibiting, deployment, are subject to preemption under that section.

The same flaws appear in commenters' requests that the Commission implement deemed-granted remedies to kick in at the conclusion of any shot clocks. Commenters again fail to offer any substantiation to support their assertion that deemed-granted remedies are necessary to remedy practices which in fact, not merely in rhetoric, prohibit the deployment of services. And they fail to point to any substantive right the Commission is provided to grant access to any municipal property, including rights of way, under Section 253.

Finally, commenters fail to recognize that, as Smart Communities wrote in initial comments, "Section 253 entails a very different framework with a limited role assigned to the Commission. Thus, the Commission has no authority to adopt a shot clock or other time limit."²⁴¹ Smart Communities' initial analysis remains valid, and nothing in the record proffered in support of expansive Section 253-based shot clocks provides any legally sustainable alternative interpretation.

F. Wireless Industry Claims Of Unreasonable Discrimination Are Unfounded.

T-Mobile and Sprint argue the Commission should clarify that terms and access made available to any telecommunications provider must be available to all on the same terms and conditions.²⁴² In particular, T-Mobile argues that the Commission must make clear that the wireline industry cannot be subject to "more favorable" access to the public rights-of-way compared to the wireless industry.²⁴³

²⁴¹ Smart Communities Wireline Comments at 22.

²⁴² T-Mobile Comments at 45; Sprint Comments at 43.

²⁴³ T-Mobile Comments at 46.

First, as we have explained earlier, the wireless industry cannot avail itself of Section 253 because that statute does not apply to wireless service. Even if it did, by arguing that undergrounding requirements, for example, do not apply to them when such requirements are imposed on the wireline industry, the wireless industry is making a self-refuting argument because it is essentially asking to be treated like the wireline industry except when they want to be treated differently. In essence they are acknowledging that asymmetric treatment does not violate Section 253, and that, in fact, there are significant differences between traditional wireline facilities and wireless facilities.²⁴⁴

Second, as Smart Communities noted in its comments, given that Section 253 does not apply to wireless deployments. The only non-discrimination provision that applies to wireless appears in Section 332(c)(7)(B)(i)(I), 332(c)(7) which and prohibits state and locals governments from refers to unreasonably discriminating among providers of functionally equivalent services. Courts and the legislative history make clear that for the limited purpose of applying Section 332(c)(7)(B)(i)(I), wireless and wireline services cannot be considered “functionally equivalent.”

T-Mobile’s position has no support in either legislative history or case law. The House Conference Report states that the term “functionally equivalent services” refers “only to personal wireless services that directly compete against one another” or as interpreted by the 7th Circuit, “... the statute requires the decision maker to see if the two services (or products) are direct substitutes for one another and thus are in direct competition with one another.” While wireless and wireline services may both provide voice, they are hardly direct substitutes. The Second Circuit added further clarification to the House Report and 7th Circuit when it explained:

²⁴⁴ The Commission’s interpretation of Section 6409 illustrates the point. It does not limit wireless to using utility poles at a height consistent with those elsewhere in the rights of way – it permits an expansion of one-quarter to one half of a pole’s height. It does not limit the size or location of attachments to those typical on a utility pole. If a facility is not subject to concealment elements, six foot appurtenances can be added to the sides of the poles, in configurations that far exceed what is traditionally permitted in the rights of way.

Sprint's ability to compete with land-line based services simply is not part of the inquiry under subsection B [of Section 332(c)(7)]. Subsection B(i)(I) speaks only to Sprint's ability to compete with "functionally equivalent services," which does not include land-line services. See H.R. Conf. Rep. No. 104-458, at 208, reprinted in 1996 U.S.C.C.A.N. at 222 ("When utilizing the term 'functionally equivalent services' the conferees are referring only to personal wireless services that directly compete against one another."). Because subsection B(i)(II) only considers whether a town's decision will have the effect of prohibiting personal wireless services in a given area, Sprint's reliance on that subsection to contend that it cannot be prohibited from competing effectively with land-line systems is misplaced.

Indeed, neither Section 253 nor Section 332(c)(7) require local governments to treat different types of telephone or personal wireless companies identically.²⁴⁵ The concern in Section 253(c)'s safe harbor is on a competitively neutral and nondiscriminatory basis between telecommunications competitors, not between telecommunications providers and others.²⁴⁶ Even if Section 253(c)'s safe harbor is applicable to "asymmetric treatment" between telecommunications and non-telecommunications providers, Section 253(c)'s safe harbor is applicable unless there is a significant imbalance; and if the difference in treatment is not justified.

²⁴⁵ What wireless providers are seeking really is quite different. Smart Communities really have traditionally approved only wires, running along the roadway, where facilities are allowed aboveground; and only as a secondary use. Traditionally, headend, central offices and the other operating elements have been placed off the public rights-of-way. Here, wireless providers are placing many of those permanent facilities in the public rights-of-way, in ways that require much larger deployments. It is not discrimination to treat such different facilities differently, and to focus on their impacts.

²⁴⁶ Smart Communities Wireless Comments at 70-71.

VI. CONCLUSIONS

For the reasons discussed above, and in the expert declarations and reports, the Commission should not adopt additional rules or shot clocks directed at local governments; nor should it continue to pursue the topics raised in the Notices of Inquiry.

Respectfully submitted,

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July 17, 2017

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**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO	)	WT Docket No. 17-79
INFRASTRUCTURE INVESTMENT)	

ACCELERATING WIRELINE)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO	)	WC Docket No. 17-84
INFRASTRUCTURE INVESTMENT)	

**REPLY COMMENTS OF SMART COMMUNITIES
AND SPECIAL DISTRICTS COALITION**

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July 17, 2017

SUMMARY OF REPLY COMMENTS OF THE SMART COMMUNITIES AND SPECIAL DISTRICTS COALITION

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia. Smart Communities filed separate initial comments in each of the above-captioned proceedings. In these reply comments we respond to issues raised in both proceedings in a single filing submitted in both dockets as several of the comments to which we respond were filed verbatim in both dockets.

We begin by addressing our perspective on the lack of need for new federal rules or rulemakings, and articulates Smart Communities’ vision for how industry and regulators can most effectively move forward together to address the challenges and fulfill the promise of next generation wireless and wireline infrastructure. The record in these dockets reflects an industry response that is brimming with demands for federal action but woefully low on evidence of need or sound legal reasoning. Although local government filings in the *Mobilitie* docket included expert reports and the infrastructure Notices of Inquiry (“NOIs”) and Notices of Proposed Rulemaking (“NPRMs”) issued in these proceedings called for specificity, the industry comments did not include expert rebuttal and provided very few specific factual examples of problems claimed (but many unsupported claims to which it is impossible to respond). The Coalition’s unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;
- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;

- There is a significant expense associated with reviewing the applications that needs to be recovered;
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.

The implications should be obvious – the record does not support further Commission action espoused by industry.

By that we do not mean to say there is no work to be done to prepare for the next generation of deployments. To the contrary, Smart Communities recognize new types of deployments raise novel issues related to safety, aesthetics, permitting and related matters, but we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve these issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process. We are working on these issues and welcome further opportunities to participate in collaborative processes with industry that recognize and respect the unique roles of federal, state, and local governments in the regulation of wireless and wireline infrastructure.

We then reply to comments filed in the Wireless NPRM, particularly those addressing the proposed “deemed granted” remedy for the Section 332 shot clocks, modifications to shot clocks, and moratoria. No legal arguments raised by commenters who urge the Commission to change course and adopt a deemed granted remedy rest on sound principles. The Commission should reaffirm its prior rulings in this regard. The industry’s predictable calls for shorter shot clocks and other modifications should also be rejected as they are not supported by convincing legal or factual bases for action, and ignore that the legal focus of the statute is on what is a

“reasonable time” for completing the necessary regulatory action, not on an industry desire for speed to market. For actual, legal moratoria, the existing Commission’s rules are clear that moratoria do not stop the shot clocks and the record does not support a need for further action.

Finally, Smart Communities address industry comments raising myriad issues in response to the two infrastructure NOIs – specifically Part III of the Wireless NOI, and Part III.A of the Wireline NOI which also address various legal issues related to the scope of Communications Act provisions such as Sections 224, 253, and 332(c)(7). Industry comments in response to these NOIs read like wish lists. There are broad calls for preemption of local government authority to address issues from aesthetics to permits fees to undergrounding, calls for imposing new federal regulatory regimes on public rights-of-way and publicly-owned infrastructure such as utility poles and street lights, calls to overturn well-established court precedent, and the like. These demands for action are unaccompanied by a demonstration of meaningful harms or actual prohibitions or barriers to deployment. They lack sound legal support, and invite the Commission to violate basic Constitutional principles. Providers may not like that the law guarantees states and local governments a role in the deployment of wireline and wireless facilities, but that alone does not entitle them to federal preemptive action. In sum, industry filings and the record are devoid of solid legal or factual foundations for any declaratory rulings, rulemakings or even further exploratory proceedings. The Commission should not engage in further regulatory proceedings on the topics in the NOIs. It would be arbitrary, capricious, and counter-productive to impose additional federal regulations – there is no reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

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**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter of

ACCELERATING WIRELESS)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO)	WT Docket No. 17-79
INFRASTRUCTURE INVESTMENT)	
)	
ACCELERATING WIRELINE)	
BROADBAND DEPLOYMENT BY)	
REMOVING BARRIERS TO)	WC Docket No. 17-84
INFRASTRUCTURE INVESTMENT)	

**REPLY COMMENTS OF SMART COMMUNITIES
AND SPECIAL DISTRICTS COALITION**

I. INTRODUCTION

The Smart Communities and Special Districts Coalition (“Smart Communities”) is comprised of individual localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia.¹

¹ The Smart Communities and Special Districts Coalition is comprised of the following members:

Individual members: Ann Arbor, MI; Atlanta, GA; Boston, MA; Cary, NC; Corona, CA; Dallas, TX; District of Columbia; Elsinore Valley Municipal Water District (CA); Frederick, MD; Gaithersburg, MD; Greenbelt, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; Marin Municipal Water District (CA); McAllen, TX; Montgomery County, MD; Myrtle Beach, SC; North County Fire Protection District (CA); Ontario, CA; Padre Dam Municipal Water District (CA); Portland, OR; Rye, NY; Santa Clara, CA; Santa Margarita Water District (CA); Sweetwater Authority (CA); Valley Center Municipal Water District (CA); and Yuma, AZ.

Organizations Representing Local Governments: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of Michigan cities that focuses on protection of their citizens’ governance and control over public rights-of-way. The Michigan Townships Association (“MTA”) promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position. The Michigan Municipal League (“MML”) is a non-profit Michigan

II. SUMMARY

Smart Communities filed separate initial comments in each of the above-captioned proceedings.² In these reply comments we respond to issues raised in both proceedings in a single filing submitted in both dockets, as several of the comments to which we respond were filed verbatim in both dockets.³

We begin by addressing our perspective on the lack of need for new federal rules or rulemakings, and articulates Smart Communities' vision for how industry and regulators can most effectively move forward together to address the challenges and fulfill the promise of next generation wireless and wireline infrastructure. The record in these dockets reflects an industry response that is brimming with demands for federal action but woefully low on evidence of need or sound legal reasoning. Although local government filings in the *Mobilitie* docket included expert reports and the infrastructure Notices of Inquiry ("NOIs") and Notices of Proposed Rulemaking ("NPRMs") issued in these proceedings called for specificity, the industry comments did not include expert rebuttal and provided very few specific factual examples of problems claimed (but many unsupported claims to which it is impossible to respond). The

corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance.

The Kitch Firm represents PROTEC, MML, MTA and Public Corporation Law Section of the State Bar of Michigan. Best Best & Krieger represents the others in the Smart Communities coalition.

² Comments of Smart Communities and Special Districts Coalition, WC Docket No. 17-84 (Jun. 15, 2017) ("Smart Communities Wireline Comments"); Comments of Smart Communities and Special Districts Coalition, WT Docket No. 17-79 (Jun. 15, 2017) ("Smart Communities Wireless Comments").

³ In addition to the issues discussed below, the Commission has proposed a wholesale reversal of network change notification requirements to consumer, safeguards that were adopted in the 2015 Technology Transitions order. While Smart Communities supports the important transition to IP-based networks, such change should not come at the expense of important functions served by local government, nor at the expense of local businesses and residents who make up the constituencies Smart Communities represent. Our constituents, corporate, institutional, and individual, rely on a robust and reliable telecommunications network, and network changes and copper retirement notifications play a critical role in preserving the stability of that network. Smart Communities opposes the Commission's proposal to abandon these rules, and echoes the arguments made in defense of the 2015 Tech Transitions Order proffered by Public Knowledge and others. *See, e.g.* Comments of Public Knowledge, WC Docket No. 17-84 (Jun. 15, 2017) ("Public Knowledge Comments").

Coalition's unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;
- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;
- There is a significant expense associated with reviewing the applications that needs to be recovered;
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.

The implications should be obvious – the record does not support further Commission action espoused by industry.

By that we do not mean to say there is no work to be done to prepare for the next generation of deployments. To the contrary, Smart Communities recognize new types of deployments raise novel issues related to safety, aesthetics, permitting and related matters, but we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve these issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process. We are working on these issues and welcome further opportunities to participate in collaborative processes with industry that recognize and respect the unique roles of federal, state, and local governments in the regulation of wireless and wireline infrastructure.

Section IV of this filing replies to comments filed in the Wireless NPRM, particularly those addressing the proposed “deemed granted” remedy for the Section 332 shot clocks,

modifications to shot clocks, and moratoria. No legal arguments raised by commenters who urge the Commission to change course and adopt a deemed granted remedy rest on sound principles. The Commission should reaffirm its prior rulings in this regard. The industry's predictable calls for shorter shot clocks and other modifications should also be rejected as they are unsupported by convincing legal or factual bases for action, and ignore that the legal focus of the statute is on what is a "reasonable time" for completing the necessary regulatory action, not on an industry desire for speed to market. For actual, legal moratoria, the existing Commission's rules are clear that moratoria do not stop the shot clocks and the record does not support a need for further action.

Section V addresses industry comments raising myriad issues in response to the two infrastructure NOIs – specifically Part III of the Wireless NOI, and Part III.A of the Wireline NOI which also address various legal issues related to the scope of Communications Act provisions such as Sections 224, 253, and 332(c)(7). Industry comments in response to these NOIs read like wish lists. There are broad calls for preemption of local government authority to address issues from aesthetics to permits fees to undergrounding, calls for imposing new federal regulatory regimes on public rights-of-way and publicly-owned infrastructure such as utility poles and street lights, calls to overturn well-established court precedent, and the like. These demands for action are unaccompanied by a demonstration of meaningful harms or actual prohibitions or barriers to deployment. They lack sound legal support, and invite the Commission to violate basic Constitutional principles. Providers may not like that the law guarantees states and local governments a role in the deployment of wireline and wireless facilities, but that alone does not entitle them to federal preemptive action. In sum, industry filings and the record are devoid of solid legal or factual foundations for any declaratory rulings,

rulemakings or even further exploratory proceedings. The Commission should not engage in further regulatory proceedings on the topics in the NOIs. It would be arbitrary, capricious, and counter-productive to impose additional federal regulations – there is no reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

III. THE RECORD SHOWS THERE IS NO NEED FOR MORE FEDERAL RULES OR RULEMAKING PROCEEDINGS

A. The Record Reflects A Lack Of Evidence Of Actual Harms Or Prohibitions On Deployment, Showing That There Is No Need For Further Commission Action

1. Industry Filings Don't Comply With Commission Requirements And Don't Demonstrate Widespread Problems.

The issues raised in these dockets are virtually identical to those raised in the pending *Mobilitie* docket⁴ and as a result, at the time they filed comments in these dockets, supporters of additional Commission regulations and federal takings of property for the benefit of companies who are assuming no obligations to provide service to the public, were well aware that there was substantial opposition to additional rules based on (a) economic, safety, and other studies demonstrating that the sorts of rules proposed would not advance the public interest, and could lead to substantial harms that would delay 5G deployment; (b) information that showed that some wireless providers and some wireless infrastructure providers were seeking to install, and were installing intrusive and unsafe wireless installations as “small cell” installations; (c) a careful rebuttal of claims by the wireless industry of widespread abuse. Commenters also noted that industry had by and large failed to provide specific, supported examples of significant deployment problems caused by states or localities.

⁴ *Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling*, WT Docket No. 16-421 (“*Mobilitie* petition”). The comments filed by Smart Communities in the *Mobilitie* docket are referred to herein as “*Mobilitie* Docket Smart Communities Comments” (filed March 8, 2017) and “*Mobilitie* Docket Smart Communities Reply Comments” (filed April 7, 2017).

Among other things, members of this coalition, their experts and other local public agencies submitted substantial facts and evidence in the Mobilitie docket⁵ and again in comments in these dockets which demonstrated that where delay has been documented, the vast majority of delay can be attributed to incomplete applications and siting requests that are improperly made, not to local barriers.

Having already seen those filings, and in light of the language of the NOIs and NPRM issued in this proceeding, one would have expected for the initial industry comments to include some expert rebuttal, specific factual examples of problems claimed (rather than unsupported claims to which it is impossible to respond). Instead, the record thus far reflects a startling absence of meaningful substantiation to support service provider assertions that substantial barriers exist to broadband deployment. Aesthetic requirements, duration of shot clocks, costs and fees, and other terms and conditions associated with accessing public rights-of-way and governmental infrastructure are broadly assailed in the record, but are rarely supported by citations to specific communities or policies or examples of actual harm arising from such policies.

To the extent relief rests on Section 253,⁶ the record even more convincingly fails to justify the oft-repeated assertions that these barriers rise to a level sufficient to satisfy Section 253's language regarding policies that prohibit or have the effect of prohibiting deployment. Commenters point instead to policies which may cause them to incur some costs as they seek to take advantage of municipal rights-of-way and municipal infrastructure, or that may inconvenience providers as they seek to gain access to municipal resources in order to offer service to consumers.

⁵ See generally *Id.*

⁶ 47 U.S.C. § 253.

With few exceptions, commenters seeking Commission action against local authority fail to respond to the Commission's requests, much less heed, the statutory language of Section 253(d) in their comments. Furthermore, Section 253(d) requires that, before the Commission may utilize its authority to preempt under Section 253(a) or (b), it must provide notice and seek comment on particular state or local policies, rules, or regulations at issue. The Commission asked commenters to "explain their concerns in sufficient detail to allow State and local governments to respond," yet the record remains light on particularized examples of complaints.⁷ As Smart Communities discussed at length in initial comments, and further examined below, Section 253(d) serves to limit the Commission's ability to engage in general rulemaking pursuant to Section 253's preemption authority. Particularized identification of policies at issue is required by statute, but the record is largely devoid of these essential details. Smart Communities trust that the Commission will disregard improperly formed claims for relief which fail to comply with Section 253(d). As a general matter, whether raised in the NPRM, in the NOIs or otherwise, such nameless and vague accusations are not "sufficiently supported and credible for purposes of decisional reliance" and thus should be ignored by the Commission.⁸

2. *Carriers Continue To Celebrate Their Accelerating Deployment, While Telling The Commission They Need Relief From Barriers Which Prevent That Deployment.*

Were the comments of wireless providers in these proceedings to be believed, a vast array of practices implemented by state and local governments are having a crippling impact on the ability of wireless providers to deploy new services to meet consumer demands and compete

⁷ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 17-79, ¶94 (rel. Apr. 21, 2017) ("Wireless NPRM/NOI").

⁸ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Order Denying Request for Extension of Time, WT Docket No. 17-79, FN 6 (rel. Jul. 13, 2017).

in the marketplace.⁹ The public statements of those same companies, however, suggest otherwise. All four major nationwide wireless carriers are engaged in aggressive deployment of innovative technologies at a breakneck pace, and take every opportunity to celebrate their deployment and innovation. To be sure, celebrating the important progress these companies are making in deploying wireless services is an essential part of their marketing and business strategies, but their statements and releases announcing deployment plans and success stories stands in stark contrast to the litany of complaints and claims of prohibitions upon deployment submitted here. Actual or *de facto* prohibitions – that narrow category of policies the Commission has authority to preempt – would surely prevent providers from achieving just the kinds of deployment and investment successes they so frequently celebrate.¹⁰

As stated in our initial comments, the designs and standards for true 5G have not been set, carriers are in the process of conducting technical trials, and test roll-outs, without any real indication that ultimate deployment will be delayed. In its 2016 Annual Report, Lowell McAdam, President and CEO of Verizon Communications, Inc., wrote “In 2016, we conducted successful technical trials of 5G infrastructure and will follow up in 2017 with pre-commercial pilots in 11 markets around the country in preparation for introducing fixed wireless service.”¹¹ In September 2016, AT&T announced that it was nearly ready for field trials of its Project

⁹ See, e.g. Comments of AT&T, WT Docket No. 17-79 at 2 (Jun. 15, 2017) (“AT&T Wireless Comments”); Comments of T-Mobile, WC Docket No. 17-84, WT Docket No. 17-79, at 3 (Jun. 15, 2017) (“T-Mobile Comments”); Comments of Sprint Corporation, WC Docket No. 17-84, WT Docket No. 17-79, at ii (Jun. 15, 2017) (“Sprint Comments”); Comments of Verizon, WC Docket No. 17-84, WT Docket No. 17-79, at 1 (Jun. 15, 2017) (“Verizon Comments”).

¹⁰ For purposes of this discussion, we are not distinguishing between a claim of effective prohibition under Section 253, and a claim of effective prohibition under Section 332. As we explained in our initial filing, where wireless siting is involved, Section 253 does not apply at all.

¹¹ Lowell McAdam, Chairman and Chief Executive Officer, Verizon Communications Inc., Annual Letter to Shareholders (Dec. 2016), *available at* http://www.verizon.com/about/sites/default/files/annual_reports/2016/letter.html.

AirGig technology to deliver wireless broadband using power line infrastructure, announcing that they “expect to kick off [their] first field trials in 2017.”¹²

Of course, most of the deployment now occurring does not involve 5G (although that is often a code word used to justify preemption); rather deployment today involves continued roll-out of fourth generation LTE technology and densification of 4G networks. That also proceeds apace.¹³ T-Mobile celebrated expanding its network by more than 2000 new cell sites over the course of 2016.¹⁴ Sprint routinely announces network densification efforts, including recent promises to bring “hundreds of network enhancements” to metropolitan areas like Milwaukee, Chicago, Detroit, and New Orleans, since March 2017 alone.¹⁵ These ongoing investments and densification efforts suggest a marketplace which is permissive, rather than prohibitive, where deployment is concerned.

If local policies rose to the level of prohibitions, this level of deployment simply would not be happening. Providers may not like that the law guarantees states and localities a role in the deployment of wireline and wireless technologies, but that does not entitle providers to

¹² Press Release, AT&T Labs’ *Project AirGig Nears First Field Trials for Ultra-Fast Wireless Broadband Over Power Lines*, (Sep. 20, 2016), http://about.att.com/newsroom/att_to_test_delivering_multi_gigabit_wireless_internet_speeds_using_power_lines.html

¹³ The wireless industry’s own data makes it clear that deployment is proceeding. Scott Bergmann Prepared Statement to House E&C, April 5, 2017: “In just seven years, wireless providers have blanketed the country with \$200 billion in network spending to deliver 4G LTE mobile broadband nationwide. Today, 99.7 percent of Americans have access to 4G LTE service, and 95.9 percent can choose from three or more 4G LTE providers.”

¹⁴ T-Mobile 2016 Annual Report (2017) (“We had approximately 66,000 cell sites, including macro sites and distributed antenna system network nodes as of December 31, 2016, compared to approximately 64,000 cell sites as of December 31, 2015”), available at <http://investor.t-mobile.com/Cache/1001223313.PDF?O=PDF&T=Y=&D=&FID=1001223313&iid=4091145>.

¹⁵ See, e.g. Press Release, *The Secret’s Out! Sprint to Illuminate Chicago with Thousands of Network Enhancements and 100+ New Stores* (May 8, 2017), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2017/The-Secrets-Out-Sprint-to-Illuminate-Chicago-with-Thousands-of-Network-Enhancements-and-100-New-Stores/default.aspx>; Press Release, *Sprint’s New Cell Sites Hit Network Coverage Out of the Park in Downtown Detroit* (Apr 3, 2017), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2017/Sprints-New-Cell-Sites-Hit-Network-Coverage-Out-of-the-Park-in-Downtown-Detroit/default.aspx>.

preemptive action. The law does not entitle carriers to relief from the costs of doing business – only from prohibitions.

3. *Industry Supporters Failed To Provide Any Expert Evidence To Back Their Claimed Impacts Of Local Regulation And Practices On Investment.*

The record developed in this proceeding fails to provide substantive economic analysis to substantiate alleged harms to providers or barriers which have the effect of prohibiting deployment. The Information Technology and Innovation Foundation’s submission, for example, speaks at length of the risks posed by “legacy, inefficient processes that are not well suited to modern network deployment” but then jumps straight to policy proposals to ‘solve’ the problem, without offering any clear examples of harm to substantiate those claims.¹⁶

Industry assertions that broadband investment and deployment is hampered by local policies remain largely unsubstantiated. Commenters generally fail to offer substantive economic analysis to support their assertion that, but for municipal policies, broadband deployment would be happening that simply isn’t happening today (and thus would satisfy Section 253’s requirements to justify preemption). Additionally, broadband providers fail to offer sworn statements from executives which might support their positions.¹⁷

Furthermore, the record reflects a striking lack of studies or independent analysis proffered by industry stakeholders in support of their demands and assertions. As discussed in

¹⁶ Comments of the Information Technology and Innovation Foundation, WC Docket No. 17-84, WT Docket No. 17-79, at 2 (Jun. 15, 2017) (“ITIF Comments”).

¹⁷ In contrast to the absence of substantive evidence presented by aggrieved parties in support of their claims in this proceeding, it is not uncommon for parties seeking to substantiate their assertions when requesting Commission relief, to substantiate their grievances with sworn declarations. *See, e.g.*, Comments of DISH Network, Declaration of Melisa Ordonez, Director, Local Programming, GN Docket No. 16-142 (May 9, 2017). In fact, sworn statements of precisely this nature have been submitted in the wireline proceeding captioned above. *See* Declaration of Susan M. Baldwin on behalf of the National Association of State Utility Consumer Advocates, et. al., WC Docket No. 17-84 (Jun. 15, 2017), No party claiming harm or requesting preemption in this proceeding has offered such a statement to support their claims.

the *Mobilitie* docket and Smart Communities’ initial filings, the Accenture report (reentered in this docket by the Free State Foundation¹⁸) lacks substantiation for its claims of 24-month delays in application processing, lacks specific examples or evidence to support claims of “challenges” facing small cell providers, lacks empirical analysis and evidence, and concludes that in any event, deployment is proceeding apace.¹⁹ The one new whitepaper submitted comes from Deloitte, regarding the future of broadband deployment.²⁰ While it identifies a number of policies which it alleges have a bearing on the future of broadband, its contents do not actually address prohibitions or barriers to deployment. It does not appear to discuss local policies at all. Indeed, when describing those federal and state (but not local) policies which are allegedly the source of problems, the report does not at any point describe them as barriers, prohibitions, obstacles, or impediments to the deployment of networks – wireline or wireless.²¹ Instead, it focuses on the *transition* to IP-enabled services; a distinct and separate issue raised by the Commission in the Wireline NPRM. It discusses rules and policies as “regulations that prevent IP migrations” but at no point offers even any text, let alone evidence or analysis which substantiates, a connection between those policies and allegedly reduced broadband deployment. The Deloitte report, in total, describes the future need for broadband infrastructure, but barely addresses or even suggests that any policies related to deployment pose so much as an inconvenience, let alone an outright prohibition.

¹⁸ See Comments of the Free State Foundation, WT Docket No. 17-79 (Jun. 15, 2017)

¹⁹ Accenture Strategy study, filed in a January 13, 2017 *ex parte* by CTIA entitled “Smart Cities; How 5G Can Help Municipalities Become Vibrant Smart Cities” (“Accenture Study”). The rebuttal was in the ECONorthwest Reply Report.

²⁰ Deloitte Report Entitled “Communications infrastructure upgrade: the need for deep fiber”, WT Docket No. 17-79 (Jul. 11, 2017).

²¹ *Id.* at 20.

Other groups which allege substantial barriers are similarly unable to offer substantiation for their assertions. The R Street Institute offers some examples, but fails to provide policy justification for the broad preemption and rulemaking-based approach it seeks, or to connect the dots between those particular data points it discusses, and any lost or prohibited deployment.²² At no point does the record provide any economic or other substantive evidence that broadband deployment that would otherwise be happening, is not moving forward due to the role of local governments. The absolute most any commenter is able to offer on this point are legal arguments in favor of an expansive interpretation of the Commission's statute. Such a reading is industry commenters' only hope of success precisely because they are unable to present any substantive proof to support their claims.²³

4. *The Coalition's Expert Reports Demonstrated New Rules Aimed At Local Governments Are Unnecessary And Could Be Counter-Productive Have Not Been Refuted.*

In the *Mobilitie* docket, members of this coalition submitted numerous expert reports, which were resubmitted in the comments round of these two proceedings, along with additional expert reports previously presented to the Commission.²⁴ No one provided expert evidence to challenge the conclusions of these reports in the *Mobilitie* docket or in the comments filed in the present dockets. The Coalition's unrefuted expert reports show, among other things, that:

- Small cells can have significant impacts on safety and on property values, because small cells are not necessarily small;²⁵

²² See Comments of the R Street Institute, WT Docket No. 17-79, at 6-9 (Jun. 15, 2017) ("R Street Institute Comments").

²³ *Id.*

²⁴ See generally Smart Communities Wireless Comments at Exhibits 1-7; Smart Communities Wireline Comments at Exhibits 1-3.

²⁵ "Report and Declaration of Andrew Afflerbach For the Smart Communities Siting Coalition" (referred to herein as the "CTC Declaration"). The CTC Declaration was attached to the Smart Communities Wireless Comments as Exhibit 1; "Definitions of Small Cells, and the Review of Small Cell Applications, Supplemental Report" (referred to herein as the "CTC Reply Report"). The CTC Reply Report was attached to the Smart Communities Wireless

- While many localities are making significant efforts to accommodate small cells, the applications are often not properly prepared, sometimes lacking even basic engineering analysis, and therefore require multiple submissions and resubmissions;²⁶
- There is a significant expense associated with reviewing the applications that needs to be recovered;²⁷
- Allowing localities to recover costs and obtain fair market value for property (including public rights-of-way) used will actually enhance deployment, and ensure that advanced systems are deployed in a rational way;²⁸
- There is no reason to suppose charging less than market rates for public property or public rights-of-way will lead to deployment of 5G or advanced systems in a rational way.²⁹

In contrast to the unsupported allegations of those seeking additional federal regulations, the Coalition’s expert analyses are the only analyses that are “sufficiently supported and credible for purposes of decisional reliance” and thus should be weighed heavily by the Commission when considering taking any actions in these dockets.³⁰ Those analyses show that it would be arbitrary, capricious and counter-productive to impose additional federal regulations – there is no

Comments as Exhibit 1A; “Report and Declaration of David E Burgoyne for the Smart Communities Siting Coalition”(referred to herein as the “Burgoyne Declaration”). The Burgoyne Declaration was attached to the Smart Communities Wireless Comments as Exhibit 3; “Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition” (referred to herein as the “Puuri Declaration”). The Puuri Declaration was attached to the Smart Communities Wireless Comments as Exhibit 4.

²⁶ CTC Declaration and CTC Reply Report.

²⁷ *Id.*

²⁸ “The Economics of Government Right of Way Fees” (referred to herein as the “ECONorthwest Declaration”). The ECONorthwest Declaration contains an economic analysis of the effect of limiting the amounts that may be charged for use of the public rights-of-way and concludes that the rulings sought by Mobilitee will not promote economically efficient deployment of public rights-of-way and will discourage innovation. The ECONorthwest Declaration was attached to the Smart Communities Wireless Comments as Exhibit 2. “Reply Declaration of Kevin E. Cahill, PhD, Regarding the Accenture Report and the Economics of Local Government Right of Way Fees” (referred to herein as the “ECONorthwest Reply Report”). The ECONorthwest Reply Report was attached to the Smart Communities Wireless Comments as Exhibit 2A.

²⁹ ECONorthwest Declaration and ECONorthwest Reply Report.

³⁰ *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Order Denying Request for Extension of Time, WT Docket No. 17-79, FN 6 (rel. Jul. 13, 2017).

reason to suppose any legitimate interest would be advanced, and federal preemption is not supported.

B. Respect For The Federal System Of Government And Its Division Of Powers And Responsibilities Would Better Serve Communities And Industry

1. Placement Will Always Be A Fundamentally Local Endeavor

In crafting the Communications Act of 1934 (“Act”) and its subsequent amendments and revisions, Congress has always exercised particular care to respect the important roles played by states and local governments in the deployment and governance of communications technologies and services. This shared-jurisdiction framework ensures that an appropriate balance is struck between consistent national policy, respect for our system of laws and the role states play in that system, and the quintessentially local nature of infrastructure deployment and service delivery as it takes place on a community-by-community basis. Smart Communities reiterate their concern that the Commission, by its proposals, and industry supporters through their comments, either fail to recognize and respect this critical distinction, or seek to disregard the clear design of Congress by dismissing the role of states and local governments wherever it suits. Siting and deployment of wireless and wireline facilities will always be a fundamentally local matter, both in the law and in practice. Congress devoted sections of the Act to preserving and protecting that local role, and balancing it where appropriate, but at no point does the Act give the Commission the authority to simply clear localities out of the way for providers’ convenience.

2. The Commission Should Encourage Further Cooperative Efforts Through Existing Mechanisms.

In Smart Communities’ opening comments, we urged the Commission to encourage further cooperative efforts in fora already established such as the Broadband Deployment Advisory Council (“BDAC”) and the Intergovernmental Advisory Committee. While it is notable that industry support for such partnership opportunities in comments is often either

absent or vague,³¹ some in industry *did* express support for this approach at least to an extent.³²

We sincerely hope that Commission will focus on cooperative and collaborative initiatives in existing fora rather than continuing to pursue unnecessary and ultimately unnecessary preemptive actions.

This is particularly true with respect to comments urging the Commission to set the prices, terms and conditions for access to public property. As we pointed out in our initial comments, the Commission lacks authority to set those terms and conditions. The industry comments fail to actually acknowledge or even mention some of the actual complexities associated with requiring provision of access to street lights and other vertical structures at cost. One notable example of an incident where a wireless provider installed facilities itself without authorization was the *Malibu Canyon Fire of 2007*, which burned 3,836 acres, 36 vehicles and 14 structures, including Castle Kashan and the Malibu Presbyterian Church. The fire also damaged 19 other structures and injured three firefighters.³³ After almost six years, the California Public Utilities Commission approved a settlement over \$50 million, and imposed re-inspection requirements for utility poles.³⁴ The California Public Utilities Commission is now

³¹ Comments of Crown Castle, WC Docket No. 17-84, at 53 (Jun. 15, 2017) (“Crown Castle Comments”).

³² Comments of CALTEL, WC Docket No. 17-84, at 18 (Jun. 15, 2017) (“CALTEL Comments”) (“CALTEL believes that the development of recommendations and best practices by the Broadband Deployment Advisory Council (BDAC) is probably the most effective and efficient way to surface and resolve concerns about unreasonable terms and conditions, including local moratoria”); Comments of the Wireless Infrastructure Association, WT Docket No. 17-79, WC Docket No. 17-84, at 6, 25 (Jun. 15, 2017) (“WIA Comments”) (acknowledging a role for the BDAC in addressing wireless deployment obstacles and resolving fee disputes); Comments of Extenet, WT Docket No. 17-79, WC Docket No. 17-84, at 15-16, 51 (Jun. 15, 2017) (“Extenet Comments”) (suggesting BDAC role developing model safe harbor license or pole attachment agreements).

³³ Melissa Caskey, *CPUC Approves \$51.5 Million Malibu Canyon Fire Settlement*, The Malibu Times (Sep. 19, 2013), available at http://www.malibutimes.com/news/article_3d62067a-2175-11e3-86b6-001a4bcf887a.html.

³⁴ California Public Utilities, Data Request, (Jan. 27, 2017). Check D.13-09-026, D.13-09-028

pursuing several proceedings specifically to tackle issues related to reconciling competitive wireline and wireless access with utility pole safety.³⁵

All of this is to say, the installation of structures in the public rights-of-way, and the attachment of devices to those structures raises safety issues and inspection issues that must be addressed properly. Those include questions as to liability: who will pay for inspections (which themselves can be quite costly), who will pay for engineering analyses, and so on.³⁶ Any strict federal rule by the Commission would go beyond preemption (all that is permitted under Section 253 or Section 332), to effective *prescription*. Any rule which required taxpayers to effectively subsidize the lease of public property in any way – including by requiring them to assume an ongoing risk of error or to pay for inspections without full compensation – would not only require justification far beyond what is within this record, but would also raise significant issues under the Fifth and Tenth amendments, and would exceed any obvious source of authority. In addition, the use of local government structures can foreclose use of the structure for important public purposes because the space within and upon such structures is limited. Rules compelling access have significant future effects on infrastructure. Some of the elements that are criticized by commenters (requiring that attachers maintain an inventory of street poles³⁷) are actually critical to public safety: the types of poles required to support wireless installations are often not poles that are readily available to a locality, and if a street light is downed, and there is no

³⁵ Order Instituting Investigation into the Creation of a Shared Database or Statewide Census of Utility Poles and Conduit in California, I.17-06-027 (June 29, 2017); Order Instituting Rulemaking into Access by Competitive Communications Providers to California Utility Poles and Conduit, Consistent with the Commission's Safety Regulations, R.17-06-028, consolidated with R.17-03-009 (Order Granting Petition 16-08-016, and . . . Instituting Rulemaking to consider Amendments to the Revised Right of Way Rules Adopted in D.16-01-046 (WIA Petition/Rulemaking), issued on April 3, 2017).

³⁶ Giuseppe Parise, Luigi Martirano, and Massimo Mitolo, *Electrical Safety of Street Light Systems*, IEEE, April 29, 2011 (available at <http://ieeexplore.ieee.org/document/5756684/>). Attachments to street lights likewise create risks given that street lights themselves under fault conditions, present hazards to the public.

³⁷ Conterra-Southern Light-Uniti Comments at 12.

available pole, that creates an ongoing risk. Asking localities to maintain an inventory of spare poles that they would not normally have in order to lease those facilities to wireless providers at cost is nothing more than a tax on the public – a tax the Commission has no authority to impose, but should not impose as a matter of policy.

The details of access are not simple, and federal rules – even if they could be developed – would need to carefully balance and address many intersecting issues. Localities, states and industry are working to develop contracts and other rules that permit access to different types of vertical structures. Much like the perspective expressed by the National Association of Regulatory Utility Commissioners,³⁸ we believe that a cooperative approach that recognizes state and local roles is a far more sensible way to resolve issues, as opposed to what would inevitably be a heavily litigated and expensive federally mandated regulatory process.

3. The Commission Should Exercise Extreme Caution In Taking Any Actions As A Result Of These Proceedings.

Smart Communities note that a variety of parties have raised wide-ranging claims and arguments for preemptive actions against local governments in response to the Commission’s Wireless NPRM and the NOIs. This was perhaps inevitable because of the Commission’s decision to combine Notices of Inquiry and Proposed Rulemakings in consolidated dockets and comment cycles, and the open ended nature of some of the Commission’s questions.³⁹ However, this intertwined approach substantially increases the need to clearly distinguish between

³⁸ Comments of the National Association of Regulatory Utility Commissioners, WC Docket No. 17-84 at 2-3 (Jun. 15, 2017) (“NARUC Comments”) (referring to a resolution adopted at the February 2017 meetings in Washington, D.C., that “‘applauds the FCC and Chairman Ajit Pai for initiating the Broadband Deployment Advisory Committee and looks forward to an active role in that effort’ but also specifically ‘opposes further efforts in petitions asking the FCC to preempt the traditional authority of the State and local authorities by replacing intrastate regulation of rights-of-way, Pole Attachments, and other telecommunications facilities or services of public utilities with comprehensive federal mandates imposed by the FCC.’”)

³⁹ See, e.g. Wireless NPRM/NOI at ¶ 97-99; *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84 at ¶104-108 (rel. Apr. 21, 2017) (“Wireline NPRM/NOI”).

comments offered in reply to the Commission's rulemaking from any proposals or requests made in general response to the Notices of Inquiry. Smart Communities urge the Commission to recognize this critical distinction as it conducts its review of the record.

The Commission's authority to act pursuant to some of the proposals is clearly constrained, not only by statute but by its own practice and precedent. As Smart Communities noted in initial comments, for instance, the Commission has limited authority to proceed pursuant to the Notice of Inquiry.⁴⁰ While the agency has broad authority to choose how to proceed, some of the comments seem to envision precisely the sort of action that the D.C. Circuit found requires notice and comment rulemaking.⁴¹ The Commission has also long recognized and respected restrictions on its ability to act pursuant to Section 332(c)(7), including recognizing that it cannot limit the scope of local authority or compel local action.⁴² Furthermore, the Commission should not proceed, as some parties have suggested, directly to the implementation of declaratory rulings about particular types of prohibitions.⁴³ Contrary to the assertions of T-Mobile, the proceedings thus far conducted do not provide sufficient information to support the issuance of a declaratory ruling.⁴⁴ This is in part due to commenters, including T-Mobile, having ignored the Commission's request for particularized information as required by Section 253(d) regarding local policies which allegedly prohibit deployment. As Smart Communities pointed out initially, the Commission's own practice regarding preemption under Section 253 requires "credible and probative evidence that the challenged requirement falls within the proscription of

⁴⁰ See, e.g. Smart Communities Wireline Comments at 5 (citing *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999)).

⁴¹ *American Mining Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1108-09 (D.C. Cir. 1993); *General Motors Corporation v. Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (en banc) (quoting *Noel v. Chapman*, 508 F.2d 1023, 1030 (2d Cir. 1975)).

⁴² Smart Communities Wireless Comments at 38 (citing Shot Clock Order at ¶39).

⁴³ WIA Comments at 29.

⁴⁴ T-Mobile Comments at 55-56.

section 253(a) without meeting the requirements of Section 253(b) and/or (c).”⁴⁵ No such evidence has been proffered in this record. Accordingly, the Commission cannot proceed directly, as the absence of particular evidence and commentary in effect deprives those local governments whose policies are challenged, with adequate notice that their rules may be subject to preemptive action.

Finally, Smart Communities reiterates that the sorts of relief sought by commenters in this proceeding are appropriate for notice-and-comment rulemaking, rather than declaratory action. As discussed above, the record before the Commission today reflects a near-total lack of particularized complaints. The requests made by carriers and infrastructure companies are more properly described as seeking the adoption of generalized nationwide standards impacting every state and local government. The Commission’s Notice appears to contemplate the adoption of similar nationwide rules, but fails to provide specifics on what its actual proposal might be. While the Commission certainly retains broad discretion in choosing how to proceed, the actions sought by commenters seem to be precisely of the sort that the D. C. Circuit has long held require notice and comment rulemaking.⁴⁶

IV. NO NEW RULES SHOULD BE ADOPTED IN THE WIRELESS NOTICE OF PROPOSED RULEMAKING

A. Commenters Fail To Justify Adoption Of “Deemed Granted” Remedies Under Section 332(c)(7)

Not surprisingly, industry commenters urge the Commission to adopt a deemed granted remedy for shot clocks under Section 332(c)(7). The policy and factual justification for this dramatic departure from the settled Commission position that deemed granted is not appropriate

⁴⁵ *In the Matter of TCI Cablevision of Oakland County, Inc.*, FCC 97-331, 12 FCC Rcd. 21,396, 21440 at ¶ 101 (Sept. 19, 1997).

⁴⁶ *American Mining Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106, 1108-1109 (D.C. Cir. 1993); *General Motors Corporation v. Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (en banc) (quoting *Noel v. Chapman*, 508 F.2d 1023, 1030 (2d Cir. 1975)).

under Section 332(c)(7) is largely that it is expensive and inconvenient to sue local agencies for violations of the shot clock.⁴⁷ This policy justification ignores the importance of ensuring that local agencies have the ability to explain why the presumptively reasonable 150-day and 90-day time periods are inappropriate under the particular facts and circumstances of an individual case. This approach is required by the plain language of Section 332(c)(7).

Commenters seek to disparage this careful balancing test by suggesting that federal courts are not meeting their obligations. For example, Lighthouse attributes alleged shot clock violations to the “... fact that it is widely known that a rebuttable presumption is easy to overcome in federal court, essentially making the remedy so toothless that it can easily be ignored.”⁴⁸ This unsupported attack on the judiciary is misplaced. As explained in Smart Communities’ Opening Comments, the vast majority of agencies meet the shot clocks and take their obligations seriously.⁴⁹ If a dispute arises regarding whether a presumptively reasonable timeline is appropriate in a given instance, it is necessary for the courts to resolve that dispute. The fact that Lighthouse has apparently lost many of these cases does not render the shot clock toothless but calls into question the reasonableness of Lighthouse’s deployment strategy and application process.

Even if the Commission agrees with commenters that a deemed granted remedy under Section 332(c)(7) is advisable, the Commission is unable to adopt it. The Smart Communities

⁴⁷ Comments of CompTIA, WT Docket No. 17-79 (Jun. 15, 2017) (“CompTIA Wireless Comments”); Comments of Lighttower Fiber Networks, WT Docket No. 17-79 (Jun. 15, 2017) (“Lighttower Comments”); Comments of CCIA, WT Docket No. 17-79, WC Docket No. 17-84 (Jun. 15, 2017).

⁴⁸ Lighttower Comments at 7.

⁴⁹ Smart Communities Wireless Comments at 46.

outlined in our initial comments why the three alternatives proposed by the Commission for establishing a deemed granted remedy are unavailing.⁵⁰

Of the three alternatives, most commenters who urge the Commission to adopt a deemed granted remedy gravitate toward establishing the deemed granted remedy as an irrebuttable presumption. As an example, Verizon suggests that the Commission has the authority to adopt a deemed granted remedy as an irrebuttable presumption under Section 332(c)(7) under the Fifth Circuit's decision in *City of Arlington v. FCC*.⁵¹ Verizon reaches this conclusion on two bases: (1) the legislative history relied on by the Commission in the Shot Clock Order was not accepted by the Fifth Circuit and (2) adopting an irrebuttable presumption is consistent with the Commission action under Section 621 when generating a deadline for cable franchise negotiations.

Verizon's argument is unavailing because it fails to acknowledge the clear difference in statutory language authorizing Section 332(c)(7)'s "reasonable time" requirement and Section 6409's mandate that communities "shall approve" applications. Reference to the Fifth Circuit's analysis of legislative history does not modify this plain language. It also overemphasizes its point. The Fifth Circuit decided that legislative history was unclear regarding whether the Commission had any authority to adopt shot clocks. It did not decide that the legislative history was silent on whether Section 332(c)(7) authorizes the Commission to impose a deemed granted or similar remedy. In addition, Verizon's citation to Section 621 and cable franchises is unavailing. It ignores the statutory language in Section 332(c)(7) that requires localities to act within a reasonable period of time "after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request." By definition, an irrebuttable presumption does not take into account the "nature or scope" of the request.

⁵⁰ Smart Communities Wireless Comments at 37-43.

⁵¹ *City of Arlington v. FCC*, 668 F.3d 229 (5th Cir. 2012).

Similarly, this approach is inconsistent with the legislative history. This history expressly notes that Section 332(c)(7) is not intended to “give preferential treatment to the personal wireless service industry in the processing of requests, or to subject their requests to any but the generally applicable time frames for zoning decision.”⁵²

In addition, the Competitive Carriers Association (“CCA”) supports its call for the adoption of an irrebutable presumption by noting that the remedies provision in Section 332(c)(7) allows a local agency to petition the court for relief.⁵³ Citing the statutory language that “any person adversely affected by any final action or failure by a State or local government...may” seek redress, CCA notes that “person” could include a local agency if it felt that the irrebutable presumption “unduly constrained” the agency. While a local agency can certainly fall within the definition of “person,” CCA’s interpretation completely ignores the balance of the sentence that refers to a decision “by a State or local government.” Essentially, CCA’s argument is that one can interpret this sentence to allow a local agency as a “person” to sue itself (and presumably the applicant as a real party in interest) for being forced to approve a request based on an irrebutable presumption adopted by the Commission. This interpretation strains all credulity and must be rejected.

B. Industry Commenters Fail To Identify Any Factual Or Legal Basis For Modifying Existing Shot Clocks.

A number of industry commenters support the call for new and modified shot clocks. These include simply shortening existing shot clocks, redefining existing shot clocks to include time spent negotiating licenses or other agreements for use of public property, harmonizing collocation shot clocks for all applications that are not subject to the Spectrum Act (or a subset of

⁵² 1996 S. Conf. Rpt. 104-230 at 208

⁵³ Comments of Competitive Carriers Association, WC Docket No. 17-84, WT Docket No. 17-79, at 11-12 (Jun. 15, 2017) (“CCA Comments”).

those applications) with those that are subject to the Spectrum Act or establishing different time frames for small cell or DAS deployments, or for requests that include “batches” of requests submitted by a single provider. While industry commenters urge the Commission to adopt these proposals, they fail to articulate sufficient rationales, legal or otherwise, to do so.

1. A Shorter Time Does Not Mean A Reasonable Time

Many industry commenters request that the Commission adopt modified shot clocks generally to be 90 days for new applications and 60 days for all collocations, including those not subject to the Spectrum Act.⁵⁴ As an initial matter, any request to modify the existing shot clocks for new applications is beyond the scope of this NPRM. The Commission did not seek comments on any proposal to modify the existing 150-day shot clock for new applications.⁵⁵ That being said, the requests for establishing shorter shot clocks fail for another reason: commenters failed to articulate any factual or legal basis for these modifications.

Most commenters request shorter shot clocks simply to speed up deployment.⁵⁶ This is not a sufficient basis to modify the shot clocks.⁵⁷ Section 332(c)(7) requires localities to act on an application “... within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.” It is notable that textually, reasonableness turns on the “nature and scope” of the request; the business plans of the applicant are irrelevant. Hence, even if there were a business need for speed, the review period must be based upon the time required to review the request within the context of a

⁵⁴ See, e.g. Comments of CTIA, WT Docket No. 17-79, at 7 (Jun. 15, 2017) (“CTIA Comments”); Lighttower Comments at 12; ExteNet Comments at 8-11; T-Mobile Comments at 18.

⁵⁵ Wireless NPRM/NOI at ¶18.

⁵⁶ See, e.g., CTIA Comments at 2.

⁵⁷ Similarly, CTIA appears to suggest that delay in processing a wireless application can be an “effective prohibition” under Section 253. (CTIA Comments, p. 12.) This is a misapplication of the test under Section 253 as it requires an individualized examination of each agency’s practice before preempting the local agency.

discretionary land use or zoning process. The Section 332 shot clocks currently create presumptively reasonable time periods for agencies to review applications. Simply speeding up deployment for the sake of speeding up deployment without any consideration of countervailing factors, especially a community's ability to actually review an application within the requested time period, does not adhere to the plain statutory language.

Some commenters do attempt to articulate factual justifications for shorter clocks. For example, T-Mobile notes that communities now have more experience with wireless applications than when the initial shot clocks were adopted, and they should be able to more quickly review and approve them.⁵⁸ This suggestion assumes that processing a land use application is something akin to an inverse Moore's Law, where increased experience and knowledge will lead to exponential reductions in time that ultimately results in nearly instantaneous review. This is simply wrong. Cities and counties have reviewed wireless and land use applications for many years, and there are public noticing, hearing and other requirements that necessarily take time.⁵⁹ Increased "experience" cannot avoid these legal requirements. The argument also ignores the increasing complexity and volume of requests seen by local governments.⁶⁰

In another example, GCI suggests that shortened shot clocks are necessary due to the short construction season in Alaska (generally June to September according to GCI).⁶¹ While

⁵⁸ T-Mobile Comments at 20.

⁵⁹ See e.g., California Government Code, §§ 65090, 65091 (requiring notice before specified land use hearings).

⁶⁰ Pole owners express similar concerns about shortening shot clocks in the wireline docket. For example, AT&T expresses opposition to proposals to shorten the pole attachment application review and survey period, given the need to determine whether the pole can accommodate the attachment, and the increasing complexity and volume of pole attachment requests. See AT&T Comments at 8. The industry argument for shortened shot clocks based on "experience" might have a bit more force if one assumed that over the years, proposals had become identical or nearly identical, and submissions and analyses were routinized. In fact, the nature and volume of requests are changing, and while localities do make efforts to use experience to shorten review periods, their ability to do so depends on their ability to establish mandatory standards and design requirements. The current regulatory scheme (as explained in our initial comments) actually discourages streamlined approaches.

⁶¹ Comments of General Communications Inc., WT Docket No. 17-79, at 5 (Jun. 15, 2017) ("GCI Comments").

Smart Communities supports the deployment of wireless facilities throughout the country, including in Alaska, it is wholly illogical to determine what constitutes a reasonable time to review a wireless facilities based on the climatic difficulties of the country's least populous state. Moreover, it seems that GCI is mistiming its application process. Assuming Alaska has a June to September construction schedule, a complete application for a new facility filed in October must be approved or denied by February or March. If anything, GCI's comments support continuing or expanding the current shot clocks.

T-Mobile suggests that shorter shot clocks are reasonable because some jurisdictions have processed applications more quickly than the current deadlines. It notes that the Commission has recognized that some jurisdictions process collocations in 14 days or less and new facilities in 75 days or less.⁶² Communities that process applications as efficiently and quickly as possible should be applauded, but without context to explain how this was achieved in some instances and not in others, the number itself is of little value. As noted in its Opening Comments, Smart Communities strongly supports efforts by the Commission to encourage public-private cooperation and the development of model codes and other best practices. That being said, the legal standard (and the question in this NPRM) is not how quickly can local agencies process applications but what is a reasonable time for them to do so, taking into account the nature and scope of such request.⁶³

⁶² T-Mobile Comments at 19.

⁶³ The initial Section 332 shot clocks were based primarily on a review of the time for action on wireless applications under state laws; the shot clock was merely presumptive in part because the state laws relied upon allowed for longer periods of consideration where justified; that is, state laws and the Commission rules recognized that it was not "reasonable" to demand action by a date certain in all instances. The fact that some applications can be resolved sooner is simply an indication that some applications *are simpler to process*, and that localities are not using the shot clock to delay actions where approval is simple. But that does not mean that as a general matter, a shorter shot clock is appropriate. Indeed, the ability to process applications will in part depend not only on the simplicity of an application but the resources available to a community. Hence, if the Commission in any way limits the resources that a community may use (e.g., if it prevents localities from hiring and charging for the costs of

In addition, industry commenters cited several state statutes with “expedited time frames to lower siting barriers and speed deployment” as justification for shortening review periods for new wireless sites and collocations.⁶⁴ However, in at least three of the states mentioned, the statutes recognize the potential need for longer review periods by permitting localities to extend the required time frames. For example, the industry comments noted that Minnesota law requires any zoning application, which includes both collocation and non-collocation applications, to be processed within 60 days. The comments failed to mention, however, that Minnesota also permits parties to extend the timeline.⁶⁵ Similarly, the statutory 60-day completion period for small cell application approvals in Virginia may be extended for an additional 30 days,⁶⁶ and the statutory 45-day approval period in Wisconsin for collocations may be extended for an additional 45 days.⁶⁷

Lastly, even if the Commission wished to adopt shorter shot clocks, it could not do so based on the record in this proceeding. As noted above, simply seeking to speed up deployment is not sufficient, and any effort to adopt modified shot clocks on this basis would be arbitrary and capricious. “An agency acts arbitrarily or capriciously if it has . . . offered an explanation either contrary to the evidence before the agency or so implausible as not to reflect either a difference in view or agency expertise.” *Defs. of Wildlife & Ctr. for Biological Diversity v. Jewell*, 815 F.3d 1, 9 (D.C. Cir. 2016). The D.C. Circuit recently determined that the Commission failed to meet this standard when regulating rates for prison calls. *Global Tel*Link v. FCC*, No. 15-1461 (June 13,

additional employees or technical consultants to review applications), that limitation must also be taken into account in setting what is a “reasonable” time, and would render the existing shot clocks unreasonable.

⁶⁴ T-Mobile Comments at 19-20; CTIA Comments at 11-12.

⁶⁵ Minn. Stat. § 15.99(2)(a) and (3)(f).

⁶⁶ Va. Code Ann. § 15.2-2316.4(B)(1).

⁶⁷ Wis. Stat. § 66.0404(3)(c). *See also*, Va. Code Ann. § 15.2-2232(F) [90-day completion period for reviewing non-collocation applications may be extended by 60 days]; Wis. Stat. § 66.0404(2)(d) [90-day completion period for non-collocation applications may be extended by 90 additional days].

2017). In part, this decision invalidated Commission rate caps that were based on the “weighted average per minute cost.” This order sought to implement a statute that “each and every” call be fairly compensated. The Commission’s caps were set at levels where many calls were unprofitable but the majority of the Commission (Pai dissenting) justified its position on the basis that it would lead to efficiency for larger carriers. The court ultimately determined that the weighted average per minute cost standard was arbitrary because it did not adhere to the statutory language. The record reflected that cost was largely due to regional variation, and the caps would not result in all calls being fairly compensated.

Here, establishing shot clocks solely based on speeding up deployment would be arbitrary and capricious. While the Commission may have some latitude to establish a general standard for reasonable review, that time cannot be an absolute deadline, and must have a factual basis tied to the statutory standard, which does not empower the Commission to adopt standards that ensure the quickest or cheapest deployment of these facilities. Moreover, case law interpreting the Commission’s existing shot clocks upheld them based on the fact that 150-day and 90-day deadlines hewed to the statutory language of a “reasonable time.”⁶⁸ We encourage the Commission to adhere to this statutory language and to reject requests that it establish shot clocks designed solely to speed up deployment.

2. Various Other Requested Modifications Are Unwarranted

Commenters requested various other changes to the existing shot clocks. These include expanding the scope of agency actions subject to the shot clock, modifying how the clocks can be tolled by local agencies, adopting modified shot clocks for small cells or batches of similar

⁶⁸ *City of Arlington v. FCC*, 668 F.3d 229, 261 (5th Cir. 2012).

applications, and subjecting all utility poles (whether or not they currently house antennas) to Section 6409. These requests are unwarranted based on the record in this proceeding.

First, some commenters have requested that the Commission expand the scope of the shot clocks to include pre-application meetings and other preliminary efforts, any time spent negotiating a franchise or otherwise obtaining access to public property, especially the public right-of-way, and the issuance of any approvals of permits that typically come post-application like building permits.⁶⁹ As an initial matter, adopting a rule including additional authorizations or permits that may be needed within the existing shot clock is beyond the scope of this NPRM. The NPRM does request that commenters address when the shot clock should begin, but it does so in the context of regulatory “pre-application” meetings.⁷⁰ In any event, such action is also not supported by the record. If the Commission were to incorporate into the land use process that is the subject of Section 332(c)(7) all other application processes that are required before shovel turns dirt, it would need to take into account the additional work associated with those authorizations and permits and what is clear is that no one has shown that all the work can reasonably be completed within the current shot clocks.⁷¹

⁶⁹ AT&T Comments at 23; Crown Castle Comments at 31; Verizon Comments at 43; CTIA Comments at 15; Sprint Comments at 44-45; T-Mobile Comments at 19-12; Comments of Conterra, Southern Light, and Uniti, WT Docket No. 17-79, at 19 (Jun. 15, 2017) (“Conterra-Southern Light-Uniti Comments”); Comments of Mobilitie, WT Docket No. 17-79, at 6 (Jun. 15, 2017) (“Mobilitie Comments”) (seeking modified longer shot clocks for negotiating franchises).

⁷⁰ Wireless NPRM/NOI at ¶20.

⁷¹ For example, an application for DAS will often be filed before final make-ready or other engineering work is completed, and thus before the electric utility determines precisely how power will be brought to the system (preliminary work, is often performed, including structural analyses of the facilities to be used). The engineering work requires time and money, and some entities rightly argue that before determining what must be done to use a pole (and obtaining building, electrical and other required permits), it makes sense to determine whether and what installation will be approved for installation as a matter of land use. If, as some propose, all those permits must be issued along with the land use permits, then one of the following has to occur: (a) all engineering work, FAA and federal approvals, MISS Utility work, make ready planning and the like needs to be completed before the application is ever submitted; or (b) the time period must be substantially extended to reflect the time required for all these tasks to be completed *seriatim*.

Second, some commenters suggest modifying how shot clocks may be tolled. CGI proposes that shot clocks would no longer be tolled while applications remain incomplete. Specifically, CGI proposes that incomplete applications would be subject to a three-day grace period where applicants could provide supplemental information without tolling the shot clock.⁷² As explained in Smart Communities' Wireless Comments, communities routinely receive incomplete applications.⁷³ These applications require disproportionate attention and resources from local agencies that contribute to delays for other applicants. Creating a grace period for incomplete applications would simply encourage game-playing and lead to longer delays. Under CGI's proposal, applicants would have an incentive to submit applications in batches to receive multiple grace periods to slow "bleed" the shot clock. This perverse incentive would harm diligent applicants and divert local resources to monitoring these applications.

Third, commenters support creating separate shot clocks for small cells and processing batch applications. Commenters support shorter shot clocks for small cells based on the assumption that these facilities are less complex than macrocells or that traditional zoning processes are not applicable within the right-of-way. They assume batch applications will be easier to process due to the similarity.

These commenters are mistaken. Small cells, especially those within the right-of-way are not necessarily easier to process or review. As we pointed out in initial comments no one can seriously argue that the term "small cell" means "small physically" as opposed to "serving a small area."⁷⁴ Small cells may involve substantial amounts of equipment, including a support structure (ranging in size from a Mobilitie tower to a more conventional utility pole); an antenna;

⁷² GCI Comments at 5-6.

⁷³ Smart Communities Wireless Comments at 31-32.

⁷⁴ Smart Communities Wireless Comments at 44.

radio units; power supplies/electric meters/disconnects/cabling; and potentially back-up power supplies.⁷⁵ These sites can approach or exceed the size of many monopoles or macrocells.⁷⁶ In addition, small cells locating within the right-of-way can present unique challenges, and in many ways, these applications are as, if not more, challenging than traditional macrocells. These facilities can raise significant issues for roadway engineering, safety, and coordination with other utilities.⁷⁷

In addition, processing applications in batches does not warrant a shorter shot clock. Commenters suggesting that batch applications are necessarily easier to review gloss over the practical realities of most applications. While it may be possible to reduce review time for some aspects of batch applications (i.e., if the same design is used in the same zoning area, that design may be approved for the entire area), the majority of sites must be evaluated independently. This is especially true if applications within a batch are located on different structures (i.e., new poles vs. existing poles), differ in size or visibility and require coordination with other utilities (i.e., existing electric poles and underground utilities), and may require planning to avoid harming roadside trees and other vegetation.⁷⁸

Lastly, some commenters, most notably Crown Castle, suggest that the Commission should reverse its decision and expand the scope of “eligible facilities” under Section 6409 to include all utility poles, whether or not they currently contain transmission equipment. Crown Castle suggests, “[w]hether the equipment is being collocated on a pole currently used for telecommunications services or one used for some other purpose is a distinction without a

⁷⁵ Smart Communities Wireless Comments at 44-45; CTC Declaration at 6.

⁷⁶ CTC Declaration at 6-8.

⁷⁷ Puuri Declaration at 2.

⁷⁸ As we pointed out in our comments, the new large poles proposed by Mobilitie required sinking a pole a substantial distance into the ground, but even placement of ordinary utility poles must be planned so that they do not interfere with sewer lines, water lines and storm sewer drainage. Smart Communities Wireless Comments at 44-47.

difference.”⁷⁹ The plain language of the statute contradicts Crown Castle’s assertion. Section 6409 (47 U.S.C. § 1455) refers to actions affecting an “... existing wireless tower or base station that involves—(A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment.” The term “tower” has consistently been used to refer to a facility designed primarily to support a wireless facility; it would be stunning if Congress meant for the term to include every vertical structure. Likewise, the technical term “base station” could not sensibly be used to refer to structures that do not support wireless facilities. Setting aside the use of the term “existing,” statutory references to “collocation,” “removal” or “replacement” of equipment implicitly require that the tower or base station already contain transmission equipment. Indeed, the Commission has already considered this issue and rejected Crown Castle’s strained interpretation of the statute.⁸⁰ Crown Castle fails to articulate any new or compelling reasons for disturbing this settled issue.⁸¹

C. The Commission Does Not Need To Address Moratoria.

A number of commenters suggested that it is necessary for the Commission to reiterate that the shot clocks run regardless of any local moratoria. For example, Crown Castle noted that seven communities recently imposed moratoria on wireless applications. Based on this, it urges the Commission to “reiterate that even temporary moratoria are prohibited barriers to entry.”⁸² Commenters also focused on concerns related to claimed “de facto” moratoria where

⁷⁹ Crown Castle Comments at 48.

⁸⁰ In the matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238, ¶ 135 (rel. Oct. 21, 2014) (“2014 Infrastructure Order”).

⁸¹ *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 41–43 (1983).

⁸² Crown Castle Comments at iv.

communities have failed “... to act on permit applications, and [other] interminable delays that can extend more than a year.”⁸³

For actual, legal moratoria, the existing Commission’s rules are clear: that moratoria do not stop the shot clock. Any communities adopting moratoria are doing so to ensure that carriers do not obtain vested rights under state law. Any Commission admonishment or reiteration that moratoria do not toll the shot clock is unnecessary. For the asserted “de facto” moratoria, this is simply an attempt by industry commenters to erode the important regulatory and proprietary distinction. As explained in Section V.E.4(B), the Commission cannot require localities to lease public property to carriers. Those communities that wish to lease public property, including franchising use of the public right-of-way, are entitled to negotiate an arms’ length transaction with carriers. This process is not a moratoria but the same process carriers engage in with property owners when seeking to lease private property.

V. THE COMMISSION SHOULD NOT PURSUE MORE DECLARATORY RULINGS OR RULEMAKINGS BASED ON QUESTIONABLE LEGAL AUTHORITY

A. The Commission Must Consider Communications Act Provisions In Context With The Rest Of The Statute

While the Commission undoubtedly has broad authority to adopt rules to fill “gaps” in the Communications Act,⁸⁴ that authority is not unlimited, and the scope of that authority must be interpreted in context. For example, Section 201(b)’s broad grant of rulemaking authority cannot be utilized to address infrastructure attachment without consideration of the general grant of authority to the Commission, which does not give the agency authority over facilities which

⁸³ CTIA Comments at 7.

⁸⁴ *City of Arlington v. FCC*, 668 F.3d 229 (5th Cir. 2012).

may be useful in the provision of telecommunications services⁸⁵ and the limits of Section 224, which grants limited authority over privately owned utility infrastructure, and carves out particular rights for classes of attachers to infrastructure. Similarly, the Commission cannot, as commenters in this proceeding suggest,⁸⁶ largely disregard Congress' clear intent to preserve a robust role for state and local governments in regulating the deployment of telecommunications services under either section 253 (leaving, for e.g. management of the public rights-of-way to localities) or section 332 (preserving authority over wireless deployments except for those regulations which are applied in a manner specifically prohibited), or more broadly.⁸⁷ Which is to say, general grants of authority to make rules cannot grant substantive authority where none exists, and cannot trump the clear protections of state and local authority in, e.g. Section 253, Section 332.⁸⁸ The Communications Act has been structured deliberately to preserve state and local authority, rather than to give the Commission complete authority over all aspects of service regulation, and more importantly for this proceeding, all aspects of deployment of communications equipment, or all facilities or property that may be used in connection with that deployment. This not only reflects a conscious choice as to the distinctions between interstate and intrastate authority, but also recognizes that the deployment of these facilities implicates proprietary, sovereign and police power interests of states and their subdivisions (as well as interests of private property owners that cannot be ignored consistent with the Constitution.⁸⁹

⁸⁵ Smart Communities Wireless Comments at 11-14.

⁸⁶ T-Mobile Comments at 25-26; AT&T Comments at 7-12..

⁸⁷ See Telecommunications Act of 1996, Sec. 601(c)(1); See also Dissenting Statement of Commissioner Ajit Pai, *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375 (2015); *Global TelLink v. FCC*, D.C. Cir. No. 15-1461 (Jun. 13, 2017).

⁸⁸ See Telecommunications Act of 1996, Sec. 601(c)(1).

⁸⁹ See further Section V.D.

B. Section 253 Does Not Permit The Commission To Engage In Rulemaking-Based Preemption

Contrary to the assertions of numerous commenters, the Commission does not have the authority to undertake rulemaking action pursuant to Section 253(d). Verizon argues, for instance, that the Commission may proceed either through adjudication or rulemaking, citing *City of Arlington*'s statement that "Agencies typically enjoy 'very broad discretion [in deciding] whether to proceed by way of adjudication or rulemaking.'"⁹⁰ While true as a general principle, Section 253(d) does not present a typical scenario. Unlike the majority of statutes governing the Federal Communications Commission, Congress explicitly outlined particular procedures for the application of authority under Section 253(d) which the Commission must follow. Notably, the statute clearly and unambiguously directs the agency to provide "notice and an opportunity for comment" of a particular "statute, regulation, or legal requirement that violates subsection (a) or (b)" before the agency may act to preempt those laws. This process is the very essence of an adjudication, rather than a general rulemaking, and the deliberate inclusion of 253(d)'s procedural language establishes that, unlike typical situations, the agency may *not* exercise discretion in deciding how to proceed under this Section.⁹¹

Verizon also erroneously seeks to bypass the clear language of Section 253(d) by arguing that, in any event, Section 201(b) of the Act empowers the Commission to enact rules preempting state and local laws. While generally true, suggesting that fundamental principles of statutory interpretation indicate that simply reading 201(b) as an alternative path and dismissing 253(d) out of hand is to suggest that Congress needlessly added that language to the statute. As a

⁹⁰ Verizon Comments at 31.

⁹¹ *City of Arlington v. FCC*, 668 F.3d 229, 240 (5th Cir. 2012), *aff'd*, 133 S. Ct. 1863 (2013) ("Agencies typically enjoy 'very broad discretion [in deciding] whether to proceed by way of adjudication or rulemaking.'") (quoting *Time Warner Entm't Co. v. FCC*, 240 F.3d 1126, 1141 (D.C. Cir. 2001)) makes it clear that the general rule does not apply in all circumstances.

general matter, statutes are to be interpreted in their entirety, and where an interpretation of one section would render another section meaningless, that interpretation should be rejected. Verizon proposes to do the opposite, relying on *Brand X* to assert that, where the statute is ambiguous, Section 201(b) gives the agency authority to fill in the gaps with binding rules. The statute is not ambiguous here. If the Commission wishes to preempt state or local laws on the basis that they pose barriers to deployment of telecommunication services, the procedures of Section 253(d) must be followed.

Separately, AT&T argues that the Commission need not look beyond Section 253 to find a means to dispense with Section 253(d)'s unambiguous directives. AT&T maintains that Section 253(d) is, in essence, optional, and that it does not expressly or by implication suggest any limitation on the agency's ability to proceed with exercising 253(a) authority using 201(b) general rulemaking authority. AT&T's assertion fails for the same reason Verizon comes up short – their proposed interpretation of the governing statute effectively makes Section 253(d). Protections intentionally built into Section 253 by Congress (including the omission of Section 253(c), and the requirement that any preemption be as narrow as possible) would disappear if the section could be bypassed altogether. To dismiss the guiding statute and the express words of Congress in this manner falls well outside the deference any agency might hope to enjoy.⁹² That is particularly so because Section 253 and Section 332(c)(7) were adopted as part of the Telecommunications Act of 1996, and that Act itself limits the authority of the Commission to use its general powers to supersede state laws. Section 601(c) of the Act provides:

(c) FEDERAL, STATE, AND LOCAL LAW-

(1) NO IMPLIED EFFECT- This Act and the amendments made by this Act shall not be construed to modify, impair, or supersede Federal,

⁹² AT&T Wireless Comments at 69-71.

State, or local law *unless expressly so provided* in such Act or amendments.

(2) STATE TAX SAVINGS PROVISION- Notwithstanding paragraph (1), nothing in this Act or the amendments made by this Act shall be construed to modify, impair, or supersede, or authorize the modification, impairment, or supersession of, any State or local law pertaining to taxation, except as provided in sections 622 and 653(c) of the Communications Act of 1934 and section 602 of this Act.

In this case, the general provisions of Section 253(a) are subject to a specific procedural provision titled “preemption,” and to imply that Congress meant to grant the Commission unlimited authority to draw upon other provisions to limit local authority is inconsistent with this express directive.

CTIA appears to suggest that delay in processing a wireless application can rise to be an “effective prohibition” under Section 253.⁹³ As explained below, Section 253 simply does not apply to wireless applications, and CTIA’s comments merely underscore why that is so: Section 332 sets out the only permissible time limitation on local action on an application to site a wireless facility, and making the time subject to an additional Section 253 requirement cannot be squared with the plain language of Section 332. Moreover, even assuming that Section 253 does apply, delays that would be related to managing the rights of way in a non-discriminatory manner, or in ensuring that facilities installed subject to appropriate safety standards would fall within the safe harbors of Section 253(b) and (c), and CTIA’s own formulation (delay can amount to an effective prohibition) suggests that the reverse is also true. Because the existence of the prohibition may depend on facts; and because even if prohibitory, the action may be permissible, a blanket deemed granted remedy is not permissible consistent with Section 253(d).

⁹³ CTIA Wireless Comments at 12.

A blanket deemed granted remedy reaching lands owned by a state or its subdivisions is not available for another reason. Section 253 is only a preemptive statute: it does not give the FCC authority to grant property rights to any entity. The ability of a state to control its own property is the essence of sovereignty; the federal government is not given broad authority to control state lands, and only limited authority over lands that it owns, US Const. Art IV Clause 2. This is not a case where Section 253 provides an opportunity for the State to participate in a federal regulatory program in return for following federal standards; commenters, through the deemed granted remedy, are asking that the FCC grant them property interests in, or access to, sovereign lands of the state. Even if permissible, given the impact on state sovereignty of allowing a federal administrative agency to grant rights in stated land, *Pollard's Lessee v. Hagan*, 44 U.S. 3 How. 212 212 (1845) the right would need to be quite specific, and it is not.

C. Numerous Commenters Agree That The Commission Cannot Exercise Title II Authority To Preempt Local Governments If It Reclassifies Broadband Internet Access Service As A Title I Information Service.

As Smart Communities explained in detail, “Sections 253 and 201 . . . would not apply to broadband Internet access service if the Commission were to reclassify the service.”⁹⁴ A variety of industry commenters who oppose classification of broadband Internet access service as a Title II telecommunications service nevertheless seek to benefit from Title II’s provisions where it suits their interests.⁹⁵ T-Mobile urges the Commission to act immediately to “close the loophole that might open” if the Commission moves forward with its Restoring Internet Freedom proposal.⁹⁶ T-Mobile is wrong to assert, however, that the Commission can simply “clarify that Sections 253 and 332 apply to ‘mixed-use’ facilities” and subsequently disregard the clear

⁹⁴ Smart Communities Wireline Comments at 6.

⁹⁵ AT&T Wireless Comments at 69-71; T-Mobile Comments at 52.

⁹⁶ T-Mobile Comments at 52.

language of the statute.⁹⁷ Section 253 explicitly refers to “telecommunications services,” and the D.C. Circuit has already rejected arguments analogous to T-Mobile’s, as discussed in Smart Communities’ original comments.⁹⁸ CCA offers similar arguments in its comments, in an apparent effort to enjoy the benefits of common carrier status while vigorously objecting to any accompanying obligations or limitations.⁹⁹ Statutorily, however, local and state authority are prescribed under Section 253 only to the extent that they prohibit the provision of telecommunications services; they are not proscribed to the extent that they prohibit the provision of non-telecommunications services. Likewise, under Section 332, a regulation of the placement of wireless facilities is only preempted if it prohibits or effectively prohibits the provision of common carrier services (as all personal wireless services are by definition common carrier services.).¹⁰⁰ The issue is not whether a facility has a *mixed use*; it is whether the regulation has the specifically required effect. Hence, for example, if a wireless provider can offer its common carrier services via existing facilities, it cannot demand the right to place additional facilities in a manner inconsistent with existing state and local codes.¹⁰¹

Numerous other commenters share Smart Communities’ view on this matter, as well. We agree with Public Knowledge that “this proceeding relies on legal authority only available to the extent that broadband internet access remains classified as a Title II telecommunications

⁹⁷ *Id.*

⁹⁸ Smart Communities Wireline Comments at 6.

⁹⁹ CCA Comments at 23-24

¹⁰⁰ See 47 U.S.C. § 153(24) (definition of information service; 47 U.S.C. § 153(53) (definition of telecommunications service).

¹⁰¹ The issue, we stress, is one of the limits of the Commission’s preemptive authority, in light of the specific language of Section 332(c)(7) and Section 601. Localities are seeking ways to ensure that broadband is deployed throughout their communities; but the question before the Commission is whether deployment can be compelled where not required for the provision of common carrier services.

service.”¹⁰² Public Knowledge correctly notes that the statutory language of Section 253 is clear: the Commission may only exercise that authority in relation to telecommunications service, not information services.¹⁰³ The League of Arizona Cities and Towns, League of California Cities, and League of Oregon Cities also recognize this issue, pointing out that the Commission “makes no bones about its desire to reclassify broadband as an information service.”¹⁰⁴

Finally, the Commission must recognize and respect the striking logical inconsistency inherent in seeking to exercise Title II authority over, and in furtherance of, broadband internet access service, while simultaneously attempting to remove that service from its Title II jurisdiction. As the AZ-CA-OR Leagues of Cities note, “these simultaneously-held inconsistent positions would undermine any ‘rational connection between the facts found and the choice made.’”¹⁰⁵

D. There Is No Basis For The Industry’s Broad Interpretation Of What Is Regulatory As Opposed To Proprietary Action

1. *Industry Commenters Correctly Acknowledge That Publicly Owned Property Outside The Public Right-Of-Way Is Proprietary.*

While industry commenters argue that public rights-of-way and municipally owned property within public rights-of-way are non-proprietary (an argument with which we do not agree as discussed below), they at least acknowledge that Sections 253 and 332 in general do not apply to property owned by public agencies, such as buildings and parks.¹⁰⁶ For example, T-

¹⁰² Public Knowledge Comments at 13.

¹⁰³ Public Knowledge Comments at 14.

¹⁰⁴ Conterra-Southern Light-Uniti Comments at 1

¹⁰⁵ *Id.* at 2

¹⁰⁶ See, e.g., T-Mobile Comments at 49; Crown Castle Comments at 49. This view is perhaps not fully shared by AT&T, which in its Wireline Comments, cited an 1880 Supreme Court decision, *Meriwether v. Garrett*, 102 U.S. 472, 513 (1880), which stated that a municipal corporation “[i]n its streets, wharves, cemeteries, hospitals, court-houses, and other public buildings ... has no proprietary rights distinct from the trust from the public.” AT&T Wireline Comments at 72, FN203.

Mobile notes cases in which the courts found a public agency's management of the placement of antenna on a school roof and in a city-owned park to be proprietary functions.¹⁰⁷ This view is consistent with statutory and constitutional principles and cannot be impeded.

2. *Commenters Incorrectly Urge The Commission To Determine All Public Right-Of-Way Decisions Are Regulatory*

Industry commenters request the Commission reverse long-standing policy and determine that the public right-of-way and access public facilities (i.e., lightpoles) within the public right-of-way are regulatory, not proprietary, decisions. Commenters articulate three reasons for this dramatic change: (1) the public right-of-way is an ideal place for small cell and similar facilities, (2) the regulatory/proprietary can be disregarded because the term "proprietary" does not appear in Sections 253 or 332 and (3) the public right-of-way is held in public trust for the provision of public service. Each of these reasons is insufficient, and the Commission must respect the property rights of local agencies by rejecting the requested change.

(i) *Convenience For Carriers Is Not A Sufficient Reason To Change Policy*

Commenters suggest that the Commission should clarify that access to the public right-of-way and facilities within the public right-of-way is a regulatory decision because the public right-of-way is a convenient and easy place to locate facilities.¹⁰⁸ For example, CCIA notes that, "Facilities in ROWs, like light poles, traffic light signals and poles, utility poles, and equipment cabinets usually have the necessary infrastructure for wireless service ... Put simply, siting facilities in ROWs is effective and could be a more expeditious way of building out a network"¹⁰⁹ Smart Communities does not necessarily disagree that placing facilities in the

¹⁰⁷ T-Mobile Comments at 49, citing *Sprint Spectrum L.P. v. Mills*, 283 F.3d 404, 419-21 (2nd Cir. 2002) and *Omnipoint Commc'ns, Inc. v. City of Huntington Beach*, 738 F.3d 192, 200-201 (9th Cir. 2013).

¹⁰⁸ See, e.g. T-Mobile Comments at 49-50; AT&T Wireless Comments at 11-12.

¹⁰⁹ CCIA Comments at 12.

public right-of-way is convenient for carriers. However, this is insufficient reason for the Commission to reverse long-standing policies respecting the rights of local agencies to control their property.

Localities must ensure that the placement of wireless facilities by wireless providers does not interfere with the primary use of the rights of way – which is for transit by vehicles and pedestrians, including persons with disabilities whose use of the rights of way would be blocked by the placement of the sorts of facilities actually proposed by wireless providers. Similarly, adjacent property owners have interests that may require protection. In addition, government agencies are themselves seeking to deploy equipment that will be used to speed traffic flows, and enhance public safety. They have an interest in ensuring that those systems may be deployed cost-effectively, and without interference. Local governments are not the only parties to recognize the significance of these policy considerations. The Communications Workers of America (CWA) has urged the Commission to “act with extreme caution in considering preemption of state and local government authority to manage and to receive fair and reasonable compensation for use of public rights-of-way, authority granted in Section 253(c) of the Act.”¹¹⁰ As CWA explained, “State sovereignty is a core principle in our federal system.”¹¹¹

Moreover, the very point of the argument concedes that in most, if not all instances, there are alternatives to the placement of wireless facilities in the public rights-of-way. Under the strict statutory and constitutional limitations on the Commission’s authority, discussed below, convenience is not enough to justify intrusion on local authority.

¹¹⁰ Comments of the Communications Workers of America, WC Docket No. 17-84, at 24-27 (Jun. 15, 2017) (“CWA Comments”).

¹¹¹ *Id.* at 24.

(ii) The Fact That “Proprietary” Is Not In Statutory Language Is Irrelevant

Some industry commenters argue that the regulatory/proprietary distinction is illusory and may be disregarded because Section 253 and 332 do not actually contain the term “proprietary.” As an example, AT&T notes, “this distinction finds no support in the text of Sections 253 or 332, which do not use the term ‘proprietary.’”¹¹² That term may not be used *per se*, but the sections – and particularly section 332 contain other words which do foreclose the interpretation urged.

We begin with the proposition that the Commission has ruled on the issue raised by commenters, and a decision by the Commission to reverse its established policy to respect public property rights would be subject to more specialized judicial review.¹¹³ Specifically, the Commission must adequately explain the reason for its change and must take into account legitimate reliance on prior interpretation.¹¹⁴ Here, it has always been convenient to locate facilities in the public right-of-way. Commenters have not articulated several reasons to deviate from established Commission policy.

The courts have uniformly recognized that there is a meaningful difference between regulatory/proprietary actions under the Telecommunications Act of 1996 that is of Constitutional dimension.¹¹⁵ While the Commission has the authority to preempt regulatory actions, preemption by definition does not reach non-regulatory actions.¹¹⁶ That distinction is

¹¹² AT&T Wireless Comments at 11.

¹¹³ *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 41–43 (1983).

¹¹⁴ *Smiley v. Citibank (s.D.), N.A.*, 517 U.S. 735, 49 (1996).

¹¹⁵ *Sprint Spectrum v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002); *Qwest Corp. v. City of Portland*, 385 F.3d 1236, 1240 (9th Cir. 2004) (recognizing that Section 253(a) preempts only “regulatory schemes”).

¹¹⁶ *Id. Building & Construction Trades Council v. Associated Builders & Contractors of Massachusetts/Rhode Island, Inc.*, 507 U.S. 218, 224 (1993).

compelled by the statutes that are the primary focus of this proceeding. Section 332(c)(7) “...indicates that Congress meant preemption to be narrow and preservation of local governmental rights to be broad, for subparagraph (A) states that ‘nothing’ in the [the Telecommunications Act of 1996] affects the “authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities” ‘except as provided in this paragraph.’”¹¹⁷ 47 U.S.C. §332(c)(7)(A) (emphases added). Section 332(c)(7) then draws a line between regulatory and other actions, requiring that the “regulation” of the “placement, construction, and modification” of wireless facilities meet certain standards.¹¹⁸ The fact that the statute does not use the term “proprietary” is irrelevant – the clause that empowers any intrusion explicitly refers to the regulatory functions of governments.

The argument is no stronger with respect to Section 253. Section 253 has no application to wireless facilities at all, so the issue is whether Section 253 prohibits proprietary control generally. As an additional argument in support of the incorrect premise that proprietary considerations are irrelevant, some industry commenters argue that the “legal requirement” language in Section 253(a) must be construed to conclude that this section applies to all exercises of governmental authority.¹¹⁹ That is not the case, and reliance on the *Minnesota* case is misplaced. In *Minnesota*, the state sought a declaration that a program under which it would provide one entity the right to place fiber within certain limited access roads was affirmatively permitted under Section 253. Without deciding the issue, the Commission essentially ruled that the answer to the question depended on a variety of factors, including how the program worked.

¹¹⁷ *Sprint Spectrum, supra*, 283 F.3d 404, 421.

¹¹⁸ *Id.*

¹¹⁹ Crown Castle Comments at 28-29 (citing “State of Minnesota,” 14 FCC Rcd 21697, 21705); *see also* WIA Comments at 61-62.

It concluded that “legal requirements” could include contractual provisions that had the same effect as a law that created exclusive rights in one entity. The point was explained in the Amigo.net case:

“To make this determination, we focus on the contract’s effect on the provision of telecommunications service – that is, whether the contract imposes a requirement that has the effect of prohibiting the provision of any telecommunications service. The Commission has indicated that a state could impose, as part of a contract to obtain telecommunications services, the type of legal requirement proscribed by section 253. The simple act of forming a contract, which typically excludes from its provisions all entities not party to the contract, does not necessarily implicate section 253, however. The Commission has drawn a distinction between a contract in which the state was “merely acquiring fiber optic capacity for its own use” and a contract in which the state was granting its contract partner exclusive access to freeway rights-of-way, which other carriers would need in order to provide fiber optic services. In this latter instance, the Commission found that the state’s contract might impose a legal requirement that would have the effect of prohibiting the ability of other carriers to provide service.”¹²⁰

In other words, the proprietary/regulatory distinction is not eliminated, even as to rights of way; what is subject to challenge are contract terms that effectively prevent a state from making resources required by wireline providers available to others. What is requested here, however, is far different, and far more expansive, and essentially requires the Commission to read Section 253’s legal requirements provision to forbid the right to deny access to public or

¹²⁰ *In re Amigo.net*, 17 F.C.C. Rcd. 10904, 10967.

private property altogether, except as the Commission may permit. The law does not bear that weight.¹²¹

3. A BLANKET, ONE SIZE FITS ALL APPROACH IS INAPPROPRIATE.

(i) Establishing a Blanket Declaration or Rule That All Right-of-Way Management is Regulatory Would Ignore The Distinct and Diverse Nature of Local Conditions.

The industry's desire for a one-size-fits-all declaratory ruling that states and localities are not acting in their proprietary capacity when acting on requests to place facilities on public rights-of-way or municipal poles would ignore an important reality — the wide diversity in local conditions that must be considered by States and local governments in adequately managing their public rights-of-way and property within public rights-of-way. A wide range of demographic, geographic, climate, aesthetic, and other considerations exist from place to place across the country. Because of these variations, different agencies would necessarily have different needs and requirements when leasing their public rights-of-way and municipal poles and infrastructure within public rights-of-way. As discussed in Smart Communities' Opening Comments, public agencies, including cities, counties and special districts, must retain control of their property to preserve the condition of the property and its financial value, to ensure daily government operations run smoothly, to provide services such as water, sewer, fire protection, parks and recreation and flood control, and to protect against security breaches that could harm their operations and the public. These goals often must be accomplished while grappling with

¹²¹ Section 253 does not just reach public property – it actually reaches laws and “legal requirements” regardless of the type of property to which those might apply. Hence, to read 253 to authorize the Commission to preempt laws requiring payments of rents, costs and the like, or to read Section 253 to preempt laws that require authorizations from a property owner before property can be occupied in effect reads 253 as an authorization to require dedication of public and private property to telecommunications uses. The law cannot constitutionally bear that weight. *FCC v. Florida Power Corp.*, 480 U.S. 245, 253 (1987).

budgetary and staffing limitations.¹²² When considering whether or not placement of third party facilities on their property can be accomplished without risk to the public safety and welfare, they must be able to take into account unique and highly sensitive safety and operational issues and their limited resources.¹²³ *Requiring* local governments or special districts to make facilities available, or to administer a federal program, would impose an undue burden on them and the public they serve.

Thus, any question about whether a State or local government is acting in violation of Section 253 must be addressed on an individual, case-by-case basis preemption analysis and determination.¹²⁴

The *Qwest Corp. v. City of Portland* case¹²⁵ illustrates the significance of this consideration. In this case, ten cities were involved in the litigation, each with unique franchise agreements and ordinances being challenged by Quest.¹²⁶ The district court concluded the cities' agreements and ordinances were not preempted by Section 253.¹²⁷ The appellate court, however, reversed and remanded, in part because the district court had failed to conduct an individualized preemption analysis of each city's challenged ordinances.¹²⁸ The court emphasized that such a generalized conclusion "is not conducive to effective review on appeal."¹²⁹ Here, the industries urge the Commission to form a generalized conclusion with a sweep that would include 50 states

¹²² Smart Communities Wireless Comments at 65-69.

¹²³ See Smart Communities Comments at 68 (water districts must ensure sensors, gates, lighting and other security measures are not disturbed by third parties to protect the public clean water supply; access to property of fire protection district must be strictly controlled on a case-by-case basis to prevent interference with vital services).

¹²⁴ *Quest Corp. v. City of Portland*, 385 F.3d 1236, 1242 (9th Cir. 2004), overruled on other grounds in *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571.(9th Cir. 2008).

¹²⁵ *Quest Corp. v. City of Portland*, 385 F.3d 1236, 1242 (9th Cir. 2004).

¹²⁶ *Id.* at 1240.

¹²⁷ *Id.* at 1242.

¹²⁸ *Id.*

¹²⁹ *Id.* at 1240.

and countless cities, counties, special districts and other local governments. It cannot do so consistent with the statute.

a. *Industry Arguments Urging A Blanket Preemption to Limit Compensation for Use of Public Rights-of-Way Ignores and Would Contravene Constitutional Principles.*

(1) *Limiting State and local ability to set compensation for use of public rights of way would raise serious Fifth Amendment concerns.*

In their initial comments, Smart Communities explained that the statute does not grant the Commission authority to set rates, and at most permits a court to preempt a local or state law related to charges if the charges fall outside a zone of reasonableness, which by definition permits rates that recover all costs and the market value of the property to be used; and if the charges actually prohibit the ability of some entity to provide service. Nonetheless, some commenters continue to ask the Commission to set rates at out-of-pocket, incremental costs or to limit charges associated with right of way use (such as permitting charges) to a fixed amount regardless of cost incurred in connection with the use of property.

Of course, if the federal government were to require a local government to place a wire on its property without compensation, it would constitute an unlawful taking under the Fifth Amendment.¹³⁰ The Supreme Court has clearly recognized a local government's "right to exact compensation" for such property uses:

[W]hile permission to a telegraph company to occupy the streets is not technically a lease, and does not in terms create the relation of landlord and tenant, yet it is the giving of the exclusive use of real estate, for which

¹³⁰ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 421, 433 (1982) (state law requiring property owner to permit access to cable company to install lines on private property constituted a taking).

the giver has a right to exact compensation, which is in the nature of rental.¹³¹

And the Court has also held that like private property owners, local governments have the same right to fair market value compensation for the federal government's taking of property as private property owners.¹³² It matters not that the intrusion may be relatively slight:

[P]ermanent occupations of land by such installations as telegraph and telephone lines, rails, and underground pipes or wires are takings even if they occupy only relatively insubstantial amounts of space and do not seriously interfere with the landowner's use of the rest of his land.¹³³

Reading the Act to both compel the government to provide access and to allow the Commission to limit compensation would create significant takings issues.¹³⁴

b. *Interfering with local public right-of-way management practices would raise serious issues under the Tenth Amendment and the Guarantee Clause.*

The preemption of local public right-of-way management practices would offend the Tenth Amendment and the Guarantee Clause of the Constitution. Under the Tenth Amendment, “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”¹³⁵ As part of the system of “dual sovereignty,” the federal government “may not compel the States to enact or enforce a federal regulatory program.”¹³⁶ Even in areas where the federal government has authority to act, the

¹³¹ *City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92, 99 (1893), *op. on rehrg.*, 149 U.S. 465 (1893); *see also Cities of Dallas and Laredo v. FCC*, 118 F.3d 393, 397-98 (5th Cir. 1997) (“Franchise fees are . . . essentially a form of rent: the price paid to rent use of the public right-of-ways.”).

¹³² *United States v. 50 Acres of Land*, 469 U.S. 24, 31 (1984).

¹³³ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 430 (1982).

¹³⁴ *FCC v. Florida Power Corp.*, 480 U.S. 245, 253 (1987).

¹³⁵ U.S. Const. amend. X.

¹³⁶ *Printz v. United States*, 521 U.S. 898, 918-19, 933 (1997) (*quoting New York v. United States*, 505 U.S. 144, 166 (1992)).

Constitution only authorizes the federal government to regulate individuals, not States.¹³⁷ If the Commission were to assert control over public right-of-way practices or compel local governments to provide access to public rights-of-way on federally-prescribed terms, the Commission would unconstitutionally commandeer the local administration of public property in service of a federal regulatory program. Here, it is important to distinguish the situation in which the Commission imposed a deemed granted remedy that only applies in situations where a government entity had already made a voluntary choice to regulate wireless services — in which case it could then be required to regulate in accordance with a valid federal scheme.¹³⁸ In the case of access to property, there is no preliminary choice to be made; an affirmative action is always required because, as a matter of law, no person has a right to occupy the property of another without the owner’s permission.¹³⁹ In effect, the choice the commenters urge the Commission to give to State and local governments is the choice between granting access to property without conditions, or granting access subject to the conditions the Commission may prescribe. That is no choice at all.¹⁴⁰

The preemption of local discretion regarding how to manage of its property also raises concerns under the Guarantee Clause.¹⁴¹ The Guarantee Clause precludes the federal government from interfering with a State’s distribution of power among the various levels of government.¹⁴²

¹³⁷ *Alden v. Maine*, 527 U.S. 706, 714 (1999) (citing *New York v. United States*, 505 U.S. 144, 166 (1992)).

¹³⁸ *Montgomery County v. FCC*, 811 F.3d 121, 129 (4th Cir. 2015).

¹³⁹ *FCC v. Fla. Power Corp.*, *supra*, at p. 253 (Property law “has long protected an owner’s expectation that he will be relatively undisturbed at least in the possession of his property.”)

¹⁴⁰ *New York v. United States*, 505 U.S. 144, 176 (1992) (two choices in take title provision of the Low-Level Radioactive Waste Policy Amendments Act of 1985 constituted “no choice at all” because “[e]ither way, ‘the Act commandeers the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program.’”).

¹⁴¹ U.S. Const., Art. IV, § 4.

¹⁴² *City of Abilene v. FCC*, 164 F.3d 49, 52 (D.C. Cir. 1999) (“interfering with the relationship between a State and its political subdivisions strikes near the heart of State sovereignty”).

Where a State has decided to allow local governments to obtain certain fees, the Commission may not undermine the State’s decision by leaving the local government without a means to recover that compensation. While the Federal government may use its Commerce Clause authority to limit certain actions of State and local officers, it may not—consistent with the unqualified *guarantee* to the people of the States of “a Republican Form of Government”—curtail the fundamental powers or property rights of local governments as local governments.

E. Industry’s Laundry List Of Requests For Action Pursuant To Sections 253 And 332 Are Rife With Problems

On issues related to effective prohibition in the context of Sections 253 and 332(c)(7), industry commenters largely repeat arguments made in the *Mobilitie* docket. Smart Communities’ comments in the *Mobilitie* docket addressed the arguments raised in that proceeding, and as the Commission will see, Smart Communities’ comments in these proceedings to a large degree anticipated and responded to arguments raised by industry commenters here.

1. *The Commission Should Not Harmonize The Interpretations Of “Prohibit Or Have The Effect Of Prohibiting” In Sections 253 And 332(C)(7)*

The industry asks the Commission to “harmonize the interpretations of “prohibit or have the effect of prohibiting” in Sections 253(a) and 332(c)(7) by applying its current interpretation of Section 253 to both statutory provisions.¹⁴³ Smart Communities argues that harmonization can only go so far, and in this case, harmonization makes very little sense.

Statutorily, both Sections 253 and 332(c)(7) use the term “effective prohibition,” but Section 332(c)(7) only reaches “regulations” that effectively prohibit the provision of “wireless services,” while Section 253 reaches laws and statutes that prohibit or effectively prohibit the

¹⁴³ Verizon Comments at 10.

ability of any entity to provide telecommunications services. In the former instance, the test can thus be focused on what would actually result in a prohibition of wireless service, while in the latter, what is a prohibition may be far more difficult to generalize.

The significant gap test recognizes that by its very nature, there are always gaps in wireless coverage, but those gaps do not prevent anyone from providing wireless services *per se*. On the other hand, courts have reasoned that if the coverage gaps are large enough, and involve high traffic areas that lack service from a provider (e.g., highways), the gap amounts to enough of an impairment to constitute a prohibition. While that test will no doubt evolve, it will only add to confusion – and raise questions about how the law applies – if one seeks to “harmonize” the standards to create a generalized test that applies to both wireline and wireless.

2. *Contrary To Industry Claims, Only Requirements That “Prohibit Or Have The Effect Of Prohibiting” May Be Preempted*

Verizon urges the Commission to define “effective prohibition as a regulation or action that “(1) significantly increases a carrier’s costs; or (2) otherwise meaningfully strains the ability of a carrier to provide telecommunications service.”¹⁴⁴ Verizon, in particular, cites to the *Puerto Rico Tel. Co. v. Guayanilla* case to argue that “because of the cumulative effect of ordinances and actions of multiple localities that limit carrier access to rights-of-way, the Commission should make clear that carriers can demonstrate that local requirements significantly increase costs, or otherwise meaningfully strain their ability to provide service, by showing the effect of numerous municipalities employing similar restrictions.”¹⁴⁵

Verizon suggests the First Circuit’s ruling in *Guayanilla* supports its proposed standard that a local regulation has the “effect of prohibiting” where it “(1) significantly increases a

¹⁴⁴ *Id.* at 11.

¹⁴⁵ *Id.* at 12.

carrier's costs; or (2) otherwise meaningfully strains the ability of a carrier to provide telecommunications service.”¹⁴⁶ It is not clear what the standard proposed by Verizon actually means — it appears to be the result of editing the decision of the First Circuit to create a standard that the First Circuit never actually adopted.¹⁴⁷ As far as it appears, the First Circuit was attempting to apply the standard proposed by Smart Communities, and reflected in the decisions of the Eighth and Ninth Circuits. Nor does *Guayanilla* actually support the “cumulative impacts” test proposed by Verizon, or a limitation of fees to costs. *Guayanilla* actually supports fees in excess of costs. In *Guayanilla* the problem was that the community could not support a claim that its charges even reflected the market value of the property used; rather, the community simply argued that the charges were inconsequential since they were small considering all the revenues that the provider obtained from *other* communities. The court's decision simply rests on the uncontroversial provision that if one wishes to measure impacts based on revenues from other

¹⁴⁶ *Id.* at 11.

¹⁴⁷ Verizon Comments at 11. (*Guayanilla*, 450 F.3d 9, 19 (1st Cir. 2006) found that it constituted an effective prohibition because it would “negatively affect [the provider's] profitability;” give rise to “a substantial increase in costs for [the provider];” and “place a significant burden on [the provider],” thereby “strain[ing the provider's] ability to provide telecommunications services.”). Not only is the Commission barred from adopting Verizon's proposal, but Verizon is incorrect in its interpretation of *Guayanilla* supports a broad rule which would be met if a rule “increased a carrier's costs.” This interpretation would be inconsistent with the Supreme Court's interpretation of the Act's language: the Court interpreted the word “impair” under the Communications Act to require more than a showing of an increase in costs, *AT&T v. Iowa Utilities Board*, 525 U.S. 366, 389-390 (1999). In *Iowa Utilities Board*, the Commission defined the term “impair” in a way designed to ensure companies could enter the market more easily to compete with incumbents by obtaining access to incumbent facilities. But the use of the term “impair” was meant to limit the circumstances under which a competitor could obtain access to incumbent facilities, and the Supreme Court found it was the Commission's duty to define “impair” in accordance with its ordinary meaning, and not simply to do whatever the Commission felt would best promote statutory goals. (*Iowa Utilities Board*, 525 U.S. at 389-390; see also *Util. Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2445 (2014)) The Court found that the mere fact that it might be more convenient for a competitor to enter the market under the Commission's rules was not a sufficient justification for the approach taken. (*Iowa Utilities Board*, 525 U.S. at 409) Thus the more-absolute term under the Act—effect of “prohibiting”—would require a telecommunications company complaining about a local requirement to show much more than that the local requirement increases its costs – even if doing so created a “strain” on the company. Moreover, Verizon is wrong to suggest a new test based solely on the facts in *Guayanilla* because under the facts of that case, the court accepted as given the untested assumption that the provider would see an 86 percent decrease in profit. Such a unique factual scenario is inappropriate for a generalized test to replace the widely-accepted *California Payphone* test.

communities, one must also consider the impact that would follow if the same fees were charged for use of public property in those communities.

At the outset, Smart Communities notes that what are at issue legally are prohibitions and effective prohibitions, and not hindrances or impediments, as the Commission seems to suggest in its Notice in the *Mobilitie* docket, or as CTIA suggests in its comments in this proceeding.¹⁴⁸ As we pointed out in initial comments, the term “prohibit” is not defined in the Act, but it has an ordinary meaning: to formally forbid (something) by law, rule, or other authority; or to “prevent, stop, rule out, preclude, make impossible.” A mere “hindrance” “is simply not in accord with the ordinary and fair meaning” of the term prohibit,¹⁴⁹ and can provide no basis for additional Commission intrusions on local authority over wireless facilities (under Section 332) or wireline facilities (under Section 253). Much of what industry commenters (such as *Mobilitie*) complain about is a “hindrance” at most (and usually a hindrance magnified by its own actions).

Verizon goes so far as to suggest that several Circuits courts treat actions that “may prohibit” as violations of Section 253; that the Eighth and Ninth Circuits have incorrectly interpreted the statutory standard; and incorrectly claim the Commission has authority to overturn these cases pursuant to *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967 (2005), and to declare that even *potential* prohibitions violate Section 253.¹⁵⁰ In fact, the Circuits are not in conflict: they have not recognized that what the act reaches are prohibitions, or laws and regulations that have the effect of a direct prohibition. The Eighth and Ninth Circuits decisions are explicitly based on the plain language of Section 253 where the Commission receives no *Chevron* deference. Moreover, these interpretations are consistent with

¹⁴⁸ CTIA Comments at 44.

¹⁴⁹ *AT&T v. Iowa Utilities Board*, 525 U.S. 366 (1999).

¹⁵⁰ Verizon Comments at 10, FN33, 15, FN52.

California Payphone so there is no need to clarify anything.

3. *No Further Interpretation Of Section 332(c)(7)’s Effective Prohibition Standard Is Necessary*

Industry commenters also urge the Commission to reject the “significant gap” standard that courts have articulated in Section 332 cases, primarily because they argue installations are now addressing capacity and not coverage.¹⁵¹ Some of them are proposing reinterpreting the standard.¹⁵² AT&T and CTIA fail to mention that commenters and the Commission itself agree that most courts, not “some courts” as they claim, have come to a common interpretation of Section 332(c)(7): “[c]ourts generally agree that a carrier may establish that a land-use authority’s denial of its siting application ‘prohibits or has the effect of prohibiting’ the provision of service by showing that it has a significant gap in service coverage in the area and a lack of feasible alternative locations for siting facilities.”¹⁵³ According to the Commission and industry commenters (e.g., CTIA), the courts have not necessarily developed consensus “about the showings needed to satisfy this standard.”¹⁵⁴ However, the application of a legal standard to facts is the precise scenario where case-by-case decision-making is required—not general standards or prescriptive national rules. Localized zoning decisions and their real-world impacts on provider offerings are well-suited to district court proceedings to ascertain facts and apply relevant legal

¹⁵¹ AT&T Wireless Comments at 10; WIA Comments at 38; CTIA Comments at 21. In its section addressing the significant gap test, CTIA claims, without any explanation, that “regulations that police the technology or service the provider seeks to deploy are clearly preempted by the Commission’s plenary jurisdiction under Title III of the Communications Act to regulate the licensing and operation of radio facilities.” (CTIA Comments at p. 27) CTIA is mixing apples with oranges. Title III regulation of licensing and operation of radio facilities is separate from the factors that go into siting an actual facility (e.g., the least intrusive means test), which is under local authority. The Commission’s authority under Title III to regulate licensing and operation of radio facilities does not preempt local siting considerations.

¹⁵² Verizon argues that should the Commission find that the “significant gap” standard is in fact the proper standard, then it should alter the standard so that a “significant gap” is a gap in an ever-increasing quality level of service. Verizon Comments at 18, FN56.)

¹⁵³ Public Notice at 10 (WT Docket No. 16-421); Verizon Mobilite Docket Comments at 21.

¹⁵⁴ Public Notice at 10 (WT Docket No. 16-421); Verizon Mobilite Docket Comments at 21. See also CTIA Comments at 21.

standards.¹⁵⁵

4. The Commission Should Not Adopt Or Rule In Favor Of Industry's Proposals That Certain Local Practices Are Effective Prohibitions

a. Compensation For Use of The Public Right of Way Should Be Priced at Fair Market Value

The industry argues that the Commission should limit public right-of-way fees to recovery of actual and reasonable costs for processing applications and managing the public rights-of-way.¹⁵⁶ The industry also argues that the Commission should clarify that “fair and reasonable compensation” under Section 253(c) means charges that enable a local government to recoup the costs reasonably related to reviewing and issuing public right-of-way permits as well as incremental public right-of-way management costs associated with adding a new wireless facility and applied equally to all public right-of-way users.¹⁵⁷

First, Smart Communities has shown in its comments that (1) the Commission does not have the authority to regulate these charges, much less require local governments to effectively subsidize applications; (2) there is a significant expense associated with reviewing the applications that needs to be recovered; and (3) that allowing localities to recover costs and obtain fair market value for property used will actually enhance deployment, and ensure that

¹⁵⁵ If the Commission wished to address the different standards, the standard that is better suited may be the one laid out in *360 Degrees Communs. Co. v. Board of Supervisors of Albermarle County*, 211 F.3d 79, 86-87 (4th Cir. 2000). In that case, the court held that neither Section 253 nor Section 332(c)(7) ensures that a provider will never have a service gap. (*Id.*) The court stated, “The Act obviously cannot require that wireless services provide 100% coverage. In recognition of this reality, federal regulations contemplate the existence of dead spots.” (*Ibid.*) The court also noted that the broader inquiry indicated by Section 332(c)(7) is: “Does the denial of a permit for a particular site have the effect of prohibiting wireless services?” (*Id.*) The court held that “this statutory question requires no additional formulation and can best be answered through the case-by-case analysis that the Act anticipates.” (*Ibid.*; citing *AT&T Wireless PCS, Inc. v. City Council of the City of Virginia Beach*, 155 F.3d 423, 428-429 (4th Cir. 1998). Smart Communities recognize that in some cases capacity shortages can amount to a prohibition (as where the absence of capacity results in dropped calls) without adopting a term “capacity” or a new standard that has no obvious tie to the Act. Notably, no cases are identified where the existing standards somehow results in a prohibition that a court simply did not recognize.

¹⁵⁶ Verizon Comments at 14-15; T-Mobile Comments at 31-33; AT&T Wireless Comments at 17.

¹⁵⁷ Verizon Comments at 14-15; T-Mobile Comments at 30-33.

advanced systems are deployed in a rational way. More generally, the arguments conflate the right to recover costs associated with management,¹⁵⁸ with the right to recover compensation, which is viewed as a “rent” for use of property that does not belong to the applicant.

Verizon suggests that “market forces” are sufficient to ensure reasonable rates in a competitive market, but it goes on to argue that such forces are not present when it comes to access to public rights-of-way because local governments have “monopoly control” of public rights-of-way and municipally-owned structures.¹⁵⁹ The proposition that a local government would exercise monopoly power and charge supra-competitive rates for public right-of-way access — even if it had such monopoly power—is *ipse dixit*, and nothing more. The only record evidence — the evidence submitted by Smart Communities — is to the contrary. Local governments compete vigorously with one another to attract and encourage deployment of advanced and reliable utilities that will in turn attract and support new industrial, commercial, and residential development. This is a strong incentive not to overprice right-of-way access.¹⁶⁰ In some cases where companies are claiming that they are being overcharged, the charges were proposed by the companies themselves, under contracts that they helped to draft.¹⁶¹

¹⁵⁸ Management costs may include initial engineering review, but also ongoing inspections and administrative reviewed. For example, while Crown Castle was required to inspect its facilities after its installations caused massive destruction to properties in Malibu Canyon, there would be a cost associated with reviewing the work done by Crown Castle, and those costs are properly borne by Crown Castle. It may be that these costs will prove to be quite high in some areas, but it is both appropriate as an economic matter, and permissible under the law to recover all of those costs.

¹⁵⁹ Verizon Comments at 14.

¹⁶⁰ ECONorthwest Report at 22.

¹⁶¹ See, e.g., *Petition by Level 3 Communications LLC*, WC Docket No. 09-153. In that case, the New York State Thruway Authority entered into a contract that provided access to NYSTA rights of way and facilities and allowed providers to make use of those facilities, including the right to enter and exit the property at specified points. Several providers, including Level 3’s predecessor, agreed to that contract. Subsequent to entering into that contract, Level 3 asked for additional exit points—unique treatment—and the NYSTA agreed to amend the contract after negotiations on terms similar to those proposed by Level 3, which reflected the value of the special rights sought, and the nature of the limited access roadway. Level 3 now asks the FCC to upset the agreement many years after it was executed. But doing so will only discourage future innovative arrangements for use of government property.

Verizon also argues that the legislative history of the Telecommunications Act supports a cost-based limitation under Section 253.¹⁶² Verizon states that “Senator Feinstein made clear in a floor statement that Section 253(c) would permit a municipality to “[r]equire a company to pay fees to recover an appropriate share of the increased street repair and paving costs that result from repeated excavation.” First, this excerpt is from a letter written by Louise H. Renne, City Attorney for the City and County of San Francisco that Senator Feinstein asked to be printed in the record. This excerpt was provided as an example of a routine requirement imposed by local governments in exercise of their responsibility to manage the public rights-of-way that communications companies would challenge under Section 253(d) on the grounds that it interfered with their schedules or convenience. It conflates the right to compensation, with the right to recover costs associated with management. As Smart Communities explained in its initial comments, the latter is often a function of the police power, and limited to cost, while the former is not. Secondly, the excerpt regarding management costs was only part of the debate over Section 253. While management costs certainly should be recovered, neither the Renne letter or other parts of the legislative history suggests that these were the only charges permitted.¹⁶³

Congressman Barton, one of the key architects of what became Section 253(c) noted:

[The amendment] explicitly guarantees that cities and local governments have the right to not only control access within their city limits, but also to set the compensation level for the use of that right-of-way. . . . The Chairman’s [Manager’s] amendment has tried to address this problem. It goes part of the way, but not the entire way. The Federal Government has

¹⁶² Verizon Comments at 15.

¹⁶³ 141 Conf. Rec. H8460 (1995) The Barton-Stupak amendment was proposed as an alternative that would have required localities to charge the same rate to every provider – the so-called “parity” amendment. That amendment was resoundingly rejected. But even the Barton-Stupak amendment’s opponents indicated that they did not intend to limit localities to recovery of costs. For example, Representative Schaefer acknowledged that local governments were already entitled to freely charge for rent; the parity amendment, he suggested, merely required them to charge each provider on an equal basis: “The bill philosophy on this issue is simple: *Cities may charge as much or as little as they wanted* in franchise fees. As long as they charge all competitors equal, the [Barton-Stupak] amendment eliminates that yet critical requirement.” (Statement of Rep. Schaefer.) (emphasis added).

absolutely no business telling State and local governments how to price access to their local public right-of-way.¹⁶⁴

Smart Communities has also shown in its comments in the *Mobilitie* docket that neither the terms of Section 253(c), the legislative history, or relevant case law require the fee charged by a local government for use of the public rights-of-way be restricted to the municipality's cost of maintaining the public rights-of-way. Nor does it require absolute parity among providers and utilities in setting compensation levels.¹⁶⁵ Indeed, obtaining fair market value for use of the public rights-of-way is by definition fair, and it is the normal measure of "just compensation" under the Fifth Amendment's Takings Clause. In this proceeding, as with the *Mobilitie* docket, the industry commenters appear to ask the Commission to regulate the costs that can be charged to it so that (1) it is not forced to bear the full costs associated with repeated applications, engineering, or land use reviews of its applications; and (2) it does not have to pay its fair share for the use of the public rights-of-way. This goes against one of Congress's principal purposes in adopting Section 253(c) – to ensure that Section 253 did not constitute an unfunded mandate and to prevent local governments from being required to subsidize telecommunications providers' costs.¹⁶⁶

¹⁶⁴ 141 Conf. Rec. H8460 (1995). Representative Stupak later added, "[W]e have heard a lot from the other side about gross revenues.... The other side is trying to tell us what is best for our local units of government. Let local units of government decide this issue." 141 Cong. Rec. H8461 (daily ed. August 4, 1995)(Statement of Rep. Stupak).

¹⁶⁵ Smart Communities *Mobilitie* Docket Comments at 60.

¹⁶⁶ 141 Cong. Rec. H8460 (daily ed. August 4, 1995) (statement of Rep. Stupak) ("It is ironic that one of the first bills we passed in this House was to end unfunded Federal mandates. But this bill, with the management's amendment, mandates that local units of government make public property available to whoever wants it without a fair and reasonable compensation. The manager's amendment is a \$100 billion mandate, an unfunded Federal mandate. Our amendment is supported by the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the National Conference of State Legislatures and the National Governors Association. The Senator from Texas on the Senate side has placed our language exactly as written in the Senate bill. Say no to unfunded mandates, say no to the idea that Washington knows best. Support the Stupak-Barton amendment.").

Recent decisions in state court are consistent with Smart Communities’ arguments here that states may choose to limit the ability of their subdivisions to charge for use of public property where that is constitutionally permitted, but unless the state lawfully chooses to limit those charges, the right to recover rents is inherent in the ownership of the property, and as compensation for a grant to use property, and distinct from the ability to recover fees associated with regulatory programs.¹⁶⁷

The Commission’s practice of engaging in spectrum auctions serves as a useful analogy that supports Smart Communities’ arguments that (1) compensation for use of the public rights-of-way should be priced at fair market value, (2) fair market value is fair and reasonable, and an efficient use of a finite government-owned resource. The history of the auctions as a means to achieve the fairest return for government is explained by the Commission:

In 1993 Congress passed the Omnibus Budget Reconciliation Act, which gave the Commission authority to use competitive bidding to choose from among two or more mutually exclusive applications for an initial license. Prior to this historic legislation, the Commission mainly relied upon comparative hearings and lotteries to select a single licensee from a pool of mutually exclusive applicants for a license. The Commission has found that spectrum auctions more effectively assign licenses than either comparative hearings or lotteries. The auction approach is intended to award the licenses to those who will use them most effectively. Additionally, by using auctions, the Commission has reduced the average time from initial application to license grant to less than one year, and the public is now receiving the direct financial benefit from the award of licenses.¹⁶⁸

The statement above falls in line nicely with recent remarks made by Chairman Pai on April 5,

¹⁶⁷ For example, since 2006, Kentucky state law has prohibited local governments from collecting franchise fees on cable and communications services. In June 2017, the Supreme Court of Kentucky issued an opinion in *Kentucky CATV Association Inc. v. City of Florence et al.*, holding that the Kentucky Constitution delegates to cities “control over the placement of utilities within their public spaces and rights-of-way; and the right to reap the long-term profits of that control through consideration paid by private franchisees to the municipality, i.e., franchise fees.” *Kentucky CATV Association, Inc. v. City of Florence et. al.*, 2017 Ky. LEXIS 277, *13 (2017).

¹⁶⁸ Federal Communications Commission, *About Auctions* (last accessed Jul. 17, 2017), available at http://wireless.fcc.gov/auctions/default.htm?job=about_auctions.

2017 regarding the importance of economic analysis at the Commission. In his remarks, Chairman Pai stated that “[s]pectrum license auctions are the most notable example of good economics guiding good policy at the Commission”.¹⁶⁹ Pai also cited Ronald Coase’s “seminal paper” in 1959 titled “The Federal Communications Commission” and his influence on the Commission eventual adoption of auctions for licensing spectrum.¹⁷⁰ In this paper, “Coase argued that the government should treat spectrum like other property, and allow markets to determine who gets to use it. As he put it, based on basic principles of economics, ‘it is not clear why we should have to rely on the Federal Communications Commission rather than the ordinary pricing mechanism to determine whether a particular frequency should be used.’”¹⁷¹

Chairman Pai also noted that Coase’s proposal was initially met with skepticism in the industry, Congress, and Commission but eventually “carried the day”, and now, spectrum auctions “have facilitated the explosion of wireless services that have created millions of U.S. jobs and improved the American people’s lives in countless ways.”¹⁷² In this proceeding, and in the *Mobilitie* docket, the industry and even the Commission appears to have a skeptical view on the current practices of local governments in obtaining the fair market value for use of the public rights-of-way. However, the current explosion in wireless services that Chairman Pai describes has happened because of, and not in spite of, such public rights-of-way practices. As Smart Communities has argued based on its own economic analysis and study, which is glaringly missing in comments by the industry, that such practices have facilitated, and will continue to

¹⁶⁹ “The Importance of Economic Analysis at the FCC”, Remarks of FCC Chairman Ajit Pai at the Hudson Institute, April 5, 2017.

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

facilitate, the innovation of new technologies and means of deployment and deployment in underserved areas, while preventing the exacerbation of marketplace inequities.¹⁷³

Sprint also argues that the Commission should endorse the approach taken by states that have enacted legislation addressing access, fee levels, and time frames related to communications facilities in the public rights-of-way. First, as discussed elsewhere in this reply, the Commission has no authority to regulate the rates charged for public property. Second, any Commission action compelling local governments to provide access to the public rights-of-way and to limit compensation would create significant takings issues because the Supreme Court has clearly recognized a local government's "right to exact compensation" for such property uses, which Smart Communities explains in its comments. Third, the Commission's preemption of local discretion regarding how to charge for use of its property and of local rights-of-way practices would offend the Tenth Amendment and the Guarantee Clause of the Constitution discussed elsewhere in this filing.

R Street Institute alleges that in addition to "unreasonably high fees," local governments "often impose additional terms and conditions on broadband providers that discourage infrastructure deployment", including "extracting" what it alleges to be "unreasonable contributions"¹⁷⁴ As an example, R Street cites the City of Portland requiring companies like

¹⁷³ The spectrum example also exposes the limitation of the "monopoly" argument. Normally a monopoly argument arises in a situation where one market participant is using its power in an economically defined market to gain an advantage over competitors, and to prevent them from entering or remaining in the market in competition with it. The United States was clearly the sole controller of spectrum within the United States, and there is also almost no cost to the United States as a governmental entity of creating that spectrum, and its cost of management are far less than the value of that spectrum. However, it had no incentive to prohibit competition (and more than do localities), and the question raised by the spectrum auction example is: what is the best way to allocate access to a resource? What the auctions recognize is that if given away, or given away at cost, there is little incentive to use the resource efficiently and no guarantee that broad deployment will result.

¹⁷⁴ R Street Institute Comments at 8. *See also* Verizon Comments at 7. Verizon complains that the District has released a supplemental agreement for installing wireless facilities that , " would give the city the ability to require applicants to install, for free, WiFi access points (provided by the city) on the poles used by the applicant and to run fiber to each access point." Verizon makes no reference to whether such a proposal allows for offsets elsewhere.

Qwest and Time Warner Cable “to make in-kind contributions to support the city’s effort to deploy and operate a competing broadband network.”¹⁷⁵ On this point, R Street cites *Time Warner Telecom of Or. v. City of Portland*. What R Street fails to mention is that the Ninth Circuit held that these in-kind requirements “do not have the effect of prohibiting the provision of telecommunications services.”¹⁷⁶ The Ninth Circuit affirmed the lower court’s opinion, which agreed with the City of Portland’s expert economist that the in-kind contributions were not “subsidies”, as alleged by Qwest, because “[f]ranchisees provide in-kind contributions to the City in exchange for the valuable right to use the City’s streets for telecommunications networks.”¹⁷⁷

Indeed, contrary to R Street’s arguments there really is no correlation between right-of-way rents or in-kind contributions and broadband deployment. It is important to note here that R Street simply states examples of in-kind contributions but does not take the additional and necessary step of correlating those in-kind contributions with a decrease in deployment or an effective prohibition. Furthermore, R Street does not provide any economic analysis supporting its unfounded claims. On the other hand, Smart Communities has already shown in its analysis by economist Alan Pearce, Ph.D., that even with Portland’s in-kind contribution requirements and fees for use of its rights-of-way, the city has a “relatively large number of competitive providers” when compared to other similarly situated cities that do not impose such right-of-way

Nor does Verizon assert that it is being overcharged in any way. Without such allegations, the Commission lacks the authority to review. Still, one should not allow to stand the indirect accusation that requiring in-kind compensation is either illegal or counterproductive as reflected in the text above. In-kind payments are not inherently inappropriate, and in many cases better serve the financial needs of the applicant while meeting needs of the community.

¹⁷⁵ R Street Institute Comments at 8.

¹⁷⁶ *Time Warner Telecom of Or. v. City Of Portland*, 322 Fed. Appx. 496, *4-5 (9th Cir. 2009).

¹⁷⁷ *Time Warner Telecom of Or. v. City of Portland*, 452 F. Supp. 2d 1103, 1105 (D. Or. 2006) [citing *TCG New York, Inc. v. City of White Plains*, 305 F.2d 67, 80 (2d Cir. 2002) (cities “retain the flexibility to adopt mutually beneficial agreements for in-kind compensation”).

compensation requirements.¹⁷⁸

R Street also claims that “[w]hile municipal networks theoretically can provide additional competition and augment broadband deployment, their track record of doing so has been abysmal.”¹⁷⁹ R Street’s claims are without basis. First, municipal networks *actually* provide additional competition and augment broadband deployment. It is not theoretical, as Smart Communities explained in its comments.¹⁸⁰ Second, the track record has not been abysmal. In their comments, Smart Communities explained how the City of Portland’s “Integrated Regional Network Enterprise” (IRNE) actually increased competitive alternatives by allowing customers to reach providers who do not have the resources to build out to the entire community.

b. *Undergrounding Requirements are Not An Effective Prohibition.*

T-Mobile and Verizon call on the Commission to declare and adopt rules stating that requirements that all wireless communications facilities be located underground constitute an effective prohibition of communications service.¹⁸¹ T-Mobile cites to Mobilitie’s filing in the Mobilitie docket, where it gives an example of a “California community” that requires all facilities to be located underground, “and thus does not allow even small cells attached to existing poles.”¹⁸²

First, the industry’s argument that the Commission should use its Section 253 and Section 332 authority to take such action is incorrect. Section 253 does not apply at all here. Second, the claim underlying the application of Section 253 to wireless is that wireless and wireline should be treated identically. The complaint here is that wireless needs to be treated differently – the

¹⁷⁸ Smart Communities Wireline Comments at 27.

¹⁷⁹ R Street Institute Comments at 8.

¹⁸⁰ Smart Communities Wireline Comments at 24-27.

¹⁸¹ Verizon Comments at 33; T-Mobile Comments at 38.

¹⁸² T-Mobile Comments at 38.

two claims do not sit together. Third, the industry continues to present a misleading and incomplete picture on the reality of wireless facilities placement as it relates to undergrounding requirements. What is being complained about are requirements that structures in the public rights-of-way be placed underground. These requirements are often driven by safety considerations, as well as important economic development considerations, and often require local property owners or communities to invest millions of dollars to place utilities below ground.¹⁸³ Undergrounding programs could not possibly result in a *per se* effective prohibition under Section 253 or 332(c)(7) because though wireless services cannot operate underground, they can operate outside the public rights-of-way either on rooftops or in stealth configurations.¹⁸⁴ What are at issue legally in Sections 253 and 332(c)(7) are prohibitions and effective prohibitions, not hindrances, and in this case, no prohibition can be presumed.

c. *Moratoria Complained of by Industry are not Effective Prohibitions.*

The industry, including Verizon, T-Mobile, AT&T, and the Competitive Carriers Association, argue the Commission should use its Section 253 and 332(c)(7) authority to find that moratoria are effective prohibitions and to adopt rules that preempt moratoria.¹⁸⁵ Industry commenters cast a wide net when identifying so-called moratoria that are alleged effective prohibitions. These include public right-of-way management practices such as an Illinois city's five-year moratorium on pavement cuts to roadways that have been resurfaced or

¹⁸³ Smart Communities Comments at 71-75.

¹⁸⁴ This is also true in response to the example provided by the court in *Sprint Telephony PCS, L.P. v. County of San Diego* of an effective prohibition: "If an ordinance required, for instance, that all facilities be underground and the plaintiff introduced evidence that, to operate, wireless facilities must be above ground, the ordinance would effectively prohibit it from providing services." *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008).

¹⁸⁵ Verizon Comments at 33; T-Mobile Comments at 36; AT&T Wireline Comments at 73; CCA Comments at 17.

reconstructed;¹⁸⁶ regulatory practices such as moratoria on approvals for substantial modifications or installations requiring a variance,¹⁸⁷ and moratoria on processing and approving small cell applications,¹⁸⁸ and proprietary decisions such as refusals to negotiate or consider access agreements for public rights-of-way or municipally owned structures in public rights-of-way.¹⁸⁹

We have already explained that, to the extent it applies, the shot clock is clear for *wireless facilities* that moratoria have no effect. Beyond that, one cannot conclude that other moratoria can be addressed under either Section 332 (for wireless) or 253 (for wireline). To take an example: moratoria on street cuts are public right-of-way management tools that have three functions (a) they prevent damage to roadways that have just been restored, which is important to preserving the life of the roadway, and limiting its deterioration – an important consideration since a community can only physically restore a limited number of miles of roadway per year; (b) encourage placement when the roadway is open and before it is restored; and (c) prevent repeated disruption of pedestrian and vehicular traffic, and the costs attendant on that disruption. Because it is a management function within the meaning of Section 253(c), it does not matter if it is prohibitory or not – it is protected. And it is far from clear that it is prohibitory: a company that chooses to ignore a roadway opening is “prohibited” only in the sense that it made a choice (or may not have been ready) to enter the market when it could and now has to wait. That choice is the provider’s own choice, and does not justify preemption.¹⁹⁰

¹⁸⁶ AT&T Wireline Comments at 74.

¹⁸⁷ T-Mobile Comments at 37.

¹⁸⁸ Verizon Comments at 6.

¹⁸⁹ *Id.* at 33.

¹⁹⁰ Indeed, the argument that delay equals a prohibition ignores the fact that delay is often a result of the actions of a provider, and not fairly attributable to a pre-emptible government law.

Equally off-base is the claim of the Critical Infrastructure Coalition that a state or local agency required pre-application process that effectively prevents an application from being filed should be seen as a de facto moratorium.¹⁹¹ First, it is unclear what the standard would be for determining when a pre-application process effectively prevents an application from being filed, and the Critical Infrastructure Coalition does not cite a single example of such a pre-application process. Second, Smart Communities has argued that pre-application processes may actually speed up deployment by improving the quality and completeness of applications and facilitating faster local review. In the end, having the pre-application process count against the shot clock will actually dis-incentivize local governments from meeting and cooperating with companies, and given the significant number of delays caused by incomplete applications filed by the industry, adopting the industry's definition of moratorium may be more inefficient in the long run for deployment.

d. *Regulation of Facilities in the Public Rights-Of-Way Based on Aesthetics is not an Effective Prohibition.*

T-Mobile states that the Commission should declare that “local procedures affording a locality unfettered discretion as to whether to grant or deny an application— including unnamed or undefined discretionary factors like aesthetics that do not pertain directly to the management or use of the ROW” constitutes an effective prohibition.¹⁹² The argument presumes – incorrectly that Section 253 applies to wireless placement. In fact, it simply underlines that as T-Mobile read Section 332, it means “nothing in this act restricts local authority over wireless placement, except those items listed below, and the additional restrictions the Commission chooses to impose.” That argument is inconsistent with the Commission’s own defense of its Section 332 regulations,

¹⁹¹ CIC Comments at 20.

¹⁹² T-Mobile Comments at 40.

which are based on the assumption that the *only* limits are those in Section 332, and that the Commission has authority to interpret those provisions, but not to add to them.

In any case, the arguments are not well-founded even under Section 253. As support, T-Mobile mentions a San Francisco ordinance that regulates telecommunications antennae near the public rights-of-way based on aesthetic concerns.¹⁹³ T-Mobile challenged this ordinance in court, but in its comments conveniently omit that the California Courts of Appeal upheld the ordinance, holding that the city’s authority to regulate the installation of telecommunications equipment near public roads allows the city to consider whether the equipment would “diminish the City’s beauty.”¹⁹⁴

In 2011, the city adopted an ordinance requiring a site-specific permit before the installation of certain telecommunications equipment on existing public rights-of-way.¹⁹⁵ In enacting the ordinance, the City Council recognized that “[t]he City’s beauty is vital to the City’s tourist industry and is an important reason for businesses to locate in the City and for residents to live [in the City].”¹⁹⁶ The ordinance was intended, in part, “to prevent telecommunications providers from installing wireless antennas and associated equipment in the City’s public right-of-way either in manners or in locations that will diminish the City’s beauty.”¹⁹⁷

Acknowledging the “tension” that sometimes “exists between technological advancement and community aesthetics,”¹⁹⁸ the court rejected the plaintiffs’ claim that the public right-of-way

¹⁹³ T-Mobile Comments at 40.

¹⁹⁴ *T-Mobile West LLC v. City and County of San Francisco*, 3 Cal. App. 5th 334, 340 (2016).

¹⁹⁵ *Id.* at 340-342.

¹⁹⁶ *Id.* at 340.

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 330.

is inconvenienced only by physical obstruction of travel.¹⁹⁹ Citing *Sprint PCS Assets, L.L.C. v. City of Palos Verdes Estates*, 583 F.3d 716 (9th Cir. 2009), the court explained that public use of the road encompasses “far more than getting from place to place,” and may include “social, expressive and aesthetic functions.” Rejecting the plaintiffs’ claims of preemption, the court explained that state law does not give telephone corporations unlimited rights to install their equipment in the public right-of-way.²⁰⁰ Rather, state law reserves to local government the police power to regulate against inconvenience of public use, a power that is “broad enough to allow discretionary aesthetics-based regulation.”²⁰¹

T-Mobile makes no argument as to why such regulation is “unfettered” and simply states that “aesthetics” is an “unnamed or undefined discretionary factor[] that does not “pertain directly to the management or use of the ROW” — a claim the court rightly and flatly rejected.²⁰² In a footnote later on, T-Mobile stated that the San Francisco ordinance “requires compliance with aesthetics-based compatibility standards, determined solely by the location of the facility.”²⁰³ Thus, T-Mobile recognizes that there are certain standards that the city must use when regulating wireless facilities based on aesthetics, and as the California appellate court has stated, such aesthetic-based compatibility standards pertain directly to management and use of the public rights-of-way.²⁰⁴

¹⁹⁹ *Id.* at 355-356.

²⁰⁰ *Id.* at 348-349.

²⁰¹ *Id.* at 346-347.

²⁰² T-Mobile Comments at 39.

²⁰³ T-Mobile Comments at 40, FN 173.

²⁰⁴ The cases cited do not involve a consideration of the scope of Section 253 or 332, but instead relate to California law provisions governing the use of the rights of way by wireless providers. In California, wireless providers obtain access to the rights of way under the same provisions that apply to wireline providers. The holding on aesthetics is thus not based on a distinction between wireline and wireless per se, but on a determination that management of the right of way often involves aesthetic considerations (as should be obvious where some undergrounding projects are concerned).

AT&T also claims that local governments have “enacted unreasonable aesthetic restrictions” that “can” have the effect of prohibiting “wireless small cell facilities”.²⁰⁵ Without naming any municipalities, AT&T lists several examples of “local governments” in different states that supposedly violate Section 253 and 332, alleging that such ordinances and local laws are “problematic because they are vague and often applied discriminatorily.”²⁰⁶ AT&T’s examples include requirements for stealth designs and prohibitions on siting in and around historic properties and districts.²⁰⁷ Aside from the fact that AT&T fails to name such local governments or to give them an opportunity to respond, AT&T fails to take into account that its list consists of examples that may be hindrances or added costs of doing business but are not effective prohibitions. Indeed, AT&T even says that “[a]s a practical matter, service providers must incur the added expense of conforming their equipment designs to the approved size and configuration ...”²⁰⁸ An added cost to conform to certain size and configuration standards or to paint facilities a color that blends with the surroundings is not an effective prohibition, and there is no economic analysis provided by AT&T or other industry commenters suggesting that such requirements are cost prohibitive under either Section 332 or (even if it applied) Section 253.

e. *Commenters Seeking Caps On Permit Fees Are Misguided; Cost-Based Fees Should Vary*

Cost-based fees, by their very nature, will be different in different communities and if anything, typically under-recover actual costs. Industry calls for seeking caps on permit fees are misguided. Pole owners understand this concept.²⁰⁹ So does Chairman Pai.²¹⁰

²⁰⁵ AT&T Wireless Comments at 16.

²⁰⁶ *Id.* at 17.

²⁰⁷ *Id.*

²⁰⁸ *Id.* at 16-17.

²⁰⁹ AT&T opposes a requirement for uniform make-ready costs as impractical and not recognizing that each make-ready is distinct.

Permit fees are based on costs. Not surprisingly, the frequency and detail with which costs are analyzed and fees set depends on the size and resources available to a community, as well as state or local requirements. But, there is certainly no reason to believe that the industry is being charged unreasonable fees, or that federal action would be appropriate or permissible. In our *Mobilitie* Reply Comments as well as in our opening comments in the Wireless Infrastructure proceeding we provided thumbnails as to the way a number Smart Communities such as Ann Arbor and Cary, North Carolina set fees based upon annual use levels and budgetary insights, not by whim.²¹¹

Atlanta, Georgia, a Smart Communities member, was praised by some in the *Mobilitie* docket (*see. e.g.* ,*Mobilitie*²¹²) as a model city for deploying small cell wireless technology. On the other hand, Crown Castle criticized Atlanta in the *Mobilitie* docket for an overly expensive fee ordinance that it has yet to pass.²¹³ Atlanta explained to the Commission as part of the Smart Communities' Reply Comments in *Mobilitie*²¹⁴ and in an April 5, 2017²¹⁵ letter to the Commission that:

[Atlanta]Committee, is considering an ordinance that would establish reasonable fees for wireless pole attachments in the City's public right-of-way. Before moving the legislative

²¹⁰ Dissenting Statement of Commissioner Ajit Pai, *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375 (2015).

²¹¹ Smart Communities Reply Comments [WT Docket No. 16-421] (filed April 7, 2017) at pg 50-51.

²¹² Don Bishop, *Seeing Wireless Service as Essential Speaks to the Future of Wireless Infrastructure*, AGL Magazine (March 2017) at p. 36 available at <http://cdn.coverstand.com/39675/389411/213ff655b3e370bf9735aed1e62d36199b03bc91.3.pdf> ("Jabara Interview").

²¹³ Crown Castle *Mobilitie* Comments at p.12 – The City of Atlanta files as part of these Reply Comments as Exhibit 1 a Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O'Rielly ("Atlanta Letter") that provides a different story. ("The City of Atlanta, specifically the City's Utilities.

²¹⁴ Smart Communities Reply Comments in *Mobilitie* docket at p. 10.

²¹⁵ Letter from William Johnson, City of Atlanta, dated April 5, 2017 to Chairman Pai and Commissioners Clyburn and O'Rielly

proposal out of Committee, the City invited the Georgia Wireless Association (“GWA”) to engage in discussions about the proposed ordinance. As a GWA member, Crown Castle has participated in three meetings at City Hall during a five week period, with a fourth meeting scheduled to occur in two weeks. The meetings were hosted by City officials from the Mayor’s Office and the Department of Public Works, and attended by approximately 20 industry representatives from GWA. In response to industry’s input, including that of Crown Castle, during the first three meetings, the City substantially restructured the proposed ordinance. None of this information, however, was included in Crown Castle’s description of the City’s ordinance that was shared with the Commission.”²¹⁶

In this docket, while Crown Castle appears to recognize that its claims against Atlanta were wrong, and does not repeat those allegations, others have, citing to Crown’s Mobilitie Comments.²¹⁷ We call this incident to the Commissions attention to not only clarify for the record Atlanta’s exemplary outreach to the industry in establishing its pricing, but also to point out the echo chamber of complaint and the lack of credibility many of these complaints possess.

Crown Castle did malign Smart Communities member Gaithersburg for considering a master right-of-way use and franchise agreement that would impose a non-refundable application fee of \$500 for each new pole or collocation, an annual attachment fee of \$500 for each facility on which equipment has been installed, and a use fee of five percent (5%) of gross revenues.²¹⁸ Much like its allegations against Atlanta in the Mobilitie docket, Crown Castle fails to mention that the City of Gaithersburg provided a 30 day comment period on the franchise agreement and fees, of which Crown took advantage. Crown offered comments on the right of way and

²¹⁶ *Id.*

²¹⁷ T-Mobile Comments at 7.

²¹⁸ Crown Castle Comments in Wireless Docket (17-79) (Filed June 15, 2017) at 12

franchise agreement which are reflected in the final draft, but Crown Castle was silent as to the fees associated with the agreement. Their silence at the local level may be attributed to the fees being modeled upon agreement that the Gaithersburg City attorney's office was able to find between Crown Castle and other Maryland jurisdictions. Why Crown fails to share these additional insights with the Commission is troubling. Such additional information would paint a fuller picture of how painstaking local government are in establishing ordinances, and permit pricing levels. This should cause the Commission to pause when relying upon allegations from Crown as to improper pricing

Finally, a third member of Smart Communities that is maligned by Crown Castle regarding the costs of permit fees is Smart Community member Montgomery County, Maryland. Montgomery County is a member of Smart Communities, but also filed Supplemental Comments and Reply Comments in the *Mobilitie* docket,²¹⁹ in which the County documented that any claims of delay or excessive fees made against the County are dwarfed by its record of success, including:

- The County has reviewed 2,900 applications in 20 years, and currently has 1,121 wireless facilities deployed at 534 unique locations throughout the County;
- The County Department of Permitting Services processes over 60,000 permits and conducts more than 157,000 inspections annually.²²⁰

Moreover, the costs of processing applications in Montgomery County are set based upon

²¹⁹ Supplemental Comments of Montgomery County, MD (filed Mar. 8, 2017) ("Montgomery County Mobilitie Comments"). Supplemental Reply Comments of Montgomery County, MD (filed April 7, 2017) (Montgomery County Mobilitie Reply Comments.)

²²⁰ Montgomery *Id.* at i.

research, and for which there is a publically available audit,²²¹ and subject to the annual budgeting process in which carriers are welcomed to participate. In fact, a close review of the costs of addressing applications in Montgomery County versus the fees collected for these services reveals a loss as the costs of outside technical assistance is covered, but many time county administrative staff's time is not.

f. *The Commission Cannot Regulate Municipal Poles Under the Guise of an Effective Prohibition*

NCTA argues that Section 253 can be used to regulate municipal poles despite the clear language of Section 224 on the basis of an unsubstantiated claim of local government “abuse of monopoly power”.²²² CTIA argues that municipal poles are not excluded from the Commission’s authority under Section 253.²²³ As we noted earlier in Section V, the industry cannot make an effective prohibition claim with respect to access to municipal poles unless municipal poles somehow get captured by Section 253, and the only way this can happen is if the proprietary interests of localities in poles or similar infrastructure are ignored, which it cannot be. As importantly, the idea that the careful limitations struck in Section 224 were overturned by Section 253 do not stand up to scrutiny. Section 224 was amended and broadened in Section 703 of the TCA. Had Congress intended to eliminate the exemption for municipal infrastructure, it would have done so there. It did not. Nor can section 253 serve as a substitute for Section 224. Section 253, by its terms, allows for preemption of a law, regulation or legal requirement. What industry wants is not preemption, but grant of an affirmative right that does not exist (the right to attach); and it seeks that right at a rate prescribed by the Commission. But because the

²²¹ The Department of Permitting Services fee audit is at FN 17
<https://permittingervices.montgomerycountymd.gov/DPS/pdf/DPSFeeFinalReport2015.pdf>.

²²² NCTA 42-44

²²³ CTIA Comments at 13.

Commission is limited by Section 253 to preemption; and lacks the authority to either grant rights or provide access under Section 224, the relief sought is beyond the authority of the Commission to provide.

g. *The Commission Cannot Preempt State Franchise Fees or Regulations Applicable to Cable Operators Under the Guise of an Effective Prohibition*

NCTA urges the Commission, under Section 253 and 541, to “prohibit local governments from imposing fees for broadband or telecommunications services offered by cable operators that place no additional burden on the public right-of-way.”²²⁴ NCTA argues that where a cable operator already pays a cable franchise fee for use of the public rights-of-way, the addition of broadband and telecommunications services does not impose an additional burden on the public rights-of-way and should not be treated by local governments as a “revenue-generating opportunity.”²²⁵ Essentially, NCTA argues that cable operators should be treated differently because they already pay a cable franchise fee for use of the public rights-of-way, and so somehow because they are doing that, it would be an effective prohibition on telecommunications services to charge them more if there is no added burden on the public rights-of-way.

NCTA urges the Commission to adopt a position that has already been proven in court to be untenable and one that goes against the plain language in the Cable Act. In the *City of Eugene v. Comcast of Oregon II, Inc.*, 359 Ore. 528 (2016), the Supreme Court of Oregon correctly held that a license fee imposed by the City of Eugene on Comcast for use of the public rights-of-way to provide telecommunications service was not a franchise fee barred by the Cable Act. Looking to the plain language of the Cable Act, the court held that it was not a franchise fee because it

²²⁴ Comments of NCTA, WC Docket No. 17-84, at 23-24 (Jun. 15, 2017).

²²⁵ *Id.*

was not imposed on Comcast *solely* because of its status as a cable operator. The court stated the following:

The problem with Comcast’s argument...is that it fails to account for the phrase “solely because of” in 47 USC § 542(g)(1). Comcast argues only that the license fee is imposed on it for activity it performs as a cable operator. At most, that argument establishes that Comcast is a cable operator and that some applications of the license fee reach cable operators. But the statute requires more. Not all fees imposed on a cable operator are franchise fees. Instead, a fee is a franchise fee if it is imposed on a cable operator solely because of its status as a cable operator. Whether the fee is imposed on a cable operator is a different question from whether the fee is imposed solely because of a company’s status as a cable operator.

Comcast errs by focusing on its status as a cable operator rather than focusing on the scope of the license fee. The phrase “solely because of” is used to identify the reason that the fee is imposed on one company rather than another. *See Webster’s* at 2168 (defining “solely” as “to the exclusion of alternate or competing things (such as persons, purposes, duties) done solely for money a privilege granted solely to him rely solely on oneself”); *id.* at 194 (defining “because of” as “by reason of : on account of”). A fee is a franchise fee if it is imposed on a company because it is a cable operator and not for any other reason.

The city’s license fee does not meet that standard. The license fee is imposed on Comcast because it provides telecommunications services over the city’s public rights of way. The relationship between that reason and Comcast’s status as a cable operator is only incidental. Although one type of company that may provide telecommunications services is a cable operator, cable operators do not necessarily provide telecommunications services and non-cable operators may provide telecommunications services. Whether a company is a cable operator is therefore neither necessary nor sufficient to trigger the license-fee requirement.²²⁶

Thus, the issue here is not whether the additional broadband and telecommunications service adds a burden on the public rights-of-way (although it may in fact do so, since facilities not required for cable may be installed in connection with the provision of non-cable services). The Cable Act chooses to limit what may be charged for cable service, but by its terms does not pretend that this is intended as compensation for *all* uses of the right of way. Rather, the

²²⁶ *City of Eugene v. Comcast of Oregon II, Inc.*, 359 Ore. 528, 557-558 (2016)

franchise fee provision is written to permit a specified fee for cable service, and to permit other non-discriminatory fees for other services as part of the fees for use of the rights of way – as long as the fees are non-discriminator.

h. *Additional Local Practices Mentioned by Industry are not Effective Prohibitions*

Industry commenters to make several declarations that certain alleged practices by local governments constitute effective prohibitions. Verizon asks the Commission to use its Sections 253 and 332 authority to find that conditions on the provision of wireless service – such as “excessive separation requirements between facilities, overly restrictive equipment size limits, and unreasonable set-back requirements from residential properties – would similarly strain a carrier’s ability to provide service” and are therefore preempted.²²⁷ Mobilitie also states that minimum distance requirements prohibiting new poles are effective prohibitions under Section 253.²²⁸

T-Mobile asks the Commission to declare that “onerous” application processes that impose “burdensome requirements on applicants is an effective prohibition”, which would include submitting information or undergoing a review process that does not have anything to do with management or use of the public rights-of-way, submitting corporate policies, documentation of licenses, and other information unnecessary to meet objective public safety and welfare standards.²²⁹

AT&T also wants the Commission to declare limitations on competitors, prohibiting batched applications, and burdensome permitting requirements all to be effective prohibitions

²²⁷ Verizon Comments at 13.

²²⁸ Mobilitie Comments at 8.

²²⁹ T-Mobile Comments at 38-39.

under Section 253.²³⁰ Similarly, Verizon also argues that burdensome permitting requirements are effective prohibitions because they impose unnecessary and unreasonable delays in the permitting process.²³¹

The issue of whether a delay in processing an application is an effective prohibition has been litigated in courts. Courts, however, have found that an extensive delay can constitute an effective prohibition, but only in combination with other factors such as a city's discretionary authority to reject a franchise on *any* public interest factor.²³² At the outset, Smart Communities has shown in its comments that delays in deployment are most often attributable to incomplete applications.²³³ Moreover, what industry commenters often allege to be burdensome permitting requirements are in reality detailed application requirements that local governments use to fully and promptly evaluate the merits of an application, knowing the unique needs of the particular community at issue. The court in *Sprint Telephony PCS, Ltd. P'ship v. Cty. of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008) found the same.²³⁴

²³⁰ AT&T Wireless Comments at 3, 21-22.

²³¹ Verizon Comments at 12.

²³² *TCG New York, Inc. v. City of White Plains*, 305 F.3d 67, 76-77 (2d Cir. 2002).

²³³ Smart Communities Wireless Comments at 17-24.

²³⁴ The court stated the following:

“Most of Sprint’s arguments focus on the discretion reserved to the zoning board. For instance, Sprint complains that the zoning board must consider a number of “malleable and open-ended concepts” such as community character and aesthetics; it may deny or modify applications for “any other relevant impact of the proposed use”; and it may impose almost any condition that it deems appropriate. A certain level of discretion is involved in evaluating any application for a zoning permit. It is certainly true that a zoning board could exercise its discretion to effectively prohibit the provision of wireless services, but it is equally true (and more likely) that a zoning board would exercise its discretion only to balance the competing goals of an ordinance--the provision of wireless services and other valid public goals such as safety and aesthetics. In any event, Sprint cannot meet its high burden of proving that “no set of circumstances exists under which the [Ordinance] would be valid,” Salerno, 481 U.S. at 745, simply because the zoning board exercises some discretion.

The same reasoning applies to Sprint’s complaint that the Ordinance imposes detailed application requirements and requires public hearings. Although a zoning board could conceivably use these procedural requirements stall applications and thus effectively prohibit the provision of wireless

It is notable that most of these arguments depend on the incorrect assumption that Section 253 applies to wireless siting decisions. It does not, and it is not seriously argued that the applications are inconsistent with Section 332(c)(7). As Smart Communities explained in Section V.D, there is no evidence to support any conclusion that such categories of practices, described without ambiguity and without any context, arise to the level of effective prohibitions in any way, shape or form. Nor, as we have discussed in Section II.D, is there any legal basis for taking action on these complaints. Moreover, some simply ignore the fact that Section 253 is itself limited to requirements that prohibit the ability of an entity to provide telecommunications services. Traditionally, access to rights of way to install permanent facilities has been limited to governmental agencies and utilities – entities that perform public functions and have obligations to serve the public. The argument, for example, that one cannot require licenses is actually an argument that Section 253 allows anyone to access the right of way for any purpose. It does not. The Commission should reject these complaints outright.

5. *The Record Does Not Support Establishing Shot Clocks Or Deemed Granted Remedies For Franchise Applications.*

Several commenters ask the Commission to expand its use of shot clocks, currently limited to some wireless siting and cable franchise matters, to all instances where permitting is required.²³⁵ Commenters also ask the Commission to use its authority to extend deemed granted remedies to all types of deployments. As we have noted repeatedly, Section 253 has no bearing

services, the zoning board equally could use these tools to evaluate fully and promptly the merits of an application. Sprint has pointed to no requirement that, on its face, demonstrates that Sprint is effectively prohibited from providing wireless services. For example, the Ordinance does not impose an excessively long waiting period that would amount to an effective prohibition. Moreover, if a telecommunications provider believes that the zoning board is in fact using its procedural rules to delay unreasonably an application, or its discretionary authority to deny an application unjustifiably, the Act provides an expedited judicial review process in federal or state court. See 47 U.S.C. § 332(c)(7)(B)(ii) & (v).” *Sprint Telephony PCS, Ltd. P’ship v. Cty. of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008).

²³⁵ Conterra-Southern Light-Uniti Comments at 17-20.

on wireless applications. However, it would not support applications of “shot clocks” even with respect to applications for other facilities. As discussed at length by Smart Communities in initial comments²³⁶ and in these reply comments, Section 253 does not support general rulemaking of this type, and does not permit any Commission action absent a finding that a particular practice “prohibit[s] or [has] the effect of prohibiting” the ability to deploy telecommunications services.²³⁷ Section 253 sets high bars, both procedurally and substantively, which must be cleared before Commission action could proceed, including Section 253(d)’s requirements of notice and opportunity to comment on the proposed preemption of a particular “statute, regulation, or legal requirement” alleged to violate Section 253(a) or (b).²³⁸

Commenters seeking expansive shot clocks and deemed granted remedies offer no evidence to support such a finding, however. In a joint filing, Conterra, Southern Light, and Uniti Group claim that “local franchising processes that exceed 120 days” meet the requirements of Section 253(a), but offer absolutely no evidence to support this assertion.²³⁹ Commenters repeatedly argue that any process which results in “delay” amounts to a prohibition, and that delays amount to “effectively preventing the provision of telecommunications service.”²⁴⁰ Smart Communities agree that pace of deployment is an important consideration – no community is opposed to the idea of broadband deployment. All evidence suggests that deployment is proceeding apace, however, and nowhere in the joint Conterra-Southern Light-Uniti filing is any example offered of an instance where delays resulted in failure, ultimately, to deploy service.

²³⁶ Smart Communities Wireline Comments at 6-11, 21.

²³⁷ 47 U.S.C. §253(a).

²³⁸ 47 U.S.C. §253d.

²³⁹ Southern Light Conterra Uniti at 18.

²⁴⁰ *Id.* At 20

Section 253 is unambiguous on this point – only policies which prohibit, or have the effect of prohibiting, deployment, are subject to preemption under that section.

The same flaws appear in commenters’ requests that the Commission implement deemed-granted remedies to kick in at the conclusion of any shot clocks. Commenters again fail to offer any substantiation to support their assertion that deemed-granted remedies are necessary to remedy practices which in fact, not merely in rhetoric, prohibit the deployment of services. And they fail to point to any substantive right the Commission is provided to grant access to any municipal property, including rights of way, under Section 253.

Finally, commenters fail to recognize that, as Smart Communities wrote in initial comments, “Section 253 entails a very different framework with a limited role assigned to the Commission. Thus, the Commission has no authority to adopt a shot clock or other time limit.”²⁴¹ Smart Communities’ initial analysis remains valid, and nothing in the record proffered in support of expansive Section 253-based shot clocks provides any legally sustainable alternative interpretation.

F. Wireless Industry Claims Of Unreasonable Discrimination Are Unfounded.

T-Mobile and Sprint argue the Commission should clarify that terms and access made available to any telecommunications provider must be available to all on the same terms and conditions.²⁴² In particular, T-Mobile argues that the Commission must make clear that the wireline industry cannot be subject to “more favorable” access to the public rights-of-way compared to the wireless industry.²⁴³

²⁴¹ Smart Communities Wireline Comments at 22.

²⁴² T-Mobile Comments at 45; Sprint Comments at 43.

²⁴³ T-Mobile Comments at 46.

First, as we have explained earlier, the wireless industry cannot avail itself of Section 253 because that statute does not apply to wireless service. Even if it did, by arguing that undergrounding requirements, for example, do not apply to them when such requirements are imposed on the wireline industry, the wireless industry is making a self-refuting argument because it is essentially asking to be treated like the wireline industry except when they want to be treated differently. In essence they are acknowledging that asymmetric treatment does not violate Section 253, and that, in fact, there are significant differences between traditional wireline facilities and wireless facilities.²⁴⁴

Second, as Smart Communities noted in its comments, given that Section 253 does not apply to wireless deployments. The only non-discrimination provision that applies to wireless appears in Section 332(c)(7)(B)(i)(I), 332(c)(7) which and prohibits state and locals governments from refers to unreasonably discriminating among providers of functionally equivalent services. Courts and the legislative history make clear that for the limited purpose of applying Section 332(c)(7)(B)(i)(I), wireless and wireline services cannot be considered “functionally equivalent.”

T-Mobile’s position has no support in either legislative history or case law. The House Conference Report states that the term “functionally equivalent services” refers “only to personal wireless services that directly compete against one another” or as interpreted by the 7th Circuit, “... the statute requires the decision maker to see if the two services (or products) are direct substitutes for one another and thus are in direct competition with one another.” While wireless and wireline services may both provide voice, they are hardly direct substitutes. The Second Circuit added further clarification to the House Report and 7th Circuit when it explained:

²⁴⁴ The Commission’s interpretation of Section 6409 illustrates the point. It does not limit wireless to using utility poles at a height consistent with those elsewhere in the rights of way – it permits an expansion of one-quarter to one half of a pole’s height. It does not limit the size or location of attachments to those typical on a utility pole. If a facility is not subject to concealment elements, six foot appurtenances can be added to the sides of the poles, in configurations that far exceed what is traditionally permitted in the rights of way.

Sprint's ability to compete with land-line based services simply is not part of the inquiry under subsection B [of Section 332(c)(7)]. Subsection B(i)(I) speaks only to Sprint's ability to compete with "functionally equivalent services," which does not include land-line services. See H.R. Conf. Rep. No. 104-458, at 208, reprinted in 1996 U.S.C.C.A.N. at 222 ("When utilizing the term 'functionally equivalent services' the conferees are referring only to personal wireless services that directly compete against one another."). Because subsection B(i)(II) only considers whether a town's decision will have the effect of prohibiting personal wireless services in a given area, Sprint's reliance on that subsection to contend that it cannot be prohibited from competing effectively with land-line systems is misplaced.

Indeed, neither Section 253 nor Section 332(c)(7) require local governments to treat different types of telephone or personal wireless companies identically.²⁴⁵ The concern in Section 253(c)'s safe harbor is on a competitively neutral and nondiscriminatory basis between telecommunications competitors, not between telecommunications providers and others.²⁴⁶ Even if Section 253(c)'s safe harbor is applicable to "asymmetric treatment" between telecommunications and non-telecommunications providers, Section 253(c)'s safe harbor is applicable unless there is a significant imbalance; and if the difference in treatment is not justified.

²⁴⁵ What wireless providers are seeking really is quite different. Smart Communities really have traditionally approved only wires, running along the roadway, where facilities are allowed aboveground; and only as a secondary use. Traditionally, headend, central offices and the other operating elements have been placed off the public rights-of-way. Here, wireless providers are placing many of those permanent facilities in the public rights-of-way, in ways that require much larger deployments. It is not discrimination to treat such different facilities differently, and to focus on their impacts.

²⁴⁶ Smart Communities Wireless Comments at 70-71.

VI. CONCLUSIONS

For the reasons discussed above, and in the expert declarations and reports, the Commission should not adopt additional rules or shot clocks directed at local governments; nor should it continue to pursue the topics raised in the Notices of Inquiry.

Respectfully submitted,

/s/ Joseph Van Eaton

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July 16, 2018

Marlene Dortch, Secretary
Federal Communications Commission
445 12th St SW
Washington, D.C. 20554

Re: Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, WT Docket No. 17-79;
Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84;
Streamlining Deployment of Small Cell Infrastructure, WT Docket No. 16-421;
Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies, ET Docket No. 13-84;
Accelerating Broadband Deployment, Broadband Deployment Advisory Committee, GN Docket No. 17-83

Dear Ms. Dortch:

On Friday, July 13, 2018, the undersigned and Joseph Van Eaton, both of Best Best & Krieger LLP and counsel to the Smart Communities and Special Districts Coalition, met with Thomas Johnson, General Counsel, and Ashley Boizelle, Deputy General Counsel, to discuss the above-captioned proceedings. Specifically, we discussed local government land use and permitting processes, the costs involved with same, and other land use issues, all of which are described in greater detail in the attached document.

Pursuant to Section 1.1206(b) of the Commission's rules, a copy of this letter is being filed electronically in the above-captioned dockets. Please contact me if there are any issues.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Gerard Lavery Lederer', written over a horizontal line.

Gerard Lavery Lederer
of BEST BEST & KRIEGER LLP

Enclosure

cc: Thomas Johnson (by email)
Ashley Boizelle (by email)

**Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

In the Matter Of

Accelerating Wireless Broadband)	
Deployment by Removing Barriers to)	
Infrastructure Investment	)	WT Docket No. 17-79
)	
Accelerating Wireline Broadband)	
Deployment by Removing Barriers to)	
Infrastructure Investment	)	WC Docket No. 17-84
)	
Streamlining Deployment of)	
Small Cell Infrastructure	)	WT Docket No. 16-421
)	
Reassessment of Federal Communications)	
Commission Radiofrequency Exposure)	
Limits and Policies	)	ET Docket No. 13-84
)	
Accelerating Broadband Deployment,)	
Broadband Deployment Advisory)	
Committee	)	GN Docket No. 17-83

EXECUTIVE SUMMARY

Certain of the recommendations of the Broadband Deployment Advisory Commission, and filings made in the dockets above, appear based on a misunderstanding of the differences between:

- the franchising process;
- the land use approval process,
- the permitting process, and
- the leasing/licensing processes.

Some of this confusion is understandable as different jurisdictions sometimes use the same terms to describe the different authorizations that are granted in each these four, interrelated, yet distinct processes. As a matter of sound policy and in order to properly vindicate and preserve rights constitutionally and statutorily reserved to states and local governments, the Smart Communities and Special Districts Coalition¹ believe it critical that the Commission consider the differences in these processes, and the operational challenges each may involve.²

¹ The Smart Communities and Special Districts Coalition is comprised of members of the Smart Communities Siting Coalition which was originally formed to participate in the Mobilitie Petition docket (WT Docket No. 16-421), plus additional communities and special districts who have joined to participate in the FCC's 2017 Wireless and Wireline Infrastructure proceedings (WT Docket No. 17-79 and WC Docket No. 17-84, respectively). The full membership of the Smart Communities and Special Districts Coalition is as follows:

Individual members: Ann Arbor, MI; Atlanta, GA; Berlin, MD; Berwyn Heights, MD; Boston, MA; Capitol Heights, MD; Cary, NC; Chesapeake Beach, MD; College Park, MD; Corona, CA; Dallas, TX; District of Columbia; Elsinore Valley Municipal Water District (CA); Frederick, MD; Gaithersburg, MD; Greenbelt, MD; LaPlata, MD; Laurel, MD; City of Los Angeles, CA; Marin Municipal Water District (CA); McAllen, TX; Montgomery County, MD; Myrtle Beach, SC; New Carrollton, MD; North County Fire Protection District (CA); Ontario, CA; Padre Dam Municipal Water District (CA); Perryville, MD; Pocomoke City, MD; Poolesville, MD; Portland, OR; Rockville, MD; Rye, NY; Santa Margarita Water District (CA); Sweetwater Authority (CA); Takoma Park, MD; University Park, MD; Valley Center Municipal Water District (CA); Westminster, MD and Yuma, AZ.

Organizations Representing Local Governments: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The Michigan Coalition to Protect Public Rights-of-Way ("PROTEC") is an organization of Michigan cities that focuses on protection of their citizens' governance and control over public rights-of-way. The Michigan Townships Association ("MTA") promotes the interests of 1,242 townships by fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials. The Public Corporation Law Section of the State Bar of Michigan is a voluntary membership section of the State Bar of Michigan, comprised of approximately 610 attorneys who generally represent the interests of government corporations, including cities, villages, townships and counties, boards and commissions, and special authorities. The Public Corporation Law Section participates in cases that are significant to governmental entities throughout the State of Michigan. The position expressed in this Brief is that of the Public Corporation Law Section only. The State Bar of Michigan takes no position.

Properly considered, the Commission should conclude:

- It is not appropriate to shorten the existing shot clocks, nor to expand their application;
- Nor is it appropriate to establish additional punitive enforcement measures (such as deemed granted remedies or price controls)

that are likely to be ineffective and counter-productive – even assuming the Commission had constitutional or statutory authority to impose such measures, which Smart Communities and Special Districts Coalition does not believe to be the case.

The Michigan Municipal League (“MML”) is a non-profit Michigan corporation whose purpose is the improvement of municipal government. Its membership includes 524 Michigan local governments, of which 478 are members of the Michigan Municipal League Legal Defense Fund. The purpose of the Legal Defense Fund is to represent MML member local governments in litigation of statewide significance. The Kitch Firm represents PROTEC, MML, MTA and Public Corporation Law Section of the State Bar of Michigan. Best Best & Krieger represents the others in the Smart Communities coalition.

² This filing also supplements an *ex parte* letter filed in the above-captioned proceedings following a June 28, 2018 meeting between the Wireless Telecommunications Bureau and representatives of local governments nationwide. *See Ex Parte Letter from Gerard Lavery Lederer*, WT Docket Nos. 17-79, 16-421, WC Docket No. 17-84, GN Docket No. 17-83, ET Docket No. 13-84 (June 29, 2018) (“June 29 Ex Parte”).

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**Before the
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In the Matter Of

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I. DISTINCTIONS BETWEEN FRANCHISING, LAND USE APPROVALS, PERMITTING AND LEASES/LICENSES

While the terminology may vary from place to place, and from state to state, the distinctions can be broadly summarized as follows. It is important to recognize that there are and can be overlaps between what we describe as the “land use” and other permitting processes, but there are also very practical reasons to recognize distinctions among the processes.

1. A “*franchise*” provides a right to occupy rights of way to engage in a quasi-public enterprise.³ Franchises are often service-specific – the right to construct a telephone

³ See McQuillin, *The Law of Municipal Corporations*, Vol. 12 § 34:2 (3d ed. 2018) (“McQuillin”).

system is distinct from the right to build an electrical system, for example.⁴ Franchises are typically contractual in nature, must be subject to the police power of the community, and hence are subject to applicable land use and permitting processes.⁵ As a result, the franchise itself does not grant a right to occupy any particular location within the rights of way in any particular manner.⁶ However, because franchising by definition involve provision of an important right – a right to access rights of way to provide certain service – it is typically subject to compensation in the form of rents, and in addition, a person seeking a franchise may be required to bear the costs associated with obtaining the franchise.⁷ The Supreme Court has long recognized that state and local governments have property interests such that the Fifth Amendment is directly implicated by any legislation that purports to authorize use of public property.⁸

2. ***Land use authorizations*** are a special type of permit, that involve determination of whether a particular “use” is allowed at a particular location.⁹ Land use ordinances may

⁴ *See id.*

⁵ *Id.* at § 34:88 (“Municipal power to regulate the use of the streets is not exhausted with the grant of a franchise, but continues.”)

⁶ *Id.* at § 34:99 (“The grant of a franchise to use streets does not preclude the municipality from requiring application for a permit to excavate the streets to lay pipes or erect poles or the like, since requiring such a permit and the payment of a reasonable fee is a proper and reasonable exercise of the police power, and does not impair the franchise right of a company to use the streets.”)

⁷ *See id.* at § 34:2 (“It has been stated that a governmental ‘franchise’ constitutes a special privilege granted by the government to particular individuals or companies to be exploited for private profit as such franchisees seek permission to use public streets or rights-of-way in order to do business with a municipality's residents, and are willing to pay a fee for this privilege.”)

⁸ *See City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92 (1893), *op. on rehrg.*, 149 U.S. 465 (1893); *see also United States v. 50 Acres of Land*, 469 U.S. 24 (1984); *see also Cities of Dallas and Laredo v. FCC*, 118 F.3d 393, 397-98 (5th Cir. 1997) (“Franchise fees are . . . essentially a form of rent: the price paid to rent use of the public rights-of-ways.”)

⁹ *See McQuillin* at Vol. 8 § 25:179.18 (“The purpose of requiring permits under a zoning law is to facilitate its enforcement by providing zoning authorities with knowledge of a contemplated use and enabling them to determine whether or not it complies with the law.”)

divide a city into zones, and define what activities are permitted in what zones – an example being the distinctions between residentially zoned neighborhoods, and commercially-zoned districts.¹⁰ A department store may be a permitted use in the latter, but prohibited absent a special exception or a variance in the former. The land use process may involve consideration of aesthetics, size, design and the like, but while it has some elements that overlap those discussed in the next section, the issues are distinct. 47 U.S.C. § 332 is primarily concerned with this process. Land use involves an exercise of the police power, and in most states, the fees associated with the land use processes are cost-based.¹¹

3. ***Permitting*** may be focused on the manner in which use rights are exercised, or may be a predicate to obtaining or exercising use rights; it may involve both pre-construction, and post-construction processes.¹² Hence, if a company obtains a variance to place a commercial business in a residential area, it must also later obtain permits, such as electrical permits, construction permits and building permits that are designed to protect public safety¹³ and to ensure that facilities are installed in accordance with guidelines and regulations governing construction of facilities, and (in the case of facilities along rights of way) guidelines for

¹⁰ *Id.* at § 25:19 (“Zoning seeks to promote the public health, safety, morality and welfare by confining certain classes of buildings and uses to defined areas.”)

¹¹ *See* McQuillin at Vol. 9 § 26:41 (“Where a permit fee is imposed pursuant to a municipality's power to regulate, the amount of the fee may not exceed the cost of issuing the permit and of inspecting and regulating the permitted activity.”)

¹² *See* McQuillin Vol. 9A § 26:224 (“Statutes and ordinances may impose requirements and conditions antecedent to the issuance of building permits, and substantial compliance with those requirements or conditions is essential to the grant of the permit.”)

¹³ *See* Comments of the Smart Communities and Special Districts Coalition, WT Docket No. 17-79, Exhibit 4, Report and Declaration of Stephen M. Puuri, at 3-4 (Jun. 15, 2018) (“Smart Communities & Special Districts Wireless Comments”).

roadway design.¹⁴ There may be pre-construction requirements such as “Miss Utility” with which a permittee must comply. There are oft times also post-construction requirements that must be documented before a facility can be used. For instance, it may be necessary to inspect completed work for compliance with approved plans so that subsequent users of the rights-of-way know exactly where infrastructure was built, not just planned.¹⁵ The significance of pre and post-construction inspection is illustrated by the Malibu Canyon fire in California, caused when DAS facilities were installed without prior authorization, and installed in a manner that was not compliant with applicable codes.¹⁶ Permitting also involves an exercise of the police power, and localities are typically limited to recovering costs associated with the process.¹⁷

¹⁴ See *id* at Exhibit 1, Declaration of Andrew Afflerbach, at 12-14 (Jun. 15, 2018) (“Afflerbach Declaration”); see also *id.* at Exhibit 1A at 9-10 (detailing items and issues which require review in the permitting process.)

¹⁵ See McQuillin Vol. 9A § 26:224 (“A permit may authorize inspection before or after its granting.”)

¹⁶ Melissa Caskey, *CPUC Approves \$51.5-Million Malibu Canyon Fire Settlement*, The Malibu Times (Sep. 19, 2013), available at http://www.malibutimes.com/news/article_3d62067a-2175-11e3-86b6-001a4bcf887a.html (“Under the settlement, Edison and NextG admit that one of the failed power poles was overloaded with NextG telecommunications equipment when the fire started, in violation of CPUC rules, and that Edison did not act to prevent the overloading.”); see also *Decision Conditionally Approving the NextG Settlement Agreement*, California Public Utilities Commission Investigation No. 09-01-018 (Sept. 19, 2013) available at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K059/77059441.PDF>.

¹⁷ See McQuillin at Vol. 9 § 26:41 (“Where a permit fee is imposed pursuant to a municipality's power to regulate, the amount of the fee may not exceed the cost of issuing the permit and of inspecting and regulating the permitted activity.”); see also *e.g. Mobile Sign Inc. v. Town of Brookhaven*, 670 F. Supp. 68 (E.D. N.Y. 1987); *County of Orange v. Barratt American, Inc.*, 150 Cal. App. 4th 420, 58 Cal. Rptr. 3d 542 (4th Dist. 2007); *Bellsouth Telecommunications, Inc. v. Cobb County*, 277 Ga. 314, 588 S.E.2d 704 (2003); *Potts Const. Co. v. North Kootenai Water Dist.*, 141 Idaho 678, 116 P.3d 8 (2005); *Allen v. City of Hammond*, 879 N.E.2d 644 (Ind. Ct. App. 2008); *Billy Oil Co., Inc. v. Board of County Com'rs of Leavenworth County*, 240 Kan. 702, 732 P.2d 737 (1987); *Mayor and City Council of Ocean City v. Purnell-Jarvis, Ltd.*, 86 Md. App. 390, 586 A.2d 816 (1991); *State v. Northern Raceway Corp.*, 381 N.W.2d 526 (Minn. Ct. App. 1986); *Ashworth v. City of Moberly*, 53 S.W.3d 564 (Mo. Ct. App. W.D. 2001); *City of Great Falls v. M.K. Enterprises, Inc.*, 225 Mont. 292, 732 P.2d 413 (1987); *Orange and Rockland Utilities, Inc. v. Town of Clarkstown*, 80 A.D.2d 846, 444 N.Y.S.2d 670 (2d Dep't 1981);

4. What we refer to as *licensing and leasing* are the contracts or authorizations that permit an entity to use publicly owned or controlled structures such as buildings, street lights, street furniture, traditional poles and traffic signals. In granting such leases or licenses, a municipality exercises its proprietary authority as a landlord rather than on its police powers as it did in making permitting or land use decisions.¹⁸

Just as a landlord must look to maximize the use of its facilities, a locality considering whether to lease a light standard might first consider its future needs such as the ability to use the light pole in other ways: to monitor traffic flows; to monitor underground and roadway conditions; to monitor sounds (See e.g. “Shot spotter” which may prove critical in responding to active shooters); to provide public WiFi; and most importantly, to provide cost-effective and safe lighting.

Compensation for a license or lease permission is in the form of rents. Rents can be provided in terms of monetary compensation, in kind benefits or some combination of the two. It is also important to note that recovery of a rent or value may be required under the anti-gifting prohibitions found in a number of state constitutions as well as city or county charters.¹⁹ While the Smart Communities and Special Districts Coalition believes that the Commission lacks the

Teamster's Housing, Inc. v. City of East Cleveland, 36 Ohio App. 3d 83, 521 N.E.2d 4 (8th Dist. Cuyahoga County 1987); *City of Houston v. Harris County Outdoor Advertising Ass'n*, 879 S.W.2d 322 (Tex. App. Houston 14th Dist. 1994).

¹⁸ See *American Airlines v. Dept. of Transp.*, 202 F.3d 788, 810 (5th Cir. 2000) (“...case law distinguishes between actions a state or municipality takes in a proprietary capacity—actions similar to those a private entity might take—and actions a state or municipality takes that are attempts to regulate.”)

¹⁹ *FCC v. Florida Power Corp.*, 480 U.S. 245 (1987). For a fuller discussion of these anti-gifting laws see Smart Communities & Special Districts Wireless Comments at 62-64; see also Comments of the Texas Municipal League, WT Docket No. 17-79, at 1 (Jul. 17, 2017) (“The Texas Constitution, in Article III, Section 52, prohibits the Texas legislature from giving away the use of municipal property for less than fair market value.”)

statutory authority to regulate prices for, or access to, a local government's facilities²⁰ – even if such actions were not otherwise precluded – the Commission should refrain from taking such actions on policy grounds.²¹ Localities leverage the use of their property to create funds dedicated to, or obtain in-kind services that, serve to reduced health and safety risks, as well as deploy innovative technologies while closing the digital divide.²²

II. UNDERSTANDING PERMITTING COSTS THAT LOCALITIES INCUR AND MUST RECOVER ARE SEPARATE FROM RENT.

Permitting fees, including those for wireless facilities, are intended to recover local government costs, both those incurred administratively throughout all permitting processes, and those incurred due to the need for expertise and consultants required by particular types of permits.²³ The basis for these costs, and the numerous steps in which they are imposed, is

²⁰ See Smart Communities & Special Districts Wireless Comments at 62-64.

²¹ See *id.* at 65-69.

²² Example of both of these techniques in the small cell arena were recently announced. The City of Los Angeles, a Smart Communities & Special Districts Coalition member, chose to make poles available to Verizon in exchange for “Smart Community” services. See June 29 Ex Parte at 2 (“Charles Small of the City Los Angeles explained the recent small cell agreement entered into by the City with Verizon and the need for any FCC action to protect such creative solutions that lead to the expedited deployment of small cells in exchange for “smart community” services being made available to the community.”) The City of San Jose concluded agreements with multiple providers, and will use the proceeds of its rents to fund digital inclusion efforts. See Remarks of Commissioner Jessica Rosenworcel at the United States Conference of Mayors (Jun. 9, 2018), available at <https://docs.fcc.gov/public/attachments/DOC-351482A1.pdf>.

²³ Permitting evaluation can require expertise in wireless engineering, excavation, historical and environmental review, archaeology, and traffic and road safety, in addition to general administrative and construction review experience. See Smart Communities & Special Districts Wireless Comments, Exhibit 1A at 9-10; see also *id.* at Exhibit 2, The Economics of Local Government Right of Way Fees, Declaration of Dr. Kevin E. Cahill, Ph.D, at 8-9 (“Cahill Declaration”); see also See McQuillin at Vol. 9 § 26:41 (“Where a permit fee is imposed pursuant to a municipality's power to regulate, the amount of the fee may not exceed the cost of issuing the permit and of inspecting and regulating the permitted activity.”)

detailed below.²⁴ Still, it is important to note that localities are working to streamline and simplify all elements of the land use and the permitting process, so that all applicants are treated fairly, as required by law, while maintaining the aesthetic integrity and safety of a community in furtherance of their obligations to the public.²⁵ An example of creative and cooperative local government response is the concierge permitting services described below.

Permitting fees are wholly distinct from rents or franchise fees paid for property access. Just as permitting is distinct from the grant of right to occupy property, the costs incurred and fees paid for the permission to participate in the activity are separate and distinct from the right to use and occupy the public space, and must be recognized as such.

A. Permitting Costs Accrue Throughout the Process

Local permitting and land use processes generate costs at all stages. The initial receipt of the application and its review, as well as any subsequent review of an incomplete application,

²⁴ The land use issues presented by different placements in different locations are distinct – and receiving applications *en masse* does not make consideration of relevant issues faster or easier. It is therefore important to note that batch applications for permits for new small cell networks in the rights-of-way will not necessarily simplify the process of permitting – and could in fact, add to the burdens of local government. The reason for this conclusion is that at each deployment location requested, a local government must consider factors including how construction must be managed to prevent interference with other uses of the rights of way; how construction may affect other infrastructure; and whether planned facilities may interfere with pedestrian access or impede Americans with Disabilities Act compliance. Because roadway design can vary dramatically throughout a community, permit conditions and facility design and placement may also need to be adjusted. While batch applications may offer some economies, (for example, it may be possible that if the same electrical design is used at every location, the electrical permitting process can be simplified) such economies are not as readily apparent as one might assume. In addition, a network installation may involve requests for placement of towers on streets where existing utilities are underground, placement of new poles along streets where there are existing poles (adding to street clutter), and placement of small cells on existing utility poles in commercial, residential and industrial areas.

²⁵ See, e.g. *Ex Parte Letter from Gerard Lavery Lederer*, WT Docket No. 17-79 (Mar. 14, 2018) (“Myrtle Beach, SC Ex Parte”) (describing the approach the City of Myrtle Beach shared with Commissioner Clyburn.)

generates expenses for the local government that must be recovered. Costs are generated by construction inspections, which take place, depending on the size of a project, before, during and after any permitted activity (excavation or building). Every time a locality is required by the Commission or another authority to expedite review, additional costs are added due to the need for increased staffing and expertise. And unlike traditional building or excavation permits, local governments must develop unique forms for wireless facilities permitting, because the Commission had essentially created a system that is not iterative and cooperative, but instead penalizes a locality that does not request everything it might need in the initial application (since an application is only “incomplete” to the extent it omits information requested by the community.)²⁶

Should a permit request raise zoning and land use issues, the additional costs associated with the hearing and, if necessary, an appeals process must also be recovered.

B. Shot Clocks Increase Costs and Do Not Anticipate all Decisions that Must be Made

Shot clocks govern the land use permitting decision process. When an application is approved for placement of a wireless facility at a particular location, the applicant often has not gone through the “Miss Utility” process to determine the precise route any connections to the wireless facility must follow; and typically, the utility has not performed all make-ready work that may be required.

Some operators defer detailed, construction type engineering – including historical reviews that may be required under state or federal law – until it is determined whether the

²⁶ See 47 C.F.R. § 1.40001(c)(3)(i); *see also In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facility Siting Policies*, WT Docket No. 13-238, *Report and Order*, 29 FCC Rcd. 12865, 12970 (Oct. 21, 2014) (“6409 Order”).

facility can be placed at a particular site. Shot clocks are designed to force land use decisions within a set time; that is, to determine whether a specific facility should be allowed to be placed at a proposed location. While as part of that decision making process, a locality may evaluate the feasibility of the site requested, the actual construction may require additional permitting that is performed post-authorization. The Commission's own 6409 Orders recognize that safety issues may be addressed as part of the determination of whether an application is an appropriate "eligible facilities" request, but may also be addressed outside that process.²⁷ As the Commission considers whether and how shot clocks should be modified, it is important to recognize that if all permits required for construction are in place within a specified period, that will also mean that the applicant must perform all work before an application can be filed. Rather than speeding or reducing the cost of the permitting process, this is much more likely to add to deployment costs. In many cases, it will be impossible to complete permitting within the time frames that now apply to land use type permitting. Often permits will only be finalized, for example, after detailed field engineering is completed, and after pre-construction inspection (to ensure that what is being built in the field actually matches up with approved designs.)

Special reviews (for historic districts, for instance), depending upon the state and community, may occur before or after land use issues are considered, just as the previously required Section 106 historic review often occurred after land use approval, but before construction. Requiring those processes to be completed within a specified time frame is not only unnecessary, but also adds to the expense of the process.

²⁷ See *id.* at 12951; see also Afflerbach Declaration at 12-14.

The time it takes to complete these reviews are not only site-specific, but are higher for sites within the rights of way.²⁸ For example, a facility with battery backup power supplies that include toxic chemicals will require much more rigorous review than one that does not. A facility in an area with high fire risks may require additional permitting than one that is not. Local governments have never received complaints that these requirements are sources of delay.

The problems identified above are not simply speculative.²⁹ For example, the City of Portland, Oregon has learned over the first three years of its ongoing small cell pilot that batch submissions are not at all useful to City staff. Had the batch applications they received been uniform, there may have been some efficiencies gained; in reality, applications were batched by carriers not based on substantial similarity, but based on geographic location, and rarely demonstrated any consistency between applications. As a result each required a separate, individual review process, which consumed even more time than reviewing individual applications. It is not uncommon for carriers to object to being required to deploy small cells of a uniform design, arguing that each location is different; the same is true of applications for siting of those facilities. Each location is different, and bulk submission of applications does not reduce the necessity for individualized review.

Shot clocks also cannot account for the substantial delays driven by the submission of incomplete applications. The inadequacy of applications submitted, often by carriers' contractors, significantly increased the time it took Portland staff to review applications. During its small cell pilot, Portland approved sixty-six applications. Each one had initially been submitted without required information or documentation. Many applications even contained

²⁸ See Afflerbach Declaration at 21 (describing the enhanced burden created by applications for facilities in the public rights-of-way.)

²⁹ *Id.*

simple arithmetic errors in calculating the volume of equipment, necessitating top to bottom review of every aspect of every single application. Municipalities cannot and should not be held accountable for delays, and substantially increased costs, caused by the routine submission of incomplete or inaccurate applications.

Even in their current form, shot clocks can be quite stressful, particularly for small communities in or near major metropolitan areas. Gaithersburg, Maryland, for example, has four planning staff who must handle not only hundreds of ordinary applications, but also an ever-increasing volume of complex wireless applications. Modifications to the shot clocks will increase the costs associated with considering applications, and require localities to rely increasingly on outside or special contractors, whose costs must be recovered through increased fees.

C. Even Assuming It Had the Power to Do So, the Commission Should Not Interject Itself Into the Fee-Setting Process.

As noted above, localities are typically limited to recovering costs associated with the exercise of the police power.³⁰ However, the method for determining and assessing costs varies from community to community. In some communities, permitting costs may be set based on a community's prior experience, e.g. the aggregate costs for permitting divided by the number of permits incurred by that local government the previous year. While this theoretically means some applicants pay more than the actual costs associated with their application, it means others pay less, and all avoid the costs associated with maintaining detailed cost records. Communities that operate this way are setting permitting fees that are not unlike the regulatory fees set by the FCC – and the Commission can imagine the additional costs that would be incurred if it were

³⁰ See McQuillan, *supra* note 11.

required to identify the costs associated with every filing it considered, and to charge only the actual costs to each petitioner. Some communities do charge an hourly fee based on staff costs, and based on the costs of contractors and experts that must be retained to consider applications. Some combine these approaches, or apply different approaches to large and small projects. History has also taught us that many times permit fees collected do not result in full cost recovery, on an individual permit or aggregate basis.³¹

If the Commission dictates the methodology for cost recovery, it will be creating special cost and accounting procedures that are only applicable to wireless providers. This will not reduce costs, but will likely increase them, as communities are forced to follow what would amount to a return to the sorts of complexities that used to be involved in rate of return ratemaking. Even assuming the Commission could do this, there is no rational reason for the Commission to adopt federal rules when there are already limits on local charges embedded in state laws.³²

D. Communities Are Responding with New Approaches

Communities are pursuing creative solutions to deal with the challenge of siting and permitting an alternative wireless network within the community's rights-of-way.³³ One possible solutions that carriers and communities have developed is that of carrier subsidized permitting personnel, or what has been described as a concierge service. While concierge services differ from city to city, they general involve funds dedicated for the specific purpose of enabling local

³¹ See Cahill Declaration at 7-12.

³² See McQuillin at Vol. 9 § 26:41 ("Where a permit fee is imposed pursuant to a municipality's power to regulate, the amount of the fee may not exceed the cost of issuing the permit and of inspecting and regulating the permitted activity.")

³³ See Afflerbach Declaration at 19-20, 22-25.

government to hire consultants or dedicate staff to a specific project to overcome staffing or expertise shortages. For example, the City of Boston's process, and the City of San Jose's agreements with AT&T, Verizon, and Mobilitie, all include concierge elements.³⁴ Many times these programs provide the additional assistance on an hourly basis for staff and any other resources local government may need to engage to complete review.

III. COMPENSATION COMPARED TO COST RECOVERY

What a local government may charge as compensation for use of public assets is driven by state law and state constitutional principles.³⁵ Local governments cannot simply give away public property for private purposes, nor can the Commission constitutionally compel the grant of access, even in those states that have adopted small cell legislation.³⁶ The same pricing principles that animate network deployment decisions – opportunity costs – apply in local government property compensation.³⁷ The record before the Commission remains devoid of examples of compensation actually serving as a barrier to deployment. If anything, the record

³⁴ See, e.g. City of San Jose Model Agreements, Document B: Funding and Reimbursement Agreement (rel. Jun. 27, 2018), available at <https://www.fcc.gov/document/rosenworcel-announces-availability-small-cell-model-agreements>.

³⁵ Of the twenty or so states that have recently adopted small cells in the rights of way statutes, a number capped rental rates. States that do not have small cell legislation, nevertheless have limitations on what a local government may charge for public assets. For example, in California, communities do not charge rent for use of rights-of-way by telephone companies for the placement of telephone lines, while other states have pricing schedules on what can be charged for the rights-of-way component of a small cell.

³⁶ See Smart Communities & Special Districts Reply Comments, WT Docket No. 17-79, at 47 (Jul. 17, 2017).

³⁷ See Cahill Declaration at 7-12 (describing the full scope of costs which must be included in pricing both permits and property access in the rights of way.)

shows communities that charge fair value for access to rights of way also have some of the most robust deployments.³⁸

Even if it wished to do so, the Commission cannot set rates charged for access to the rights of way, much less the rates charged for access to publicly owned or controlled structures that may be useful to wireless providers. The Commission does not generally have the right to set rates for access to property – to the extent that authority is granted, through Section 224, it specifically precludes setting rates for access to municipally-owned property.³⁹ Section 253, as we have explained, does not give the Commission authority to set rates – at most, it permits a court to preempt a fee that is “unreasonable” (the Commission has no authority to resolve issues under Section 253(c))⁴⁰. A rate that mimics fair market value is by definition reasonable, as we have explained.⁴¹ Moreover, the Commission’s authority under Section 253 is limited to “prohibitions” of telecommunications services.⁴² It does not reach, or permit the Commission to reach, charges that may be associated with use of the rights of way to provide services that are *not* telecommunications services.

³⁸ Compensation is not always cash.. Charles Small of the City of Los Angeles described for Commission staff the City’s agreement with Verizon, in which the majority of compensation is provided in the form of in-kind smart communities services which Verizon will make available using the City-owned street light poles on which their small cells are deployed. *See June 29 Ex Parte*.

³⁹ *See* 47 U.S.C. § 224.

⁴⁰ *See* 47 U.S.C. § 253(d); *see also* Smart Communities & Special Districts Wireless Comments at 55-58.

⁴¹ *See* Reply Comments of the Smart Communities & Special Districts Coalition, WC Docket No. 17-84, WT Docket No. 17-79, at 58-59 (Jul. 17, 2017) (“Coalition Reply Comments”).

⁴² *See* Smart Communities & Special Districts Wireless Comments at 59-61; *see also* Coalition Reply Comments at 51-54.

IV. OPPORTUNITIES FOR COMMISSION ACTION TO ADDRESS BARRIERS TO DEPLOYMENT

The Smart Communities and Special Districts Coalition does believe that there are steps that the Commission can and should take to expedite the deployment of small cell and 5G technology nationwide. These steps include updating the Commission's RF standards that have not be addressed in this century and understanding the chilling effect Section 6409 protected growth schemes have on small cell deployments in the rights-of-way.

A. RF Emissions Standards

The Commission must update its RF emissions standards for the new millennium and address their applicability to modern and next-generation networks.⁴³ Smart Communities believes that such an action could remove a substantial barrier not only to deployment, but also to adoption of next generation networks. RF emissions concerns generate strong opposition to wireless deployments from concerned citizens who do not believe the current standard protects them and their children when sites are being deployed proximate to urban bedroom windows. By updating the standards, the Commission can assist in the efforts to ensure consumers are protected while arming providers and local governments with current standards to govern use the small cell in the rights-of-way deployment processes.

But perhaps more importantly, local governments are also major potential users of 5G equipment and applications, but will find it very difficult to invest in those services without updated RF standards. Opponents of wireless service may be able to highlight outdated FCC standards that are inconsistent with the latest global research on RF. Such opposition could be

⁴³ See Smart Communities & Special Districts Wireless Comments at 30.

fond and that opposition will present problems in procurement. Local governments want next-generation services, but the Commission’s long silence on RF will frustrate deployment efforts.

B. Recognizing the Expansion of Facilities Under Section 6409(a)

A second action that the Commission could take to promote deployment of small cells in the rights of way is to better understand the resistance the growth patterns provided under the Commissioner 6409 (a) generate. The Commission’s rules with respect to what constitutes a



Figure 1: T-Mobile “small cell” in Los Angeles, CA, demonstrating substantial size of small cell equipment and mandatory increases in site size required by Section 6409(a).

“substantial” change in the physical dimensions of a eligible facility under 47 U.S.C. § 1455 (Section 6409(a) of the Spectrum Act) also complicates the siting of small cells in the rights-of-way.⁴⁴ While the wireless industry has told the Commission and state legislatures that small cells are only “about the size of a pizza box,”⁴⁵ (while discounting the size of associated equipment), in reality, facilities are being deployed in the rights of way that use the sorts of antennas and involve

equipment more like that installed on a macrocell.

Communities are well aware that such sites are being installed, and that there is a real risk that approval of a “pizza box” sized facility in a residential neighborhood can be followed by a

⁴⁴ See *id.* at 27-28; see also Afflerbach Declaration at 14.

⁴⁵ CTIA, *What is a small cell?* (last accessed Jul. 3, 2018), <https://www.ctia.org/news/what-is-a-small-cell>.

request to install facilities comparable to the T-Mobile facility pictured here. We recognize that one could argue that when the Commission defined as insubstantial the addition of a six foot horizontal addition to a pole, it did not intend to allow for multiple extensions at different levels, or the addition of large radio units or antennas as pictured above. But the point is, that is not a battle localities should be forced to fight, and localities are much more likely to approve true small cell installations if those installations will remain physically small. If the Commission desires to encourage more placements in the rights of way, it needs to recognize that its definition of “substantial change” as it relates to the right of way is not sound, and that substantiality must be measured in relation to the facility that was originally approved. The sorts of absolute standards (like the 10 by 6 foot standard) embedded in the Commission’s rules simply fail to take the original design limits into account in a sensible way.⁴⁶

C. Protection of Modern Planning Processes

Finally, local governments are continuing to adapt their processes.⁴⁷ Many are shifting from using zoning to govern placement, to using planning authority. Design manuals which include clear guidelines and, in some cases, safe harbor designs, are being developed to expedite approval, while preserving a carrier’s right to pursue a different model through the zoning process. For instance, the City of Myrtle Beach shared such a model with Commissioner Clyburn.⁴⁸ And the Texas state small cell bill, SB 1004, authorized local governments to adopt just such an approach, preserving an express right for localities to “adopt a design manual for the

⁴⁶ See 47 C.F.R. § 1.40001(b)(7).

⁴⁷ See Smart Communities & Special Districts Wireless Comments at 14-17.

⁴⁸ See generally Myrtle Beach, SC Ex Parte.

installation and construction of network nodes and new node support poles in the public right-of-way” by ordinance.⁴⁹

Developing models – and building wireless into planning processes - may take more time up front, but expedites approval in the long run. Local governments need time, however, to develop these manuals, including by incorporating industry comment and feedback, and may further benefit from Commission participation in this process. Commission actions which would prohibit these efforts, however, would be counterproductive.

⁴⁹ See Tex. Local Gov’t Code § 284.108(a).

EXHIBIT H

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September 19, 2018

ELECTRONICALLY FILED

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW – Lobby Level
Washington, DC 20554

*Re: Smart Communities and Special Districts Coalition – Ex Parte Submission:
Accelerating Wireless Broadband Deployment by Removing Barriers to
Infrastructure Investment, WT Docket No. 17-79;
Accelerating Wireline Broadband Deployment by Removing Barriers to
Infrastructure Investment, WC Docket No. 17-84*

Dear Secretary Dortch:

On behalf of the Smart Communities and Special Districts Coalition (“Smart Communities”),¹ we submit this letter and enclosures for inclusion in the above-captioned dockets in response to

¹ Smart Communities are localities, special districts, and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia.

Individual members: Ann Arbor, MI; Anne Arundel County, MD; Arcadia, CA; Atlanta, GA; Bellevue, WA; Bloomfield Township, MI; Boston, MA; Burlingame, CA; Dallas, TX; District of Columbia; Fairfax, CA; Gaithersburg, MD; Howard County, MD; Kirkland, WA; Los Angeles, CA; Marin Municipal Water District (CA); McAllen, TX; Meridian Township, MI; City of Monterey, CA; Montgomery County, MD; North County Fire Protection District (CA); Ontario, CA; Padre Dam Municipal Water District (CA); Portland, OR; Rye, NY; San Jacinto, CA; Santa Margarita Water District (CA); Scarsdale, NY; Shafter, CA; Sweetwater Authority (CA); Valley Center Municipal Water District (CA).

Organizations Representing Local Governments: Texas Coalition of Cities for Utility Issues (TCCFUI) is a coalition of more than 50 Texas municipalities dedicated to protecting and supporting the interests of the citizens and cities of Texas with regard to utility issues. The Coalition is comprised of large municipalities and rural villages. The Michigan Coalition to Protect Public Rights-of-Way (“PROTEC”) is an organization of more than 75 Michigan communities that focuses on protection of their governance and control over public rights-of-way. The Michigan Townships Association promotes the interests of 1,242 townships by

the Commission’s September 5, 2018, Draft Declaratory Ruling and 3rd Report and Order (“Draft Order”).² Because of the length of this submission, we have formatted our *ex parte* submission in a manner familiar to the Commission. Our hope in providing a table of contents is that it will facilitate review by the Commission and other interested readers, allowing a better understanding of the points we seek to make. This transmittal letter serves an Executive Summary.

Smart Communities is deeply troubled by the Draft Order and believes it will lead only to litigation, delays in deployment, and additional expenses for all parties. We say this based on our belief that the Draft Order imposes mandates with which local governments cannot comply, but just as importantly, cannot understand as the Draft Order requires substantial clarification.

The Draft Order is truly unprecedented. Not only is its departure from well-established legal precedent developed by the Commission and the courts evident, but it imposes requirements that are neither consistent with nor supported by state laws governing wireless deployment, despite the Commission’s suggestion to the contrary. The Draft Order will create substantial uncertainty in the market for local governments and wireless providers alike, which Smart Communities believes will result in delayed, not accelerated, broadband deployment.

Moreover, many of the Draft Order’s faults are self-inflicted. They can be traced to the Draft Order’s flawed legal analysis and reliance on an incomplete and distorted picture of the facts on the ground and engineering details of deployments, though both were detailed at great length in filings by Smart Communities and numerous other parties in at least three proceedings.³ In fact,

fostering strong, vibrant communities; advocating legislation to meet 21st century challenges; developing knowledgeable township officials and enthusiastic supporters of township government; and encouraging ethical practices of elected officials.

The Kitch Firm represents PROTEC, the Michigan Townships Association, and Bloomfield and Meridian Townships. Best Best & Krieger represents the others in the Smart Communities and Special Districts Coalition.

² Draft Declaratory Ruling and Third Report and Order, WC Docket No. 17-84, WT Docket No. 17-79, FCC-CIRC1809-02 (rel. Sep. 5, 2018) (“Draft Order”).

³ See, e.g. Comments of the Smart Communities Siting Coalition, *In the Matter of Streamlining Deployment of Small Cell Infrastructure*, WT Docket No. 16-421 (Mar. 4, 2017); Comments of the Smart Communities and Special Districts Coalition, *In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79 (Jun. 15, 2017) (“Smart Communities Wireless Comments”); Comments of the Smart Communities and Special Districts Coalition, *In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84 (Jun. 15, 2017) (“Smart Communities Wireline Comments”); Reply Comments of the Smart Communities and Special Districts Coalition, WT Docket No. 17-79, WC Docket No. 17-84 (Jul. 17, 2017) (“Smart Communities Reply Comments”); Smart Communities and Special Districts Coalition Petition for Reconsideration of the Third Report and Order and Declaratory Ruling, WT Docket No. 17-79, WC Docket No. 17-84 (Sept. 4, 2018) (“Moratoria Reconsideration Petition”). The

this filing is supported by an engineering analysis questioning the need for the size and numbers of small cell facilities authorized by the Draft Order and the unworkable time frames of the new shot clocks.

The lack of a common factual foundation in understanding of the marketplace and the challenges facing providers and local governments alike is extremely troubling, given that Smart Communities has included engineering and economic analyses in each of its filings.⁴ The Draft Order, however, relies on economic theories that are flawed, inconsistent with common day-to-day practices, the text and legislative history of the Telecommunications Act, and actual experience.

In this *ex parte* filing, we seek to avoid addressing issues we have already made in this and related proceedings, but incorporate those arguments by reference and restate each of our objections.

Further, we note that this Draft Order, if adopted, has significant implications for the Commission's NEPA and NHPA Order.⁵ First, it supports claims that "small cell" deployment is a federal undertaking. Second, the massive deployment envisioned by the Commission raises substantial questions as to whether the Commission is in a position to assert that deployment is safe, given that its radio frequency emissions rules were based on technologies and deployment patterns that the Commission declares obsolete in this Order.

Smart Communities also believes that the Commission needs to reexamine the permitted growth patterns under Section 6409 when applied to small cells in the rights of way.

In light of the above, and the numerous other issues raised in the attached document, Smart Communities and Special Districts calls on the Commission to reexamine the policies espoused in the Draft Order prior to adoption or, at a minimum, the effective date of the Draft Order must be delayed. Hastily moving forward with the Draft Order in its current form will cause deployment costs to increase while progress slows as a direct result of these flawed policies.

Smart Communities calls on the Commission to withdraw the Draft Order and work with local governments to develop best practices to accelerate the deployment of small cell facilities. If the Commission chooses to move forward with the Draft Order, we respectfully request it be modified in a manner that fully reflects the preservation of local government's regulatory

Draft Order cites to materials in all three dockets, and materials in those dockets, along with the Moratoria Reconsideration Petition, raise issues and present facts that demonstrate the Commission's proposed actions are not consistent with statutory and constitutional limits on its authority, and is in any case arbitrary and capricious.

⁴ *Id.*

⁵ *In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, *Second Report and Order*, FCC 18-30 (Mar. 30, 2018).

authority and property rights as acknowledged in the Telecommunications Act and the U.S. Constitution.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Van Eaton", written in a cursive style.

/s/ Michael Watza

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Attachment

cc: Wireless Legal Advisors

Before the
FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of)	
)	
Accelerating Wireline Broadband Deployment)	
By Removing Barriers to Infrastructure	)	WC Docket No. 17-84
Investment)	
)	
Accelerating Wireless Broadband Deployment	)	WT Docket No. 17-79
By Removing Barriers to Infrastructure)	
Investment)	

**EX PARTE SUBMISSION OF SMART COMMUNITIES AND SPECIAL
DISTRICTS COALITION ON DRAFT DECLARATORY RULING AND THIRD
REPORT AND ORDER**

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I. THE DRAFT ORDER REQUIRES SUBSTANTIAL CLARIFICATION.

A. The Commission Must Clarify How Shot Clocks Are to Apply to “All Authorizations.”

The Draft Order purports to clarify all Section 332 shot clocks by finding that “all authorizations necessary for the deployment of personal wireless services infrastructure” are subject to the shot clocks.⁶ However, this “clarification” creates greater uncertainty. For example, it is unclear as to whether the 60-day shot clock applicable to “all authorizations” necessary to deploy a small cell is a single 60-day period in which all authorizations must be processed, or instead imposes sequential 60 day shot clocks on each separate authorization, as each application for authorization is submitted.⁷

As detailed in the record, the construction of a wireless facility, like any other construction project, requires several distinct authorizations.⁸ The consent of the property owner must be obtained, zoning or land use approval must be granted, and historical and environmental review requirements must be satisfied, if applicable.⁹ The actual construction may require a building permit, an excavation permit, an electrical permit, and in some cases a traffic plan.¹⁰ Currently, these are not all sought by applicants concurrently, as the content and nature of the permits sought may depend in part on design and placement of the wireless facility that is approved, which logically favors sequential applications.¹¹ There is no reason, for example, for a

⁶ Draft Order at ¶ 128.

⁷ *Id.*

⁸ Letter from Gerard Lavery Lederer, WC Docket No. 17-84, WT Docket No. 17-79, at Attachment, 8-11 (Jul. 16, 2018) (“July 2018 Permitting Ex Parte”); *see also* Smart Communities Wireless Comments, Exhibit 1A, Supplemental Report of Andrew Afflerbach, at 9

⁹ *Id.*

¹⁰ *Id.*

¹¹ July 2018 Permitting Ex Parte, Attachment at 8-11. The Commission’s own experience demonstrates the point. In many cases, wireless providers did not undertake required historical

provider to incur the expense of performing detailed field engineering that may be required in connection with excavation permits for a facility whose location is not yet approved, because if the specific location changes even slightly, the construction plans may need revision to adjust to the new location.¹² And traffic plans are often not prepared until after construction permits are granted, because they are by necessity influenced by the date and time of anticipated construction, which cannot be known without finalized siting approval and building permits. While this may take more than 60 days in whole for a small cell, it is far more efficient economically as it minimizes the extent to which work must be repeated to account for other changes to the project.

If the Commission intends, as the Draft Order appears to indicate, that many, if not most, small cell authorizations must be granted or denied within 60 days of the submission of a wireless application or a local government will have presumptively prohibited deployment, the costs of applying for permits, and for reviewing those permits, will needlessly skyrocket. That is, because local governments will face harsh consequences from failure to meet the shot clocks,¹³ they will have to require that all materials, for all authorizations, be prepared in advance and submitted together with the initial application. This will drastically increase provider costs, and cause providers to incur duplicate costs if any portion of the project must be changed. If, for example, a proposed site's initial location does not pass zoning or land use review, the engineering work and traffic plan (which would ordinarily be developed only after land use approval) will have to be re-done; and if the traffic control plan is defective, the proposal as a

reviews until after an application for placement of wireless facilities had been approved. This meant that resources were not spent on impact studies until the company knew exactly what would be placed and where it would be placed.

¹² *Id.* at 8-9.

¹³ Draft Order at ¶ 112.

whole will have to be rejected, or at least be found incomplete, lest the local government run afoul of the shot clock. There will be little opportunity to work cooperatively and resolve problems with small cell applications within a 60-day period. Providers commonly avoid this clear inefficiency today,¹⁴ but under the Draft Order’s framework, this will be impossible. The Commission may suggest that the problem is solved by allowing the parties to agree to times for action, but unless it decides that the 60 days actually provides enough time to allow permits to be reviewed as a general matter – and it has no basis in the record for that conclusion – the basic premise of the rule (that the 60 day shot clock establishes a presumptively reasonable time period) is flawed.¹⁵

While we do not think a shot clock is required or appropriate for franchising or other types of permitting (many permits are issued pursuant to state laws or local rules that specify response times), it should at least be clear that any applicable shot clock must at least run separately for each authorization.

Similarly, requiring all permissions to be granted within 60 days also leads to decreased flexibility for providers in negotiating property access terms. For example, the Draft Order expressly includes “license or franchise agreements to access ROW” within the scope of Section 332.¹⁶ These agreements frequently involve multiple rounds of negotiation, insisted on by providers as much as localities, to arrive at an agreement. Terms such as insurance clauses,

¹⁴ July 2018 Permitting Ex Parte, Attachment at 9 (“Some operators defer detailed, construction type engineering – including historical reviews that may be required under state or federal law – until it is determined whether the facility can be placed at a particular site”).

¹⁵ The same is true with respect to the other shortened time frames the Commission proposes to adopt, and the problems are compounded by the new remedy, which the Commission appears to intend to have an effect similar to a “deemed grant.”

¹⁶ Draft Order at ¶ 128. We assume for purposes of this discussion that the Commission has authority to dictate the timing of action on applications for a franchise.

indemnification, and termination clauses are frequently modified throughout this process, but under a consolidated 60 day shot clock, localities will not have time to engage in those negotiations – they will have no choice but to insist on take-it-or-leave-it contract terms. If a provider refuses to accept those terms, a community will have no choice but to deny the other permits associated with the facility proposed for installation in the ROW, wasting even more provider effort and incurring further costs on all sides. And note that the terms would need to be resolved in the same time frame that the provider will be responding to questions regarding the placement and design of its facilities.

Reviewing costs will increase; while piece-parting has some disadvantages, the effect of the “everything at once” approach proposed by the Commission is that all submissions must come in at once, and be reviewed at once, and then re-reviewed (at additional cost) if there is a denial. Rather than simplifying the process and reducing costs, it could easily double existing costs, with no actual savings in time (since each rejection will require a resubmission of the package of permits).¹⁷ These burdens are not alleviated by batching, either, as discussed further below and indicated in the record.¹⁸

While it is important to clarify how the shot clocks work, it is also important to recognize that shortening the shot clock for an expansively defined category of “small wireless facilities,” combined with compelled allowance for batch applications, makes the shot clocks unworkable, and arbitrary and capricious in several respects.

First, the rules inherently assume that there is no “gear up time” required to assemble the resources to review one hundred, as opposed to one application at the same time (since it

¹⁷ The Regulatory Flexibility analysis fails to take into account what we believe will be extraordinarily significant costs associated with complying with the new time frames and unlimited batching of applications. *See* Section II.H, *infra*.

¹⁸ *See* Section II.F, *infra*.

requires no prior notice of an intent to submit applications, or notice of an intent to submit batched applications).¹⁹ It assumes that existing staff or existing consultants are in place to handle the work, which the record shows is not the case, particularly for smaller communities where there may be one or two staff members managing planning and land use functions. It assumes that it is simple to engineer attachments to traffic signals and street lights – but there is no indication in the record that this is in fact the case.

Second, the Draft Order’s shortening of time creates significant practical and due process concerns. The manner in which the federal shot clock runs – which encourages and allows submission of incomplete applications that eat up time, as the clock never restarts no matter how long the lapse between resubmittals – does not work within the shortened time frame. It is in contrast to shot clocks in states like Minnesota, where the clock is longer and can be further extended to address elevated volumes of applications.²⁰ The Commission cannot purport to be setting time frames based on state laws, while ignoring key provisions that temper the impact of those time frames in the state law. The Draft Order’s new rules not only fail to take into account time lost in the “incompleteness” process;²¹ they fail to acknowledge the notice requirements for

¹⁹ Of course, providers are in a position to provide notice that would permit localities to prepare for applications. Where other major projects are planned in the public rights-of-way, that advance planning is the norm, not the exception. That sort of planning was used to schedule and stage deployment of the U-Verse and FiOS networks in many parts of the country, to allow for timely deployment without overwhelming local resources. There is no inherent reason why the same approach cannot be taken with small cell deployments. Indeed, some companies have done this already. *See* Letter from San Jose Mayor Sam Liccardo, WT Docket No. 17-79, WC Docket No. 17-84, at 2 (Sept. 18, 2018). The Commission desires broad network deployment, but develops timelines and practices that act as if each application were a simply one-off, rather than part of a major construction project.

²⁰ Minn. Stat. § 237.163 Subd. 3(a)(c).

²¹ For example, Montgomery County, Maryland finds that reviewing applications for completeness alone takes approximately 13 days of shot clock time, on average, and that more than 200 applications received since July 1 2017 have failed to include required information. Their records also show that, on average, applicants take approximately 38 days to submit that

public hearings, which may be key to a fair process; and times required for administrative appeals.

Further, the assumption that there is little to consider in a small cell application is belied by the definition the Commission adopts for “small wireless facility”: while it justifies its rules based on the assumption that many small cells are the size of a pizza box,²² a pizza box is about 1/2 cu. ft. in size, while the Commission proposes to expedite permitting of equipment cabinets 28 cu. ft. in size – a stack of 56 pizza boxes – on front lawns throughout the country. Considering that the Smart Communities’ prior filings show that the addition of facilities of this size diminish property values, it is strange for the Commission to assume that approval can be granted in the regulatory blink of an eye.²³

B. The Commission Must Clarify Its Holding On Aesthetic Standards.

The Draft Order lacks clarity regarding the expected contents of aesthetic standards.²⁴ It outlines a (questionable) test to evaluate the acceptability of aesthetic standards, but in light of the discussion of that standard, it creates more issues that it resolves.²⁵ For example, it notes that providers claim that they are forced to respond to standards that are “vague” but it is unclear as

additional required information. Providers take, in other words, more than half the total time allotted for local government review under small cell shot clocks, simply to submit the information required by the application in the first place. Montgomery County’s data reiterates that this is not an isolated problem, either. 28 applicants submitted at least one incomplete application since July 1, 2017, and of those 28 individuals, not one submitted complete applications more than 35% of the time. One applicant submitted 26 applications, 96% of which were incomplete, and took an average of 47 days to complete each application. The City of Austin, Texas has experienced similar difficulties with carriers who “do not consistently provide required data on permit applications.”

²² Draft Order at fn. 272.

²³ See also Section II.E, *infra*.

²⁴ Draft Order at ¶¶ 81-85.

²⁵ *Id.* at ¶¶ 81-83.

to whether this is meant to signal to localities that they must put aesthetic standards in a particular form.²⁶ It is common land use practice, for example, to use nonspecific aesthetic requirements – for instance, requiring a structure to conform to the general aesthetic of the neighborhood.²⁷ A design standard might require a paint color to “blend with the surrounding environment” or “to match the pole” rather than specifying a particular color. Standards like these allow sites to be evaluated based on their surroundings, and are purposely nonspecific to allow applicants and authorities to work together to conform each project to its unique location.²⁸ This means one simple code can govern aesthetics for different neighborhoods, with commercial districts being treated one way and historic or residential neighborhoods another. Those standards the Commission and industry commenters criticize as “vague” allow local governments to work with providers to develop designs that work for everyone.

If the Commission intends to allow this approach, it should be clear on that point. If it intends something else – if it intends that detailed specifications must be provided, for example -- it must at the very least say so, and square its approach with the statute, which envisions preservation of local zoning authority. That authority, as the Ninth Circuit and other courts have recognized, necessarily permits discretionary evaluation of wireless applications pursuant to the sorts of standards described above.²⁹ It must also take its decision to compel localities to “publish” in advance a new sort of aesthetic standards into account for purposes of both the timing of the effective date of any adopted order (as standards would need to be developed), and its cost. Requiring localities to develop new standards for small wireless facilities will cost

²⁶ *Id.* at ¶ 81.

²⁷ Smart Communities Wireless Comments at 34-35.

²⁸ *Id.* at 35.

²⁹ See, e.g. *Sprint Telephony PCS, L.P. v. County of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008).

thousands of small localities thousands of dollars each.³⁰ It is not possible to develop new standards within the 30 days the Commission has allotted before these rules take effect.³¹ But in any case, merely describing (but providing no analysis and reaching no conclusions regarding) practices wireless providers have long found inconvenient,³² simply creates confusion.

C. The Commission Must Clarify How Its Shot Clock Mandates Interact with State Historic and Environmental Review Laws.

When the Commission acted to effectively eliminate federal environmental and historic review for small cells, it justified that action in part by noting that state and local policies protecting the environment and historical areas remain in effect.³³ The Draft Order provides no guidance as to how the strict new shot clocks interact with these laws, however, and if the Commission means for these reviews to be completed within 60 days of an application, it must at least explain the rationale for that conclusion. In many states – New York as an example – review involves a multi-step process in which the scope of required review is not known prior to the completion of initial stages. This process, intended to protect the public and the applicant, is often required by state law, but cannot be completed in only 60, or even 90 days.³⁴ Certainly, if

³⁰ BDAC model codes are of little utility, as the BDAC largely chose to ignore local concerns; as the Commission is well aware, the integrity of the process was subject to significant question. Indeed, the Commission’s reliance on the BDAC process for any part of its Order is an example of an agency stacking the deck to achieve a predetermined result; the process raises concerns, rather than supporting the conclusions of the agency. *See* Jacob Terrell, *FCC broadband committee bypasses local input, mayor says*, CountyNews (Feb. 5, 2018), <http://www.naco.org/articles/fcc-broadband-committee-bypasses-local-input-mayor-says>.

³¹ Draft Order at ¶¶ 147-148. *See* Section III *infra*.

³² Draft Order at ¶ 81, fn. 220-222.

³³ *In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, *Second Report and Order* at ¶ 77 (Mar. 30, 2018) (“NEPA/NHPA Order”).

³⁴ *See* NY State Dept of Environmental Conservation page detailing the 11 stages of the SEQR process, where the scope of an environmental impact statement is determined at step 4. The page

the Commission purports to preempt these laws and procedures, it should say so, and it must then reevaluate whether its own abandonment of responsibility for historical reviews can be justified. Of course, if the Commission intends to require localities and states to develop special rules for environmental and historical reviews for small cells, that cost should be taken into account in the Regulatory Flexibility Analysis and in the timing of the implementation of any adopted order.

D. The Commission Must Clarify the Draft Order's Interaction with Section 6409(a).

The Draft Order fails to specify how these new procedures interact with the Section 6409(a) rules already in effect. While the Draft Order suggests the Commission believes no issues will arise,³⁵ evidence in the record demonstrates that issues from the Commission's Section 6409(a) rules already occur.³⁶ If the Commission's intent is that the small wireless facilities remain unobtrusive, it should, as Smart Communities proposed (and as the Commission ignored) limit how Section 6409(a) applies to facilities in the public rights-of-way.³⁷ The Commission's small wireless facility definition compounds the problem: while it appears intended to cap the size of what may be placed on any structure, the phrasing could be read to

also notes that there is a comment period, a public notice requirement, a potential public hearing, among other requirements: <http://www.dec.ny.gov/permits/6189.html>.

³⁵ Draft Order at ¶ 104.

³⁶ July 2018 Permitting Ex Parte at Attachment, 16-17 (describing how Section 6409(a) leads to installation of facilities much larger than those contemplated by the Commission's small cell definitions). As suggested above, Smart Communities do not believe that 28 cu. ft. is defensible when much smaller installations are clearly viable and commonplace, and the size permitted by the Commission permits quite intrusive facilities.
https://www.bing.com/images/search?view=detailV2&ccid=myT7eXTR&id=8BD29FC3CB1F837AD484692A896D8D0D965D7D5C&thid=OIP.myT7eXTRAEO00GRSjuzy6AAAA&mediaurl=https%3a%2f%2fcdn-images-1.medium.com%2fmax%2f800%2f1*G0R0s-yNlkYHx8XHh2VDIA.png&exph=1490&expw=472&q=pictures+of+ugly+small+cells&simid=608006465029407582&selectedIndex=1&ajaxhist=0

³⁷ See Smart Communities Wireless Comments at 27-28, 29-30; Smart Communities Wireless Comments, Exhibit 1, Declaration of Andrew Afflerbach at 14-15.

apply the 28 cu. ft. to each individual wireless facility located on the structure.³⁸ That is surely not the intent, and if it is, it is the Commission’s notion of what is “small” is even less defensible. This is particularly so as Section 6409(a) establishes cumulative height limits, but appears to permit multiple horizontal additions to an existing structure. Absent such an adjustment to either or both sets of rules, the combined effect of allowing deployment of an out-sized “small wireless facility” as defined in the proposed rules and the significant changes permitted by Section 6409(a) will render mere pretense Commission claims that these facilities are “small” and changes to them “insubstantial.”

E. The Commission Must Clarify Its Definition of “Infrastructure”.

The Draft Order proposes that one criterion for evaluating aesthetic standards is whether they are “no more burdensome than those applied to other types of infrastructure deployments.”³⁹ And the Draft Order suggests that same standard will be applied for evaluating minimum spacing requirements.⁴⁰ But the Draft Order does not define “infrastructure” for these purposes. By its plain meaning, the term could include all utilities which occupy the public rights-of-way, and even structures like bridges which are commonly referred to as infrastructure.⁴¹ Citations in the Draft Order even suggest such a broad definition is the Commission’s intent.⁴² But if this is true (and it is not clear that it is) then the Draft Order must explain how it reconciles that definition with 47 U.S.C. § 332(c)(7)(B)(i)(I), which specifies that local government regulation of the

³⁸ If the Commission’s intent is that the small wireless facilities remain unobtrusive, it should, as Smart Communities proposed (and as the Commission ignored) limit its application to facilities permitted in the public rights-of-way. Smart Communities Wireless Comments at 28.

³⁹ Draft Order at ¶ 83.

⁴⁰ *Id.* at ¶ 87.

⁴¹ Infrastructure, *noun*, “the system of public works of a country, state, or region” Merriam-Webster Dictionary.

⁴² Draft Order at ¶ 81 fn. 220.

placement, construction, and modification of personal wireless services is only prohibited to the extent it discriminates among providers of *functionally equivalent* services. If the Order goes beyond that limit, it exceeds the bounds of Commission authority.⁴³

The Draft Order fails to explain why it is prohibitory⁴⁴ for wireless providers to be treated differently from electric utilities, gas utilities, and water and sewer systems (or telephone systems, for that matter). The economics and the required infrastructure are different – a point the Commission recognizes in its discussion of undergrounding. There is no explanation as to why a wireless provider is prevented from providing personal wireless services if it is subject to a set of rules (like painting equipment) that do not apply to transformers. At best, the conclusion is speculation – the opposite of what is required to show prohibition, as we discuss below.

Nor can the Commission claim that *because* a locality permits one type of “infrastructure,” it must allow others, as its aesthetic concerns are insubstantial. That is not the case. It may be that certain type of facilities must be placed at certain locations in order to effectuate a utility service. That does not mean that the public right-of-way must be cluttered with all manner of obtrusive facilities that could be placed elsewhere. Nor are the facilities obviously comparable. Transformers, for example, are typically smaller than the “small cells” as defined by the Commission, are placed at the top of the utility pole, out of the line of sight of pedestrians, and *generally not* at the same level as bedroom windows. Placement of wireless

⁴³ See Smart Communities Wireless Comments at 78-81

⁴⁴ 47 U.S.C. § 332(c)(7)(B)(i)(I). The Commission cannot read the “effective prohibition” standard to import a different discrimination standard into section 332(c)(7) *sub silentio*. Such a reading would render the provisions of subsection (I) superfluous, and thus violate basic canons of statutory construction. The Smart Communities Petition for Reconsideration of the Moratorium decision also explains why Section 253 cannot be used to limit local authority over the placement of wireless facilities – the Commission’s cannot, therefore, rely on Section 253 as a source for its “infrastructure” requirement. See Moratoria Reconsideration Petition at 4-5.

facilities may involve the addition of significant (and in some cases, free-standing) conduit beside a pole, required for no other service. There may be additional meters and cabinets at ground level there are not required for other infrastructure, and proposed wireless projects may involve placement of more cabinets (and hence more overall intrusion) than is associated with other infrastructure. Indeed, other utilities are generally not placing structures in the rights of way that provide services directly to the public, using facilities that could be placed on adjoining property and still function.⁴⁵ All other utilities are transitory – electric wires and water pipes simply carry a product to a customer’s location, they are not themselves the endpoint.⁴⁶ Wireline facilities that approach small cell size are limited in number, widely separated, and commonly either underground, or shielded.

If the Commission intends to apply a unique standard, limiting local authority, to the narrow class of wireless facilities, it must actually articulate that standard. It must explain in detail what that standard is, what its statutory basis is, which “infrastructure” it covers, and to whom it applies. And the Commission must consider the consequences of making all infrastructure subject to the same standards. For example, the compensation provisions imposed by the Commission here differ substantially from those applied to other utilities in the public rights-of-way – none of which are typically based on incremental cost. But the Draft Order treats wireless differently from other utilities for the purpose of rates and fees, without explanation.⁴⁷

⁴⁵ Smart Communities Wireless Comments at 54.

⁴⁶ *Id.*

⁴⁷ As explained below at Section II.B, *infra.*, the Commission should also clarify whether any elements remain of the “significant gap” and “least intrusive alternative” test adopted by the Courts.

II. THE DRAFT ORDER RESTS ON A FLAWED LEGAL AND FACTUAL FOUNDATION.

A. The Commission’s Analysis Improperly Mixes Section 253 and Section 332, and Preempts Based on the Effect of Local Regulations on Services Other Than Personal Wireless Services.

Relying on the conclusions it drew in its Moratorium Order, the Commission’s repeatedly applies Section 253, and not just Section 332(c)(7), to justify restrictions on local authority regarding placement of wireless facilities. That is plain error. As Smart Communities explained in detail in their Moratorium Reconsideration at 4-5, Section 253 does not apply where Section 332(c)(7) does. Those arguments have not been addressed by the Commission on Reconsideration, and are not addressed in the Draft Order.⁴⁸

To be sure, Smart Communities are not arguing that the meaning of the term “effective prohibition” must be different in Section 253 and Section 332. Rather, the scope of the preemptive authority is different: Section 332(c)(7) purports to preserve local land use and zoning authority except that local authority:

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and
(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services⁴⁹

Assuming other elements of Section 332 (which establish certain standards local decision-making must satisfy) are not violated, Section 332(c)(7) cannot preempt either where discrimination does not involve “functionally equivalent services” or the prohibition does not reach “personal wireless services.” The Commission cannot, for example, justify preemption where the regulation of the placement of a wireless facility prohibits the provision of a service

⁴⁸ Because the Moratorium Order is under Reconsideration, the Commission cannot simply adopt its conclusions without at least addressing the issues that are before it, and that call those conclusions into substantial question.

⁴⁹ 47 U.S.C. § 332(c)(7)(B)(i)(I-II).

that is not a personal wireless service.⁵⁰ Yet that is precisely what it does. The Commission, among other things, suggests that local regulations that prevent “densification,” are preempted because they may prevent an operator from providing Internet services (either to people, or as part of the Internet of Things).⁵¹ However important those services may be – and localities intend to encourage their roll-out – those services are not personal wireless services. The unrebutted record in this proceeding is that reliable, available personal wireless service can be provided without the sort of widespread densification the Commission envisions.⁵² If states or localities wish to adopt land use policies to encourage deployment of facilities to support those service they may do so; but the Commission may not preempt state or local laws merely because they do not.

B. The “Prohibition Standard” Adopted By the Commission Does Not Actually Require A Prohibition or Effective Prohibition.

As was the case in the Moratorium Order, the Commission *applies* the “effective prohibition standard incorrectly, rejecting well-established court standards for a vague standard that has no true meaning.”⁵³

We begin with a notion that the Commission acknowledges, but quickly forgets: the plain language of Section 332 (and Section 253) requires a prohibition, or something that has the same effect as direct prohibition – an effective prohibition.⁵⁴ The standard that the Commission

⁵⁰ Smart Communities Wireless Comments at 78-81.

⁵¹ Draft Order at ¶ 36, fn. 78.

⁵² See Exhibit A, Declaration of Andrew Afflerbach, *infra*. at ¶ 20.

⁵³ See Moratoria Reconsideration Petition at 5-9 (discussing the “impairment” standard).

⁵⁴ *Sprint Telephony PCS, L.P. v. Cty. of San Diego*, 543 F.3d 571, 577–78 (9th Cir. 2008), citing *Level 3 Commc'ns, L.L.C. v. City of St. Louis*, 477 F.3d 528, 532–33 (8th Cir.2007). The Commission suggests these cases stand for the proposition that there must be a complete prohibition, but neither does. The “significant gap” test, by definition, means that a prohibition

purports to adopt, the *Huntington Beach* standard, requires the same.⁵⁵ The “impairment” standard – which finds a prohibition where a regulation unreasonably precludes fair competition – does not diminish the core requirement.

In *California Payphone*, the Commission specifically rejected effective prohibition claims objecting to an ordinance that forbid outdoor payphone installations except where permitted by contract with the City. The complainant argued that the restriction amounted to an effective prohibition *inter alia* because indoor private-property sites were uneconomic.⁵⁶ The Commission however, concluded that in the absence in the record of evidence supporting the assertion that indoor installations on private property were non-viable, there was no effective prohibition claim.⁵⁷ Two principles are clear: the provider was not entitled to place the facilities it desired where it desired to place them, if there was an alternative means of providing services. Second, the significance of the burden cannot be assumed, and the burden is not satisfied merely

may occur even where *some* service is being provided; and the quality or reliability of the services may also be considered in determining whether there is a gap. *See Sprint PCS Assets, L.L.C. v. City of Palos Verdes Estates*, 583 F.3d 716, 726 (9th Cir.2009). Indeed, the Commission’s discussion of coverage is something of a straw man; courts have not so narrowly construed the standard as to ignore reliability issues associated with “capacity” problems. What the cases stand for is that there must be an “actual” prohibition, not merely a speculative prohibition; and an action that merely prevents a service improvement is not the same as an action that prohibits or effectively prohibits.

⁵⁵ *In re California Payphone Association*, 12 FCC Rcd. 14191, 14209 (1997) (“*California Payphone*”) (holding that, to be preempted by § 253(a), a regulation “would have to actually prohibit or effectively prohibit” the provision of services).

⁵⁶ *Id.* at 14207-08.

⁵⁷ *Id.* at 14209 (“Even assuming, *arguendo*, that indoor payphones would generate less revenue than outdoor payphones in the Central Business District, that fact, standing alone, does not necessarily mean that indoor payphones are “impractical and uneconomic,” as argued by CPA. *For us to reach such a conclusion, the record would have to demonstrate that indoor payphones in the Central Business District would generate so little revenue as to effectively prohibit the ability of an entity to provide payphone service in the Central Business District.* The present record does not contain much relevant information, however, beyond unsupported assertions of the inferiority of indoor payphones vis-a-vis outdoor payphones.”) (emphasis added).

by showing that more profits could be made if the applicant had access to less expensive venues for placing facilities.

Texas PUC,⁵⁸ on which the Draft Order also relies, found a prohibition where some entrants were required to effectively enter the market only as non-facilities-based providers, and thus could not compete with facilities-based providers of services by building competing facilities. The case does not stand for the proposition that complainants were “prohibited” if they were permitted to install facilities as a general matter but were not permitted to install the facilities that they desired, in the locations where they desired to place them.

Consistent with those decisions, and the plain language of the law, courts have found that providers are not entitled to place facilities of the size they desire at the location that they may prefer, whether on or off the public rights-of-way. By contrast, the Commission appears to find a prohibition where a local restriction prevents an applicant from densifying or providing a new service, without regard to whether there is a prohibitory effect on *personal wireless services*. It does not appear to require a showing that absent the additional facilities, there is a personal wireless service that could not be offered, or could not be offered reliably. It does not appear to require any sort of showing as to alternatives. It focuses simply on what the applicant wants to do and asks whether the local requirements “impair” the ability to do it. That is a standard of inconvenience, not impairment, and certainly not prohibition, as defined by controlling authority. If that is what the Commission means, it should say so clearly: if it means that there is a prohibition unless service is available everywhere (that is, no dead spots or low capacity areas) are permitted, it should say so, and explain why that amounts to an “effective prohibition.”

⁵⁸ *Public Utility Comm’n of Texas, et al., Pet. for Decl. Ruling and/or Preemption of Certain Provisions of the Texas Pub. Util. Reg. Act of 1995, Memorandum Opinion and Order*, 13 FCC Rcd 3460 (1997).

Courts have concluded the Act “obviously” does not guarantee 100% coverage, and it follows, does not guarantee that it must be permitted to install whatever facilities it deems appropriate to provide any service, at whatever level it desires.⁵⁹

If the Commission intends something else, for example, that the “significant gap” test developed by the courts should include capacity and not just coverage issues, it should say so. It is also critical that the Commission be clear as to whether it is altering or eliminating the “least intrusive means” test.⁶⁰ As it stands, the plain language of its order is so vague as to be meaningless, and appears to make prohibition the handmaiden of the applicant’s business plan, contrary to the plain language of the law and the Commission’s precedent.⁶¹ A good example lies in the Commission’s discussion of undergrounding.⁶² The Commission at once appears to

⁵⁹ *360 Degrees Communs. Co. v. Board of Supervisors of Albermarle County*, 211 F.3d 79, 87 (4th Cir. 2000) (“The Act obviously cannot require that wireless services provide 100% coverage. In recognition of this reality, federal regulations contemplate the existence of dead spots.”)

⁶⁰ That test is important. The Commission, for example, finds that densification is important in order to provide services within buildings. But it does not actually follow that that service objective requires placement of facilities in streets (or that placement in streets would actually address the problem identified). Placement within buildings is a viable alternative, and indeed, industry projections suggest that there will be more in-building systems than outdoor systems. See Small Cell Forum, *Small Cells Market Status Report, February 2018*, at 5, Fig. 3-1 (Feb. 19, 2018) available at http://www.scf.io/en/documents/050_-_Small_cells_market_status_report_February_2018.php?utm_source=Email%20campaign&utm_medium=eshots&utm_campaign=member%20eshot (projecting that only approximately 28% of small cell installations will be outdoors in 2025). Just as in *Huntington Beach*, the fact that it may be more convenient to place facilities in the rights of way does not mean that it is a “prohibition” or “effective prohibition” to deny an application where there are alternatives to the provision of services.

⁶¹ The Commission also relies heavily throughout the Draft Order on Petition of the State of Minnesota for a Declaratory Ruling regarding the Effect of Section 253 on an Agreement to Install Fiber Optic Wholesale Transport Capacity in State Freeway Rights of Way, Memorandum Opinion and Order, 14 FCC Rcd 21697. That case, however, is a non-decision, and did not determine whether the proposed agreement could, would, or would not violate Section 253. It did not address proprietary/governmental distinctions.

⁶² Draft Order at ¶ 86.

recognize that communities spend millions of dollars on undergrounding projects, and that allowing poles to go up in areas where poles have been take down has significant impacts on aesthetics (not to mention property values). Yet the Commission's impairment standard, read literally and without in some ways cabining it with notions of "significance" and "intrusion," would appear to compel localities to allow just that.

C. The Commission Has No Authority To Limit Rents to Incremental Costs.

The Commission purports to limit the rents that can be charged for use of the public rights-of-way and use of municipal property in the public rights-of-way to cost. It has no authority to do so (and indeed, is precluded from doing so by 47 U.S.C. Section 224).

1. The Commission Has No Basis for Finding Non-Cost-Based Rents Prohibitory.⁶³

It first finds that charging a fee in excess of costs is prohibitory. The Commission appears to recognize that it has no real basis for finding a general prohibition: there are thousands of wireless facilities and many thousands of miles of wireline facilities in the public rights-of-way, and operators, including wireless operators like Crown Castle, routinely propose and enter into contracts that provide for compensation based on gross revenues or per foot charges not based on cost. Yet deployment of facilities for protected services (telecommunications and personal wireless services) and for broadband services have continued apace.⁶⁴ Hence, the Commission relies on speculation: it suggests that if less were charged in New York, more facilities would be deployed in North Dakota.

⁶³ The same would apply to the Commission's discussion of police power fees, but as we have explained before, those fees are cost-based in any case.

⁶⁴ Illustrating the meaninglessness of the its standard, the Commission admits that there is no serious problem with broadband deployment that justifies intervention under Section 706, but argues that deployment might proceed faster if not for local fees and regulations. That is, adequate deployment equals a prohibition in the Commission's view. *See* Draft Order at fn. 263.

To this end, the Commission quotes AT&T for the proposition that “if, as S&P Global Market Intelligence estimates, small-cell deployments reach nearly 800,000 by 2026, a ROW fee of \$1000 per year ...would result in nearly \$800 million annually in forgone investment.”⁶⁵ Set aside the obvious fact that there is no reason to suppose this amount, if saved, would in turn be invested. And even set aside the flip side that it removes from property owners \$800,000,000 in revenues that could be used to purchase services on a market basis – thus returning money not just to those companies that choose to invest, but to those who offer services that meet market demands. As the RFA clearly shows, in its calculus of public benefits and losses, the Commission blatantly ignores the effect of the loss of revenue on the ability of those deprived of market rents to deploy facilities and purchase services, including public safety services.⁶⁶

There is also no reason to suppose that \$800,000,000 is too high a rent for what the Commission assumes will be ubiquitous use of the public rights-of-way.⁶⁷ The analysis ignores the revenues that can be generated from the equipment (which surely affects whether or not there is a prohibitory effect, even assuming cross-subsidies). If one takes the cable industry as an example, there are 51.9 million video subscribers;⁶⁸ cable has invested \$275 billion into infrastructure (the same amount the Commission projects for wireless), and almost \$100 billion

⁶⁵ *Id.* at ¶ 61.

⁶⁶ TechRepublic, *Verizon sees 5G as a game changer for public safety and transportation* (last viewed Sept. 19, 2018) available at <https://www.techrepublic.com/videos/verizons-see-5g-as-game-changer-for-public-safety-and-transportation/>.

⁶⁷ While the Commission sometimes discusses small cells were disconnected from other networks, in fact small cells and DAS systems utilize high capacity transport media, including fiber optic lines place in the right of way for back-and front-haul. In that sense, a small cell network may actually involve wireline and wireless components place throughout a community.

⁶⁸ NCTA, *Cable’s Customer Base* (last accessed Sept. 19, 2018), <https://www.ncta.com/chart/cables-customer-base>.

over the last decade,⁶⁹ and has done so while paying congressionally-endorsed franchise fees for use of the public rights-of-way equal to 5% of gross revenues, by their own estimates approximately \$3 billion per year.⁷⁰ Given that the first 5G deployments are projected to focus on delivery of video and Internet services,⁷¹ there is no reason to suppose that charging rents will be “prohibitory” in any meaningful sense.⁷² The examples of 5G contracts in the record, including contracts in San Jose and Los Angeles, actually suggest that negotiated contracts, with freely established rents for municipal property, will encourage broadband deployment, not prohibit it.

⁶⁹ NCTA, *Tracking Cable’s Investment in Infrastructure* (last accessed Sept. 19, 2018), <https://www.ncta.com/chart/tracking-cables-investment-in-infrastructure>.

⁷⁰ Letter from Rick Chessen, Chief Legal Officer, NCTA, WC Docket No. 17-84 (Jun. 11, 2018) (“collectively paying about \$3 billion annually in franchise fees”).

⁷¹ Verizon, *5G Ultra Wideband Wireless Home Network*, (last accessed Sept. 19, 2018) https://www.verizonwireless.com/5g/home/?cmp=KNC-C-HQ-NON-R-AC-NONE-NONE-2K0PX0-PX-BIN-71700000040911015&msclkid=bc486d392a2712df37a536a696616805&gclid=CPGA7_Shwt0CFZGWxQIdGiEJLw&gclsrc=ds.

⁷² The Commission’s reliance on planned investment also seems to assume that the investment would not otherwise occur. Actually, there is a reason to suppose existing planned investments are being diverted to wireless, so that the gain the Commission imagines is illusory. Diana Goovaerts, *Verizon plans fixed 5G launches in 2018*, Mobile World Live (Nov. 29, 2017), <https://www.mobileworldlive.com/featured-content/top-three/verizon-plans-fixed-5g-launches-in-up-to-5-markets-in-2018/>. In addition, while there are many reasons the Commission’s economic analysis is wrong-headed, it actually allows the first market entrant to capture the fair market value of the property at a below-market price and to resell it at any rate desired. Thus, if one provider obtains the right to locate on a particular pole, other companies who wish to use that pole will need to pay that provider for access. Nothing in the Draft Order requires that first provider, or anyone else other than local governments, to limit their fees to costs – that first provider will charge a rate determined by the market. The result, in effect, is shifting that value away from the public and into the hands of wireless infrastructure providers. The Commission may argue that since other companies could place facilities on buildings or on other nearby structures, therefore this is not problematic. But that simply reinforces that the basic assumptions underlying the prohibition analysis (specifically, that access to the public rights-of-way at below-market rates is essential; and that the area served is so small as to not permit significant locational movement, necessitating mandated, price-capped access to poles in the public rights-of-way) are incorrect.

2. *Non-Cost Based Fees Do Fall Within the Section 253(c) Safe Harbor.*

Having found, without basis, a prohibition, the Commission then turns to Section 253(c) to determine whether charges for access to municipal property are within the ambit of the “fair and reasonable” compensation savings clause. The Commission takes the very same definition it used to define what fees do and do not “prohibit and effectively prohibit” the provision of service, and finds that only cost-based fees are saved by the savings clause in Section 253(c). That turns Section 253(c) into a nullity. If fees are not prohibitory, there is no need for the savings clause; the clause can only apply to save fees that are in fact prohibitory. The Commission’s attempt to nullify the savings clause can obviously not be saved by its strained and incorrect application of the *noscitur a sociis* canon of statutory interpretation, as the Commission cannot use that canon to render the savings clause meaningless. As it happens, the qualifiers cannot be read, as the Commission suggests, to mean that “fair and reasonable” must be read in favor of the person seeking access to property; they actually imply the reverse, as additional qualifiers on an otherwise broad power to set rates, as long as those rates fall within the range of what is recognized as “fair and reasonable.” In the context of the Act, which relies on competition and free markets, it is hard to argue that freely agreed to contract rates are not fair and reasonable.⁷³

⁷³ Other Smart Communities pleadings, not addressed by the Commission, discuss this point in more detail. See Smart Communities Reply Comments at 55-63. But there is nothing in the Act that allows the Commission to order New York to reduce rates so North Dakota can be cross-subsidized – which is effectively what the Commission is doing. Requiring one state to cross-subsidize another not only creates 10th Amendment issues; it is questionable whether requiring such a cross-subsidy would in any respect be within the ambit of Commerce Clause powers.

3. *The Act's legislative history does not support the Commission's interpretation.*

The Draft Order misstates the legislative history of the Act, detailed in our filings and scholarly analysis of the Act.⁷⁴ The history shows that Congress had two separate concerns: right-of-way management, and compensation. The discussion by Sen. Feinstein, cited by the Commission, actually involved reading a letter from a City, that described right-of-way management concerns and, as part of right of way management, discussed the recovery of fees related to the exercise of the management authority. The Commission itself recognizes that the right to recover fees for management of the rights-of-way must be recoverable as part of the overall management function, and that reading the law to preclude recovery of those fees would raise significant 10th Amendment issues. But, compensation is a separate matter, and the legislative history demonstrates as much. As our filings show, both opponents and proponents read the section to give local governments and states the right to charge for use of their respective properties, and to charge, among other things, non-cost-based fees such as gross revenues-based fees.⁷⁵ Smart Communities believes read *in toto*, the legislative history does not support the limited reading that the Commission seeks to give to the term “fair and reasonable compensation.” Rather, read in the context of similar terms used in the Communications Act, and in light of the fact that the Act (as the Commission repeatedly reminds us) is meant to replace regulation with reliance on free market principles, “fair and reasonable” compensation would necessarily allow recovery of fees that reflect the fair value of the property utilized.⁷⁶

⁷⁴ Frederick E. Ellrod III and Nicholas P. Miller, *Property Rights, Federalism, and the Public Rights-of-Way*, 26 Seattle U.L. Rev. 475 (2003).

⁷⁵ Smart Communities Reply Comments at 57, 58, fn. 166 (citing legislative history describing Congress’ desire to avoid a mandate that local governments make property available to whoever wants it without fair and reasonable compensation).

⁷⁶ *Id.*

The Draft Order also cites pending, unpassed Congressional legislation for support, while ignoring clear and recent statements of Congress' view as to the value of public property. The Draft Order cites the STREAMLINE Act, which has yet to have a Senate hearing or a House companion even introduced, as proof the Commission is acting in accordance with bipartisan congressional guidance.⁷⁷ The fact that there is a pending and unpassed bill provides no evidence that Congress as a body supports the Commission's direction. A better measure would be how Congress disposed of federal property in the context of telecommunications deployment. The recently enacted MOBILE NOW Act, signed into law as part of the Consolidated Appropriations Act of 2018, reveals a very different standard for an appropriate framework.⁷⁸ Congress provided 270 days' time to act, without any duty to rebut a presumption of violation if that time expires, and preserves for federal agencies the right to recover fair market value for property used by broadband providers. Under the Draft Order, the rules Congress set for federal agencies would be prohibitory. Unless one presumes Congress intended to prohibit deployments on federal land, the Draft Order's views directly contradicts the unanimous view expressed by Congress earlier this year.

4. *At the very least, the Commission needs to be clear that all costs may be recovered, and what it intends the fees it develops to cover.*

In the Draft Order, the Commission creates tremendous uncertainty as to what costs may be recovered, and at what level of granularity costs must be estimated.⁷⁹ The Commission could be read to suggest, for example, that costs must be measured on a geographic basis within a community. If there is such a dictate, the Commission needs to be clear about it. Further, the

⁷⁷ Draft Order at ¶ 27.

⁷⁸ See Consolidated Appropriations Act of 2018, Pub. L 115-141, Div. P, Title VI, Sec. 601 *et. seq.*

⁷⁹ See, e.g. Draft Order at ¶ 73.

Commission should at least make it clear that localities can recover all the costs associated with creating the systems required to conduct the cost analyses the Commission requires, and further, the costs of managing those systems. The Commission cannot set a confiscatory cost “presumed” to comply with federal law, and then require the property owner to bear an unrecoverable cost of showing more compensation is in fact permitted.

The Commission should also be clear as to whether its fee is based on the node, or the node plus the use of the public rights-of-way for back haul and front haul. Consistent with its own analysis, while the node may be subject to one fee, the use of the public rights-of-way should be subject to fees similar to those charged other wireline providers.

D. The Draft Order’s Takings Analysis is Flawed, and It Otherwise Ignores Constitutional Defects In Its Order Eliminating Distinctions Between Proprietary and Regulatory Actions.

The Commission argues that the rate limitations it imposes do not constitute a taking, and that its action here is analogous to the implementation of pole attachment rate caps (the analogy is actually inapt).⁸⁰ And it argues further that under *Florida Power*, there is no taking unless the rates set are confiscatory.⁸¹ But the Commission conflates two separate takings questions. As detailed in Smart Communities’ comments,⁸² a government action constitutes a taking if it compels access to property,⁸³ for which compensation must be paid at fair market value.⁸⁴ And

⁸⁰ *Id.* at ¶ 70 fn. 198. Among other things, its pole attachment rules permit recovery of fully allocated costs plus costs directly caused by an attacher, plus an investment return. The Commission order appears at some points to limit recovery to those costs caused by a particular user, rather than a full allocation of costs, much less a return on the property.

⁸¹ *Id.*

⁸² Smart Communities Wireline Comments at 14-21; Smart Communities Reply Comments at 47-50.

⁸³ *F.C.C. v. Florida Power Corp.*, 480 U.S. 245, 251 (1987) (“*Florida Power*”) (citing *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 440 (1982)).

separately, an action may be a taking if it is otherwise valid economic regulation of an activity entered into by a regulated entity, where the rates set are confiscatory. But one cannot both compel someone to grant access to property, and force them to do so at regulated rates. *Florida Power* specifically noted that “nothing in the Pole Attachments Act as interpreted by the FCC [...] gives cable companies the right to occupy space on utility poles, or prohibits utility companies from refusing to enter into attachment agreements....”⁸⁵ Yet that is precisely what the Commission purports to do.

In this case, of course, the Commission has not been given authority to regulate rates, or to require localities to provide access to proprietary property like traffic signals or lights poles. To the extent that the Act addresses access to property in the public rights-of-way that may be useful for placement of telecommunications facilities, the authority to regulate public property is specifically withheld.⁸⁶ The direction by the Commission in this case, which provides localities 60 days to provide access and sets the rate for access is a classic taking,⁸⁷ and assuming the Commission could direct the taking (it cannot consistent with limits on its own authority) it cannot do so at less than fair market value. In examining a circumstance where “an otherwise valid regulation so frustrates property rights that compensation must be paid” the Supreme Court was unequivocal: “a permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve.”⁸⁸ The Commission is actually going a

⁸⁴ *United States v. 50 Acres of Land*, 469 U.S. 24, 31 (1984).

⁸⁵ *Florida Power*, 480 U.S. at 251.

⁸⁶ 47 U.S.C. § 224. Indeed, the contrast between the regulatory powers granted under Section 224, and the preemptive authority under Section 253, is significant.

⁸⁷ *City of St. Louis v. Western Union Telegraph Co.*, 148 U.S. 92 (1893), *op. on rehrg.*, 149 U.S. 465.

⁸⁸ *Loretto*, 458 U.S. at 425-26.

step further, and requiring states and localities to assume the duties of a common carrier with respect to all vertical structures in the public rights-of-way, something it has no statutory or constitutional right to do.⁸⁹ Reading such an authority from the “effective prohibition language” of Section 332 (or Section 253) transforms preemptive acts into prescriptive acts, and reads the law to compel localities and states to grant benefits to users. That is not a plausible reading of the Act, as we explained in the Moratorium Petition for Reconsideration.

Nor does the Commission have a sound basis for eliminating the distinction between proprietary and regulatory functions, and treating one as if it was the same as the other. That it must do so is clear: constitutionally, preemption reaches regulatory actions (essentially validating the interests preserved by the Supremacy Clause); direct regulation of states is prohibited except to the extent that they are being subjected to the same regulations as other, private entities. The Commission is granted no authority to regulate *qua regulation*; it must therefore justify the rates and fees it sets as preemption, by claiming that every compensation provision with respect to municipal property, and presumably all conditions on access are no different than other laws and regulations. The two cases relied on by the Commission to do so – *Building & Construction Trades Council v. Associated Builders & Contractors*, 507 U.S. 218 (1993) and *American Trucking Ass’n v. City of Los Angeles*, 569 U.S. 641 (2013) – do not actually support the conclusions in the Draft Order. Those cases stand for the proposition that the form of an arrangement does not automatically resolve whether it is proprietary or regulatory; they do not eliminate the importance of the distinction, and in fact reaffirm it. The fact that violation of what was nominally a contract was punishable by criminal sanctions was determinative in *American Trucking*. In this case, however, the Commission is simply deciding

⁸⁹ *Frost Trucking Co. v. Railroad Comm’n*, 271 U.S. 583, 593-94 (1926).

that the very fact that something owned by a locality is in the public rights-of-way, means it is open to the public, that facilities can be attached to it, and that it may be used at rates that do not exceed levels dictated by the Commission. By that reasoning, police cars and city trucks may be treated as a cheap form of transport for wireless providers who would prefer not to buy their own; and must be leased out on request for gas plus a mileage benefit. As far as the record shows, structures like street lights and traffic poles are managed like private property, and the access to them, and the price for them, and use the funding to pursue their own goals. The Commission cannot compel response to a request for access in 60 days; require grant of access; or set the fee for doing so.⁹⁰

Furthermore, the Draft Order fails to recognize and address the fact that numerous state constitutions *require* recovery of fair market value for private use of public property.⁹¹ The Draft Order fails to offer localities any guidance as to how to resolve these conflicts, nor does it proffer any statutory basis for superseding state constitutions.

⁹⁰ At fn. 241, the Commission attempts to distinguish its prior contrary rulings. The argument boils down to “that was different,” even though the subject was the same, the affected properties the same, and the actual scope of the ruling broader than the Commission admits – it did, for example, directly address properties in the rights of way. It is not an adequate explanation. As now elucidated by the Commission, Section 332 applies to require a locality to provide access to a pole, but Section 6409 cannot be applied to proposed modifications to the same pole.

⁹¹ Smart Communities Wireline Comments at 15. *See also* Mich. Const. art. VII § 21 (prohibiting localities from using tax revenues for non-public purposes (such as subsidizing a wireless provider, even indirectly) and even public utilities must obtain consents and accede to appropriate conditions as a condition of public right-of-way use. (Mich. Const. art. VII § 29) *See also* Tex. Const. art. III, §52; *Comments Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies*, Comments of Arlington, Texas, WT Docket No. 16-421 (filed Mar. 7, 2017); *Comments Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies*, Comments of Texas Municipal League, WT Docket No. 16-421 (filed Mar. 8, 2017) (Texas Constitution prohibits a municipality from granting any public funds or thing of value to an individual, association or corporation.).

Part of the Commission's error appears to lie in a misreading of Section 253, illustrated in Draft Order para. 91. It reads the section as applying primarily to state and local property, and conditions governing access to that property. As the cases cited by both the Commission and other commenters suggest, Section 253(a) was actually intended first and foremost to preempt laws that governed private actors, and that essentially created telephone monopolies. Hence, for purposes of assessing whether a law is prohibitory or not, it makes no difference whether the law governs private or public property. If, for example, Section 253 authorizes preemption of property rights of municipalities, it also authorizes preemption of private property rights that "impair" the ability of a wireless provider to compete. What is important is that the Commission identify what law it is preempting,⁹² and show why that preemption is actually required. That it never does; it never even shows that access to the street lights and traffics signals is in any way necessary to the provision of telecommunications or personal wireless services.

E. The Draft Order Fails to Recognize the Complexities of Wireless Siting Review In Setting Presumptively Reasonable Timeframes and Fees.

Despite ample evidence in the underlying record, the Draft Order conducts no meaningful examination of the complexities and requirements of local permitting. The Draft Order ignores evidence from local governments that batched applications are no less burdensome than individual ones,⁹³ while accepting without examination the assertions of industry commenters

⁹² In paragraph 92 of the Draft Order, the Commission appears to suggest that intrusion on municipal property rights is insignificant because municipalities hold public rights-of-way "in trust." Actually, many hold much critical public rights-of-way in fee, including in far-flung communities like Tucson, Arizona and Newark, NJ. But it does not matter. Under a trustee theory, consistent with many state constitutional requirements, the trustee must obtain fair value for use of property by private entities.

⁹³ See, e.g. July 2018 Permitting Ex Parte at Attachment pp. 7, 10, fn. 24 (detailing the City of Portland, Oregon's experience that batched applications were presented "not based on substantial similarity, but based on geographic location, and rarely demonstrated any consistency between applications. As a result each required a separate, individual review process, which consumed

that batching makes reviewing easier.⁹⁴ The Draft Order disregards the interrelated and sequential nature of permitting, described in greater detail above, but instead asserts that imposition of more shot clocks brings “likely significant benefit[s] of regulatory certainty and the resulting streamlined deployment process.”⁹⁵ But no evidence is cited for these alleged benefits – they are simply declared to exist.⁹⁶ And the Draft Order disregards any consideration of public participation in its imposition of new shot clocks. Local laws, including but not limited to environmental and historic review ordinances, frequently provide for public input, either in the form of comments or hearings, on all construction proposals. These facts suggests that costs associated with permitting are far higher than the Commission imagines, and requires more time than the Commission allows.⁹⁷

The Draft Order furthermore presumes efficiencies that do not exist, and inadequately substantiates those same claims. It asserts, for instance, that “localities have gained significant experience processing wireless siting applications” and that “siting agencies have become more efficient in processing siting applications.”⁹⁸ But the only support for the experience gained are industry filings – no local agencies support that point.⁹⁹ The only support for claims that shot clocks are routinely met or exceeded are one Alaskan state agency noting that it meets or exceeds the shot clocks, and an industry filing listing state small cell bill *imposing* shorter shot clocks, but

even more time than reviewing individual applications.”); *see also* Smart Communities Wireless Comments at 52-55; Smart Communities Reply Comments at 30; *see also* Exhibit A, Declaration of Andrew Afflerbach at ¶¶ 24-25.

⁹⁴ Draft Order at ¶ 110.

⁹⁵ *Id.* at ¶ 106.

⁹⁶ *Id.*

⁹⁷ *See, e.g.* Smart Communities Reply Comments at 70-72.

⁹⁸ Draft Order at ¶ 102.

⁹⁹ *Id.* at fn. 277.

offering no evidence of burden or viability.¹⁰⁰ And the claims of new efficiencies are based solely on Chicago noting that it has “worked to achieve efficient processing times,” New Orleans expressing openness to new timeframes for discrete classes but making no mention of efficiency, or of what those timeframes or classes should be, and a nongovernmental business advocacy group from Colorado which again fails to mention any alleged efficiencies.¹⁰¹ And even if these wholly unsubstantiated claims *were* true, they would, as demonstrated in the record, be based in large part on local experience reviewing facilities *significantly smaller* than the definition the Commission now applies.¹⁰² The Draft Order amounts to a ruling that since cities have experience reviewing single-family housing permits, they should have no problem reviewing high-rise apartment buildings on the same timeframe, without bothering to substantiate that any relevant experience or efficiency even exists in the first place.

F. The Commission’s “New Remedy” Is Not Sound.

The Commission’s new remedy¹⁰³ is subject to many of the same concerns raised with respect to deemed granted remedies.¹⁰⁴ As importantly, it conflates the requirement that a locality act within a reasonable time with a prohibition. If the failure to act within a reasonable time were a prohibition, there would have been no need for Congress to address the time for

¹⁰⁰ *Id.* at fn. 278.

¹⁰¹ *Id.* at fn. 279.

¹⁰² See Exhibit A, Declaration of Andrew Afflerbach, *infra.* at ¶ 20.

¹⁰³ Draft Order at ¶ 114 et. seq.

¹⁰⁴ See Smart Communities Wireless Comments at 37-43; Smart Communities Reply Comments at 19-22.

action. Not only did Congress identify this as a separate requirement, it devised a specific remedy for a failure to act. The Commission's conflation of the two is impermissible.¹⁰⁵

G. The Order Is Not Constitutionally Defensible.

While the issues have been raised in pleadings by Smart Communities and others, it bears emphasizing that the Commission's disposition of this matter raises significant constitutional questions.¹⁰⁶

As noted above, the Order is specifically prescriptive, requiring localities to provide access to public property like a common carrier, and at rates that may not even be fully compensatory. That is a violation of the Tenth Amendment and the Fifth Amendment; to the extent that the Commission effectively purports to tax New York localities in order to subsidize deployment in North Dakota, (by requiring New York to make its property available at cost, rather than fair value), the Commission exceeds its authority under the Commerce Clause, as well as overstepping the bounds of its authority under the Act.

H. The Order Fails to Comply With the Regulatory Flexibility Act.

As required by the Regulatory Flexibility Act ("RFA"),¹⁰⁷ the Draft Order includes a Final Regulatory Flexibility Analysis ("FRFA").¹⁰⁸ However, the FRFA fails to comply with statutory requirements because it presents a lopsided, industry-focused analysis that wholly

¹⁰⁵ The claim that the remedy is not more burdensome because states have adopted laws on small cells is of course, contradicted by the order itself: as the Commission's order notes, most states have not adopted small cell laws; those that have adopted laws that are not the same as the rules adopted by the Commission, and the Commission is requiring compliance with both. That "double regulation" is burdensome, and should be accounted for in the FRFA.

¹⁰⁶ See Smart Communities Wireline Comments at 14-21; Smart Communities Reply Comments at 47-50.

¹⁰⁷ See 5 U.S.C. § 604.

¹⁰⁸ See Draft Order at Appendix C.

ignores the concerns raised by small government comments. The RFA requires more than just paying “lip service” to small governments through conclusory rejections of their economic concerns.¹⁰⁹

The FRFA, drawing largely on U.S. census data, determines that there are “at least 49,316 local government jurisdictions [that] fall in the category of ‘small governmental jurisdictions’” under the RFA.¹¹⁰ Yet, despite such a significant contingent of stakeholders, the FRFA contains no reasonable, good faith attempt to analyze the financial and compliance burdens that the Draft Order will impose on small governments.¹¹¹ For example, small governments argued that “additional shot clock classifications would make the siting process needlessly complex without any proven benefits.”¹¹² The FRFA contains no analysis addressing these properly-raised concerns: it does not consider in any type of quantitative terms the cost to small governments to implement the necessary procedures and hire additional workers to comply with the two new shot clocks. It does not even allege that the Commission attempted to analyze this question quantitatively. Instead, the Commission simply concludes that “any additional administrative burden from increasing the number of . . . shot clocks from two to four is outweighed by the likely significant benefit of regulatory certainty and the resulting streamlined deployment process.”¹¹³ As suggested above, this does not create regulatory certainty, and it “streamlines” at a very high costs. For example, the City of Monterey, California, which has a population of approximately 30,000, estimates that it must hire at least one additional full-time

¹⁰⁹ *See Zero Zone, Inc. v. U.S. Dep’t of Energy*, 832 F.3d 654, 683 (7th Cir. 2016) (requiring the agency to undertake a “reasonable, good-faith effort” to comply with the RFA).

¹¹⁰ Draft Order at Appendix C, ¶ 12.

¹¹¹ *See id.* at ¶¶ 42-46.

¹¹² *Id.* at ¶ 43.

¹¹³ *Id.* at ¶ 43.

employee dedicated solely to the review of wireless facility applications to be able to comply with the Draft Order's new regime. That means Monterey will have to pay approximately \$100,000 per year in salary and benefits in additional costs solely attributable to the Draft Order. Even if that amount were wholly recoverable (and timing issues make it unclear whether it will be), if a similar cost were incurred by even one-quarter of the small communities in the country, the annual additional costs would be on the order of \$1.2 billion. Other communities can expect similar impacts.

There could be additional, significant impacts depending on the clarifications made in the final order. For example, if the Commission intends to require localities to adopt aesthetic standards different from the general standards contained in zoning and land use ordinances, it must take into account the cost of that development, which would be solely and uniquely attributable to the Draft Order and Commission rules. Properly read, Section 332(c)(7) allowed localities to integrate consideration of wireless applications into normal zoning and land use processes. With its latest federal intrusion, the Draft Order requires departure from those processes, with attendant costs in the thousands of dollars per community.

The absence of a serious consideration of these costs is evident. The Commission fails to describe the "steps [it] has taken to minimize the significant economic impact on small entities," especially small governments.¹¹⁴ Indeed, the Commission's explanation of the steps it took to minimize the significant economic impact on small entities contains no reference to small governments whatsoever, focusing instead on the benefits to industry stakeholders that also count as "small entities" under the RFA.¹¹⁵

¹¹⁴ 5 U.S.C. § 604(a)(6).

¹¹⁵ See Draft Order at Appendix C, ¶¶ 44-46.

III. THE COMMISSION SHOULD GRANT NATOA’S REQUEST FOR DELAYING IMPLEMENTATION.

Smart Communities supports the National Association of Telecommunications Officers and Advisors’ (“NATOA”) request for a delay of the Draft Order’s effective date, assuming it is approved, until the resolution of any reconsideration petitions and appeals,¹¹⁶ or, in the alternative, for a 6-month transition period to allow time for localities to implement new regulations consistent with the Draft Order.

First, Smart Communities incorporates by reference all of the arguments made above and in the underlying record regarding the flaws of the Draft Order. These arguments show, individually and collectively, that the Draft Order, if approved and implemented, stands on seriously unstable legal grounds at best. Among other things, the standard adopted for prohibition is not consistent with the Commission’s own precedent, much less standards adopted by Courts of Appeal based on the plain language of the Draft Order.

Further, the Draft Order appears to require every jurisdiction to perform an evaluation of existing local rules and standards and possibly make revisions (how substantial may depend on the Commission’s clarifications), or risk litigation. Given the substantiality of the questions raised by states and local governments, the effect will be more uncertainty in the process, not less. Moreover, the Commission does not provide localities time to actually do an evaluation and, if necessary, develop new or revised standards, or to revisit existing (and in many cases contractually-agreed) fee and rent structures. It may be impossible for localities to recover costs or implement the regulatory program proposed, causing an inability to comply. Thus, the Draft Order’s stated goal of “avoid[ing] unnecessary litigation” would be completely nullified without

¹¹⁶ We would go one step further and propose that the Commission include a transition period once those petitions and appeals are finally resolved to allow local governments to bring their codes and processes into compliance.

a time to allow for a full review of the adopted Order, or alternatively to allow local governments to evaluate existing codes and processes and implement any necessary modifications.¹¹⁷

This is particularly true with respect to the portions of the Commission's Draft Order compelling access to proprietary property at what appear to be incremental costs. The Draft Order effectively turn localities into common carriers; requires localities to take prescriptive action; and requires incurrence of costs *in advance* to develop model contracts and structural analyses to avoid missing the Commission's 60-day deadline – without any guarantee that a request for use will ever be received. Moreover, it does so in the face of a provision that specifically precludes municipal property from Commission control.¹¹⁸ While a court may be able to stay a specific request for access when received, the immediate impact of preparing to comply with the Draft Order will be significant and felt long before the first application is filed.¹¹⁹ This concern is particularly potent and tangible when considered in tandem with the caps on potential cost-recovery revenue streams that the Draft Order imposes. For example, in Mount Vernon, New York, a city of approximately 68,000 people, a deal with a wireless carrier was initially agreed to at \$1,500 per site, but the carrier reneged since issuance of the Draft Order and now will only agree to \$270 per site. Similar accounts come from Boston. Many local governments already lack the budget to take the steps and hire the labor necessary to comply with the Draft Order, and, as this example shows, the Draft Order makes that significantly more difficult by prohibiting means to offset increased costs associated with compliance. Without a

¹¹⁷ *Id.* at ¶ 32.

¹¹⁸ *See* 47 U.S.C. § 224.

¹¹⁹ Nor is it clear how the rules should apply to existing applications. This is unlike the Commission's original shot clock order which explicitly addressed this situation. *See Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review, Declaratory Ruling*, 24 FCC Rcd. 13994, 14014 (2009), *aff'd*, *City of Arlington v. F.C.C.*, 668 F.3d 229 (5th Cir. 2012), *aff'd*, 133 S. Ct. 1863, 569 U.S. 290 (2013).

delayed effective date or extended transition period, local governments will simply be unable to comply with the Draft Order's brand new regime.¹²⁰

Granting NATOA's request will not materially harm other stakeholders. All relevant stakeholders have been operating under the current industry standards for years, and deployment is occurring apace in many communities, as the Commission itself recognizes and carriers celebrate.¹²¹ A delay or transition period would simply maintain the *status quo* until the Draft Order's legal viability is litigated (or at least until local governments have the opportunity to implement new regulations pursuant to the Draft Order).

Finally, the Commission's stated goal to "streamline" the deployment of wireless facilities supports a delayed effective date or extended transition period.¹²² Without first ensuring the Draft Order's legal validity prior to its effectiveness, carriers and local governments will be tied up in *post hoc* litigation of the issues raised by the Draft Order. The same can be said if local governments do not have an opportunity to evaluate their own regulations and make adjustments if needed in line with the Draft Order. Streamlining deployment thus requires a delay or transition period to allow time for an efficient and proper implementation of this new, complex regime. At an absolute minimum, local governments will need time to evaluate existing processes and establish new systems, as well as hire and train new employees. Given these serious concerns, and the Commission's stated goal of "streamlining" the deployment of wireless

¹²⁰ This problem is exacerbated because the Draft Order could come into effect midway through the fiscal year of many local governments (which run on a July 1-June 30 budget cycle) when it is especially difficult to make major budget adjustments.

¹²¹ See, e.g. Letter from Gerard Lavery Lederer, WT Docket No. 17-79, WC Docket No. 17-84, GN Docket No. 17-83 (Jul. 18, 2018) (detailing Sprint blog post celebrating deployment of "more outdoor small cells in [Sprint's] 2017 fiscal fourth quarter than ... in the previous two years combined" and plans to "continue to invest, expanding and extending our use of large traditional cell towers, as well as state-of-the-art small cells.")

¹²² *Id.* at ¶ 28.

facilities, all stakeholders stand to benefit from addressing these fundamental questions holistically *before* implementation, rather than in costly, piecemeal, *post hoc* litigation.

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DECLARATION OF ANDREW AFFLERBACH, PH.D., P.E.

1. I have been the Chief Executive Officer and Chief Technology Officer of Columbia Telecommunications Corporation (d/b/a CTC Technology & Energy), a communications engineering consultancy, since 2000, and was Senior Scientist at CTC from 1996 until 2000. I specialize in the planning, design, and implementation of communications infrastructure and networks. My expertise includes fiber and wireless technologies and state-of-the-art networking applications. I have closely observed the development of wireless technology since the advent of the commercial internet in the 1990s.
2. As CTO, I am responsible for all engineering work and technical analysis performed by CTC. I have planned and overseen the implementation of a wide variety of wired and wireless government and public safety networks. I have advised cities, counties, and states about emerging technologies, including successive generations of wireless networks across a range of licensed and unlicensed spectrum bands. I have developed broadband technology strategy for cities including San Francisco, Boston, Seattle, Atlanta, Washington, D.C., and New York; for states including Connecticut, Delaware, Kansas, Kentucky, and New Mexico; and for the government of New Zealand's national broadband project.
3. I have designed wireless networks for large cities, counties, and regions. I lead the CTC team advising the State of Texas Department of Transportation and many local governments on wireless facilities standards and processes. I also lead the CTC technical teams conducting FirstNet planning for the District of Columbia and the State of Delaware.
4. I have prepared extensive technical analyses for submission to the U.S. Federal Communications Commission and U.S. policymakers on broadband expansion to underserved schools, libraries, and other anchor facilities; on due diligence for the IP

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transition of the U.S. telecommunications infrastructure; and on the relative strengths and weaknesses of various wired and wireless technologies.

5. Under my direction, CTC engineers and analysts work to develop and implement best practices in public-private collaboration to stimulate and accelerate broadband deployment, both wired and wireless. I am co-author of a 2014 guidebook on that topic titled “Gigabit Communities: Technical Strategies for Facilitating Public or Private Broadband Construction in Your Community.” Among other areas, my company specializes in projects that involve outreach to wireless and wireline service providers to understand their goals and requirements; we then use those insights to help our state and local government clients to develop strategy that will support private investment while fulfilling public broadband policy goals. Our wireless siting support for state and local governments is focused on encouraging private deployment while protecting public safety, public property, and the needs of local communities.
6. Under my direction, the technical team at CTC has advised hundreds of public and non-profit clients, primarily in the United States. My technical staff has been engaged on projects encompassing the evaluation or planning of hundreds of miles of fiber optics and thousands of wireless nodes in rural, suburban, and urban areas across the country. CTC’s wireless engineers and analysts have processed almost 7,000 antenna and tower siting applications for our clients nationwide, including applications for about 6,500 macro sites and about 400 “small cells” and Distributed Antenna System (DAS) network nodes. In these engagements, we seek an approach that protects the interests of local governments and residents, while encouraging wireless facility deployment where reasonable and needed.

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7. The Smart Communities Siting Coalition filed my analysis, “Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies,” in the FCC’s Mobilitee docket (WT docket 16-421). CTC engineers have also delivered expert witness testimony on small cell siting issues on behalf of numerous cities in New York State and California.
8. I am a licensed Professional Engineer in the Commonwealth of Virginia and the states of Delaware, Maryland, and Illinois. I received a Ph.D. in Astronomy in 1996 from the University of Wisconsin–Madison and an undergraduate degree in Physics from Swarthmore College in 1991. My full CV is included in Attachment A.

A. The Third Report and Order’s separate volume limits for antennas and equipment is a reasonable approach

9. In the next few paragraphs, I attempt to define and distinguish the “small cell” installations that we ordinarily see (using that term loosely to include technologies like DAS and C-RAN), and that permit provision of service on multiple bands, by multiple providers, from larger installations which are not typical but would be considered “small wireless facilities” under the proposed definition. I do not mean to imply that the smaller installations should be permitted everywhere, or should not be subject to aesthetic review, but rather I am attempting to define what would be a reasonable distinction between facilities that are typically deployed presumably because they are sufficient to accommodate carrier requirements, and those that by their nature are atypical and more difficult to justify. To the extent that the Commission wishes to treat different-sized facilities differently, this provides a better basis than the proposed definition.
10. The elements of a small cell on which I focus are those at a fixed site – the node -the antenna(s), radio head, radios, fiber termination, power meter, and, in some cases, backup

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power supplies or equipment for fiber or wireless backhaul. Small cells typically are placed on an existing (or, when required, an upgraded) utility pole or street lighting structure in the public right-of-way.

11. The antennas on utility poles are placed below the power space (near telephone/CATV lines) or above the power lines. Antennas typically are cylindrical, range from 2 feet to 5 feet in height, and have an omni-directional radiation pattern. The antennas are often enclosed by shrouds to minimize visual impact, and typically can be sized so that the equipment is in a shroud whose diameter is about the same as the diameter of the pole at the point of attachment. The cabling and electronic equipment (e.g., radios, diplexers, commercial power supplies) are either attached vertically along the pole or placed in a nearby standalone cabinet or vault. In a limited number of deployments, the equipment and cabling is integrated inside the support structure, within the base of the pole, or in a separate, adjacent, surface-mounted cabinet.

B. The Third Report and Order’s overall definition of “small wireless facilities” allows unnecessarily large equipment, both in terms of the net volume of antennas and the volume of equipment allowed, as well as in terms the number of facilities required to provide personal wireless services

12. The Report and Order proposes limiting the size of a small cell antenna to 3 cubic feet. The 3 cubic-foot limit on antenna size is reasonable. However, the Report and Order does not limit the number of antennas allowed at a given site in aggregate—opening the door for excessively large installations. In my experience, where more than one antenna is installed, limiting the net volume of 5 cubic feet would be reasonable. This limit would allow carriers to mount antennas for three sectors and backhaul, while still having a spare antenna available.

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13. Twenty-eight cubic feet of equipment is not necessary for a small cell. The majority of small cell applications we have reviewed on behalf of our public-sector clients are for sitings with equipment that is significantly smaller than 28 cubic feet in volume, even in environments where small cells and DAS nodes are placed to support multiple carriers.
14. For example, the single-carrier small cell pictured in Figure 1 has a pole-top-mounted antenna that is 2' tall with a diameter of 14.6 inches, meaning it has a total volume of about 2.3 cubic feet. The two remote radios are each 16.5" x 13.4" x 13.7", for a total equipment volume of only about 3.4 cubic feet—or slightly over 10 percent of the proposed volume limit.

Figure 1: Example Single-Carrier Small Cell on Utility Pole – 2.3 Cubic Foot Antenna and 3.4 Cubic Feet of Equipment



15. Even in the largest small cell sitings I have observed—DAS installations to support multiple wireless carriers—total equipment volume is still smaller than 28 cubic feet. Figure 2 is a

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photo of an example of one of the largest small cell sitings CTC has reviewed—a Crown Castle DAS node constructed in Montgomery County, Maryland. The small cell antenna is 48" high and 8.16 inches in diameter (for a total volume of about 4.9 cubic feet, to support multiple carriers), and has a 48" x 21.5" x 14" cabinet (radio head) and 10" x 7" x 5" radio, for a total equipment volume of about 9.8 cubic feet—about one-third the proposed allowable volume of equipment for a small cell.

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Figure 2: Photo of Small Cell Siting with 9.8 Cubic Feet of Equipment



16. In my experience, while there may be a potential business justification for some industry participants to seek to place larger devices—for example, to serve a large number of carriers -- the industry has generally been able to address its needs with small cell equipment of up to 12 cubic feet and, in most cases, significantly less. Anything larger than 12 cubic feet is

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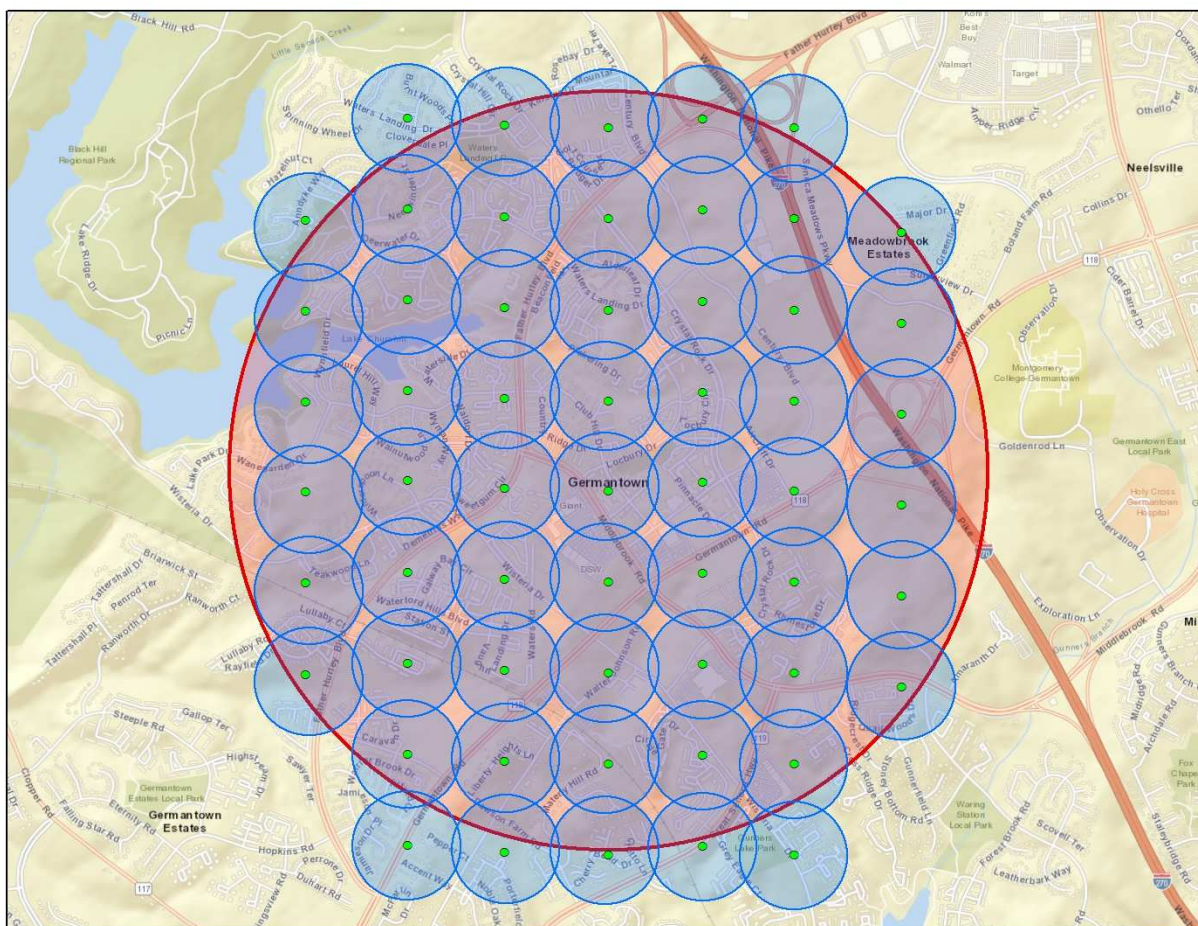
beyond a standard installation and should not be treated as a small wireless facility that warrants an abridged review process.

17. The number of facilities required to provide voice services is much less than the number required to provide non-common carrier data services. In my experience, small cell equipment is being placed primarily to accommodate the growing demand for capacity from users of data-intensive applications on smartphones and other cellular devices. I base this statement on the fact that small cells have been placed only over the past 10 years and mostly over the past one or two years, and that almost all of these have been placed in areas where adequate cellular service already exists (e.g., there are plenty of “bars”).¹²³
18. In other words, the small cells generally are not being placed to provide coverage where none exists (or where it is not reliable – for example where capacity limits result in dropped calls, failures to connect or inadequate throughput to support personal wireless services), but as part of a densification process where the applicant is adding additional capacity, mostly or entirely for high-bandwidth data services, including video and Internet access services. When a small cell is placed, the capacity formerly shared by hundreds or thousands of users over a few-square-mile area only needs to be shared by a few dozen users within a much smaller small-cell area. Figure 3 superposes small cell service areas on a macro cell area, in this case showing a 45-fold increase in capacity.

¹²³ The exceptions include service for indoor locations, locations in tight terrain where service is necessary but unavailable from macro cell sites (such as in the canyons surrounding US-6 in Clear Creek County, Colorado) or places where aesthetics or the environment preclude placement of a macro cell (such as along rural parts of the Pacific Coastal Highway), and places where small cells may be needed to off-load traffic from macro cell sites that are capacity-constrained.

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Figure 3: Comparison of Typical Macro Cell and Small Cell Service Areas



19. In a sector served with approximately 100 MHz of spectrum (typical of what is used by a wireless provider in a metropolitan area where small cells are deployed), the available aggregate downlink capacity may be in the range of approximately 1 Gbps. Apportioning this level of capacity among a few dozen users within the range of the small cell provides a mean capacity in excess of 10 Mbps and a burst speed well above that level, in line with what is expected in a well-performing 4G network.
20. However, it is significant to note that an average voice call uses less than 10 kbps, so even if all of the few dozen users within range of the small cell were simultaneously on voice calls, only about 1 Mbps or 0.1 percent of the total capacity of the service area would be required.

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Therefore, voice service is incidental to small cell deployment. While we recognize that there may be other personal wireless services in addition to voice, those are also not the drivers for deployment. If wireless networks only carried voice services, or services that the Commission has classified as personal wireless services, the sort of densification envisioned by the proposed Order would not be necessary.

C. The shortened shot clocks for small cells in public rights-of-way are unreasonable, do not improve efficiency, and compromise governments' ability to protect the safety of the public and other considerations

21. The shortened shot clocks could have significant adverse consequences with regard to adequate application review. Even the most well-staffed government office could find itself inundated with applications at times. In my experience, applications are not filed by applicants with staged or consistent timing; rather, we frequently see many applications filed all at once with either unpredictable timing or immediately before a planned government hearing. Given those patterns, even well-staffed government offices can struggle to process and adequately review large numbers of applications in short periods of time. The shortened shot clocks could thus deny a diligent state or local government its ability to adequately review small cell applications for such critical matters as the safety of the public, structural integrity, traffic safety, and impact on pedestrians with disabilities.
22. The FCC's proposed shortened shot clocks creates new kinds of inefficiencies because in many cases the time allotted is insufficient for evaluating placement on traffic signals and street lights. Given the critical mission of traffic signals and street lights, and given that other entities may use those mounting assets for monitoring and communications purposes, application review can involve significant engineering and safety issues. The FCC's proposed rule thus creates an environment in which a responsible state or local government,

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faced with insufficient time to conduct adequate review, may need to assume on the side of caution and reasonably require an applicant to replace a structure that is not clearly safe to use. That cost of replacement could be avoided given sufficient time to conduct adequate engineering review.

23. The proposed shortened shot clocks add further challenges and burdens because state and local reviewers of applications frequently receive from applicants (or their contractors) incomplete or error-riddled applications, requiring opportunity to ask applicants for correct or responsive data and to complete applications. In 20 years of experience reviewing applications for wireless facilities placement in a dozen states, my team has found that a substantial percentage of applications filed by carriers and their contractors have substantial omissions or errors. These incomplete or erroneous data are consequential and can compromise governments' ability to verify that the planned installation is appropriately designed, structurally sound, and not compromising of the safety of the public. In our experience, the delays that result from these erroneous or incomplete applications are generally blamed on the government recipient, when, in fact, the delay is caused by filing of unacceptable applications. The shot clocks should be structured to incent carriers and their contractors to file complete, accurate applications and for government offices to have adequate opportunity to require carriers and their contractors to amend and complete non-compliant applications.

24. Viewed simplistically, combining "similar" small cell applications (i.e., applications proposing the installation of the same type of antenna, or installation on the same type of support structure) into a single "batched" application would appear to create processing efficiencies for state and local governments. Given that each application has identical fields,

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the FCC logic goes, a reviewer would only need to review a given field once for a batch of sites, rather than repeating the same review for multiple applications.

25. That is not correct. A batch application does not create efficiencies and can serve to significantly complicate reasonable review. The simplistic logic ignores the reality that each siting requires individual review to ensure that the safety of the public and the integrity of the mounting asset is maintained. While a batch of applications may seem to the FCC to be largely similar, in fact each application represents an individualized request to install equipment on a specific mounting asset, in a specific and individualized location with unique locational and structural characteristics. For example, a batch of a dozen applications to install small cell antennas on light poles or traffic poles can require a dozen site visits as part of the review process, because each of those traffic and light poles has a unique set of characteristics (including its location relative to nearby buildings, its structural condition, its power source, local traffic patterns, proximity to institutions that serve people with disabilities who will be pedestrians in the area, and so on).

26. Based on our experience, the shortened shot clocks are far too short, and the costs the FCC has estimated for review are unreasonably low, by several factors.

DATED: Kensington, Maryland
September 17, 2018



Andrew Afflerbach, Ph.D., P.E.

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Attachment A: CV

Andrew Afflerbach, Ph.D., P.E.

CEO and Chief Technology Officer | CTC Technology & Energy

Dr. Andrew Afflerbach specializes in planning, designing, and estimating the capital and operating costs of broadband communications networks. His expertise includes state-of-the-art fiber and wireless technologies, as well as the unique requirements of public safety networks.

Andrew has designed robust and resilient networks for dozens of clients, including state and local governments and public safety users. He has delivered strategic technical guidance on wired and wireless communications issues to hundreds of clients nationwide over more than 20 years. He also served as a senior adviser to Crown Fibre Holdings, the public entity directing New Zealand's national fiber-to-the-home project.

In addition to designing networks, Andrew testifies as an expert witness on wireless communications issues. And he contributes to the national discussion on critical communications policy issues through the preparation of technical analyses for submission to the Federal Communications Commission (FCC) and policymakers. He has prepared white papers on:

- Estimating the cost to expand fiber to underserved schools and libraries nationwide
- Conducting due diligence for the IP transition of the country's telecommunications infrastructure
- Developing technical frameworks for wireless network neutrality
- Streamlining deployment of small cell infrastructure by improving wireless facilities siting policies
- Limiting interference from LTE-U networks in unlicensed spectrum.

As CTC's Chief Technology Officer, Andrew oversees all technical analysis and engineering work performed by the firm. He is a licensed Professional Engineer in multiple states.

Fiber Network Planning and Engineering

Andrew has architected and designed middle- and last-mile fiber broadband networks for the District of Columbia (Washington, D.C.); the city of San Francisco; the Delaware Department of Transportation; the Maryland Transportation Authority; and many large counties.

He oversaw the development of system-level broadband designs and construction cost estimates for the cities of Atlanta, Boston, Boulder, Palo Alto, Madison, and Seattle; the states of Connecticut and Kentucky; and many municipal electric providers and rural communities. He is overseeing the detailed design of the city-built fiber-to-the-premises (FTTP) networks in Westminster, Maryland; Alford, Massachusetts; and Holly Springs and Wake Forest, North Carolina.

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In Boston, Andrew led the CTC team that developed a detailed RFP, evaluated responses, and participated in negotiations to acquire an Indefeasible Right of Use (IRU) agreement with a fiber vendor to connect schools, libraries, public housing, and public safety throughout the City. This approach was designed to allow the City to oversee and control access and content among these facilities.

Wireless Network Planning and Engineering

Applying the current state of the art—and considering the attributes of anticipated future technological advancements such as “5G”—Andrew has developed candidate wireless network designs to meet the requirements of clients including the cities of Atlanta, San Francisco, and Seattle. In a major American city, Andrew led the team that evaluated wireless broadband solutions, including a wireless spectrum roadmap, to complement potential wired solutions.

In rural, mountainous Garrett County, Maryland, Andrew designed and oversaw the deployment of an innovative wireless broadband network that used TV white space spectrum to reach previously unserved residents. To enhance public internet connectivity, Andrew provides technical oversight on CTC’s Wi-Fi-related projects, including the design and deployment of Wi-Fi networks in several parks in Montgomery County, Maryland.

Andrew also advises local and state government agencies on issues related to wireless attachments in the public rights-of-way; he leads the CTC team that supports the Texas Department of Transportation (TxDOT) and many large counties on wireless attachment policies and procedures.

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Public Safety Networking

Andrew leads the CTC team providing strategic and tactical guidance on FirstNet (including agency adoption and other critical decision-making) for the State of Delaware and Onondaga County, New York. In the District of Columbia, he and his team evaluated the financial, technical, and operational impact of building the District's own public safety broadband network, including the design of an LTE system that provided public-safety-level coverage and capacity citywide. This due diligence allowed the District to make an informed decision regarding opting in or out of the National Public Safety Broadband Network.

Andrew currently is working with the State of Delaware to evaluate LTE coverage gaps throughout the state to assist agencies in their choice of public safety broadband networks. On the state's behalf, he and his team are also conducting outreach to AT&T and other carriers to evaluate their public safety offerings. He is performing similar work as part of CTC's engagement with El Paso County, Colorado.

Earlier, Andrew led the CTC team that identified communications gaps and evaluated potential technical solutions for the Baltimore Urban Area Security Initiative (UASI), a regional emergency preparedness planning effort funded by the U.S. Department of Homeland Security (DHS).

He previously served as lead engineer and technical architect for planning and development of NCRnet, a regional fiber optic and microwave network that links public safety and emergency support users throughout the 19 jurisdictions of the National Capital Region (Washington, D.C. and surrounding jurisdictions), under a DHS grant. He wrote the initial feasibility studies that led to this project for regional network interconnection.

Smart Grid

Andrew and the CTC team provided expert testimony and advisory services to the Public Service Commission of Maryland regarding Advanced Metering Infrastructure (AMI). CTC provided objective guidance to the staff as it evaluated AMI applications submitted by three of the state's investor-owned utilities (IOUs). This contract represented the first time the PSC staff had asked a consultant to advise them on technology—a reflection of the lack of standards in the Smart Grid arena.

Broadband Communications Policy Advisory Services

Andrew advises public sector clients and a range of policy think tanks, U.S. federal agencies, and non-profits regarding the engineering issues underlying key communications issues. For example, he:

- Provided expert testimony to the FCC in the matter of the preparation of the **national broadband plan** as a representative of the National Association of Counties (NACo) and the National Association of Telecommunications Officers & Advisors (NATOA).
- Served as expert advisor regarding broadband deployment to the U.S. Conference of Mayors, NACo, National League of Cities, Public Knowledge, New America Foundation Open Technology Institute, and NATOA in those organizations' filings before the FCC in

EXHIBIT A

the matter of determination of the deployment of a **national, interoperable wireless network in the 700 MHz spectrum**.

- In connection with the FCC's ongoing **Open Internet proceeding**, advised the New America Foundation regarding the technical pathways by which "any device" and "any application" regimes could be achieved in the wireless broadband arena as they have been in the wireline area.
- Provided expert technical advice on the **700 MHz broadband and AWS-3 proceedings** at the FCC for the Public Interest Spectrum Coalition (including Free Press, the New America Foundation, Consumers Union, and the Media Access Project).
- Served as technical advisor to the **U.S. Naval Exchange** in its evaluation of vendors' broadband communications services on U.S. Navy bases worldwide.
- Advised the **U.S. Internal Revenue Service** regarding the history of broadband and cable deployment and related technical issues in that agency's evaluation of appropriate regulations for those industries.
- Advised the Stanford Law School Center for Internet and Society on the technical issues for their briefs in the **Brand X Supreme Court appeal** regarding cable broadband.

Broadband Communications Instruction

Andrew has served as an instructor for the U.S. Federal Highway Association/National Highway Institute, the George Washington University Continuing Education Program, the University of Maryland Instructional TV Program, ITS America, Law Seminars International, and the COMNET Exposition. He developed curricula for the United States Department of Transportation.

He taught and helped develop an online graduate-level course for the University of Maryland. He developed and taught communications courses and curricula for ITS America, COMNET, and the University of Maryland. His analysis of cable open access is used in the curriculum of the International Training Program on Utility Regulation and Strategy at the University of Florida.

Andrew has also prepared client tutorials and presented papers on emerging telecommunications technologies to the National Fire Protection Association (NFPA), NATOA, the National League of Cities (NLC), the International City/County Management Association (ICMA), and the American Association of Community Colleges (AACC). He taught college-level astrophysics at the University of Wisconsin.

EMPLOYMENT HISTORY

1995–Present	CEO/Chief Technology Officer, CTC Previous positions: Director of Engineering, Principal Engineer, Senior Scientist
1990–1996	Astronomer/Instructor/Researcher University of Wisconsin–Madison, NASA, and Swarthmore College

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EDUCATION

Ph.D., Astronomy, University of Wisconsin–Madison, 1996

Master of Science, Astronomy, University of Wisconsin–Madison, 1993

Bachelor of Arts, Physics, Swarthmore College, 1991

PROFESSIONAL CERTIFICATIONS/LICENSES

Professional Engineer, Commonwealth of Virginia and states of Delaware, Maryland, and Illinois

HONORS/ORGANIZATIONS

- Association of Public-Safety Communications Officials (APCO)
- Board of Visitors, University of Wisconsin Department of Astronomy
- National Association of Telecommunications Officers and Advisors (NATOA) Technology and Public Safety Committees
- Armed Forces Communications and Electronics Association (AFCEA)
- Society of Cable and Telecommunications Engineers (SCTE)
- Institute of Electrical and Electronic Engineers (IEEE)
- Charleston Defense Contractors Association (CDCA)
- NASA Graduate Fellow, 1993–1996. Research fellowship in astrophysics
- Elected Member, Sigma Xi Scientific Research Honor Society
- Eugene M. Lang Scholar, 1987–1991, Swarthmore College

SELECTED PUBLICATIONS, PRESENTATIONS, and COURSES

- “A Model for Understanding the Cost to Connect Anchor Institutions with Fiber Optics” (co-author), prepared for the Schools, Health & Libraries Broadband Coalition, Feb. 2018
- “How Localities Can Prepare for—and Capitalize on—the Coming Wave of Public Safety Network Construction,” Feb. 2018
- “Network Resiliency and Security Playbook” (co-author), prepared for the National Institute of Hometown Security, Nov. 2017
- “Mobile Broadband Service Is Not an Adequate Substitute for Wirelines” (co-author; addressing the limitations of 5G), prepared for the Communications Workers of America, Oct. 2017
- “Technical Guide to Dig Once Policies,” April 2017
- “Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies,” prepared for the Smart Communities Siting Coalition, filed with the FCC, March 2017
- “How Localities Can Improve Wireless Service for the Public While Addressing Citizen Concerns,” Nov. 2016
- “LTE-U Interference in Unlicensed Spectrum: The Impact on Local Communities and Recommended Solutions,” prepared for WifiForward, Feb. 2016
- “Mobile Broadband Networks Can Manage Congestion While Abiding by Open Internet Principles,” prepared for the New America Foundation’s Open Technology Institute – Wireless Future Project, filed with the FCC, Nov. 2014

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- “The State of the Art and Evolution of Cable Television and Broadband Technology,” prepared for Public Knowledge, filed with the FCC, Nov. 2014
- “A Model for Understanding the Cost to Connect Schools and Libraries with Fiber Optics,” prepared for the Schools, Health & Libraries Broadband Coalition, filed with the FCC, Oct. 2014
- “The Art of the Possible: An Overview of Public Broadband Options,” prepared jointly with the New America Foundation’s Open Technology Institute, May 2014
- “Understanding Broadband Performance Factors,” with Tom Asp, *Broadband Communities* magazine, March/April 2014
- “Engineering Analysis of Technical Issues Raised in the FCC’s Proceeding on Wireless Facilities Siting,” filed with the FCC (<http://apps.fcc.gov/ecfs/document/view?id=7521070994>), Feb. 2014
- “A Brief Assessment of Engineering Issues Related to Trial Testing for IP Transition,” prepared for Public Knowledge and sent to the FCC as part of its proceedings on Advancing Technology Transitions While Protecting Network Values, Jan. 2014
- “Gigabit Communities: Technical Strategies for Facilitating Public or Private Broadband Construction in Your Community,” prepared as a guide for local government leaders and planners (sponsored by Google), Jan. 2014
- “Critical Partners in Data Driven Science: Homeland Security and Public Safety,” submitted to the *Workshop on Advanced Regional & State Networks (ARNs): Envisioning the Future as Critical Partners in Data-Driven Science*, Internet2 workshop chaired by Mark Johnson, CTO of MCNC, Washington, D.C., April 2013
- “Connected Communities: How a City Can Plan and Implement Public Safety & Public Wireless,” submitted to the International Wireless Communications Exposition, Las Vegas, March 2013
- “Cost Estimate for Building Fiber Optics to Key Anchor Institutions,” prepared for submittal to the FCC by NATOA and SHLB, Sept. 2009
- “Efficiencies Available Through Simultaneous Construction and Co-location of Communications Conduit and Fiber,” prepared for submittal to the FCC by the National Association of Telecommunications Officers and Advisors and the City and County of San Francisco, 2009, referenced in the National Broadband Plan
- “How the National Capital Region Built a 21st Century Regional Communications Network” and “Why City and County Communications are at Risk,” invited presentation at the FCC’s National Broadband Plan workshop, Aug. 25, 2009

EXHIBIT I



Telecommunications Transmission Facility
Committee
Tower Coordinator Recommendation

Application Number: 2019040781 **Type:** Colocation **Received (date):** 6/29/2019

Revised: 8/2/2019

Applicant: Verizon Wireless

Site Name/Location: Federal Plaza/ 12260 Rockville Pike, Rockville

Zoning Standard: CR-2.25 **Property Owner:** Federal Realty Investment Trust

Description: Attach one antenna and one remote radio head (RRH) at 38'5" on an existing 35' building.

Tower Coordinator Recommendation: Recommended. Recommendation is subject to compliance with all applicable laws.

Signature: 

Date: 8/13/2019

Impact on land-owning agency: N/A

Existing or future public safety telecommunications facilities and plans: N/A

Colocation options: No other carriers are currently located on this building.

Implications to surrounding area: The MCAtlas zoning map (below left) shows the property and the location of the building (circled) along with the general vicinity. The photo (below right) from a July 8, 2019, site visit shows the building with an arrow indicating the approximate attachment height of the proposed antenna.



Attachments: Application

Comments: The proposed antenna will be mounted on a non-penetrating 6'x6' antenna sled mount. A transparent antenna enclosure will be used to house the proposed antenna and RRH. All proposed equipment will be painted to match the color of the building, and all associated equipment will be flush mounted to the existing rooftop wall.

All proposed antennas meet the length and volume requirements set forth in the Montgomery County Ordinance, with the maximum length of the proposed antenna being 12" for a total volume of 0.77 ft³.

This site cannot be categorically excluded due to the use of mmWave bands. A Radio Frequency-Electromagnetic Energy Report (RF-EME) was requested due to the proposed antenna using mmWave 28 GHz frequency bands. CTC verified that the submitted RF-EME

report concluded that this site was in compliance with FCC standards for limiting human exposure to radio frequency electromagnetic fields.

We recommend this application.

App No: 2019040781

Revised 8.2.19 - JR

Applicant Name	Network Building + Consulting	Antenna Compliance	Yes
Application Type	Colocated	Updated	6/26/2019
Carrier	Verizon Wireless	Ann. Plan?	Yes
Solution Type	Small Cell	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Existing	Existing	Gvt. Use Desc.	n/a
Application Description	This project consists of the installation of Verizon Wireless Antennas mounted on building roof within stealth enclosure. The associated equipment mounted on buildings roof. 1 proposed Verizon Wireless antenna inside an RF transparent stealth.		
		Cat. Excluded?	
		Routine Env. Evaluation	Checked

Site Id		Zoning	CR-2.25
Structure Type	Building	Latitude	39.057204
Address	12260 Rockville Pike, Rockville	Longitude	-77.122534
County Site Name	Federal Plaza	Ground Elevation	393
Carrier Site Name	Rockville 11	City	Rockville
Site Owner	Federal Realty Invest Trust	Lease Status	Leased
Structure Owner	Federal Realty Invest Trust	Does the structure require an antenna structure registration under FCC Title 47	No
Existing Structure Height	35	Distance to Residential Property (New, Replacement, Colocation Only)	
Provide the proposed height of the replacement structure without any antenna (New, Replacement Apps Only)		Distance to Commercial Property (New, Replacement, Colocation Only)	

Justification of why this site was selected:

The proposed site was selected by Verizon Wireless to provide and improve wireless coverage and capacity along Federal Plaza.

NearbySites (New, Replacement Apps Only):

Screening considerations(New, Colocations, Replacement Apps Only):

We are proposing RF transparent(RF friendly stealth) antenna enclosure.

Tuesday, July 2, 2019

12:17:48 PM

App No:

2019040781

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only)

Yes No

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

N/A

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

No

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

N/A

More than four Equipment Cabinets? YN

No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

No

Does the structure or current installation have concealment elements/measures?

No

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

No

If yes, describe how the proposed installation does not defeat the existing concealment.

Small Wireless Facility Questions

Small Wireless Facility?

Yes No

Is the structure 10% taller than adjacent structures?

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet

0.77

Please list adjacent structure heights

Cumulative volume of the proposed antenna antenna(s) exclusive of equipment

0

Tribal Lands?

No

ROW Question

PROW?

No

ROW owner

Provide the Right of Way width

Pole Number

Tuesday, July 2, 2019

12:17:50 PM

App No: 2019040781

Antenna Model ~~VZ-AEUB-AEWB~~ AEUB

Frequency ~~28000~~ 27500-27925, 27925-28350

RAD Center 38.5 Max ERP 500 Antenna Dimensions 12X4.7X23.6 Quantity 1

EXHIBIT J

App No: 2019070898

Revised 8.8.19 - JR

Applicant Name	Network Building + Consulting	Antenna Compliance	Yes
Application Type	Minor Modification	Updated	7/10/2019
Carrier	T-Mobile	Ann. Plan?	Yes
Solution Type	Macro	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Existing	Existing	Gvt. Use Desc.	
Application Description			
T-Mobile proposes to remove (3) existing antennas, and install (3) new antenna, (3) RRU's and (2) equipment/battery cabinets.			

Site Id	47	Zoning	R-H
Structure Type	Building	Latitude	39.01745
Address	5225 Pooks Hill Rd, Bethesda	Longitude	-77.10685
County Site Name	Promenade	Ground Elevation	295
Carrier Site Name	7WAN125E	City	Bethesda
Site Owner	Promenade Towers MH Corp	Lease Status	Leased
Structure Owner	Promenade Towers MH Corp	Does the structure require an antenna structure registration under FCC Title 47	No
Existing Structure Height	171	Distance to Residential Property (New, Replacement, Colocation Only)	
Provide the proposed height of the replacement structure without any antenna (New, Replacement Apps Only)		Distance to Commercial Property (New, Replacement, Colocation Only)	

Justification of why this site was selected:

Site is an existing telecommunications facility on which the applicant carrier is currently installed.

NearbySites (New, Replacement Apps Only):

Screening considerations(New, Colocations, Replacement Apps Only):

Thursday, July 11, 2019

2:09:36 PM

App No:

2019070898

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only)

Yes

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

No

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

No

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

No

More than four Equipment Cabinets? YN

No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

No

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

No

Does the structure or current installation have concealment elements/measures?

No

If yes, describe how the proposed installation does not defeat the existing concealment.

Small Wireless Facility Questions

Small Wireless Facility?

No

Is the structure 10% taller than adjacent structures?

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet

8.7

Please list adjacent structure heights

Cumulative volume of the proposed antenna antenna(s) exclusive of equipment

Tribal Lands?

No

ROW Question

PROW?

No

ROW owner

Provide the Right of Way width

Pole Number

Thursday, July 11, 2019

2:09:36 PM

App No: 2019070898

Antenna Model Ericsson AIR 6488

Frequency DL/Tx: 2496-2690 MHz UL/Rx: 2496-2690 MHz

RAD Center 177 Max ERP 1000 Antenna Dimensions 35.2" x 20.5" x 9.4" Quantity 3

EXHIBIT K

App No: 2019070894

Applicant Name Site Link Wireless

Antenna Compliance Yes

Application Type Minor Modification Updated 7/9/2019

Compliance Desc

Carrier Verizon Wireless Will site be used to support government telecommunications facilities or other equipment for government use? No

Antenna Location Yes

Solution Type Macro

Antenna Loc. Desc.

Existing Existing

Env. Assessment

Gvt. Use Desc.

Cat. Excluded? checked

Application Description

Routine Env. Evaluation

This is an existing rooftop site with a height of 173'-6" and a penthouse height of 190'-11". Verizon proposes to modify their existing installation of (15) panel antennas at the 196' RAD center by removing (12) antennas and installing (9) new antennas, (3) at each sector. The proposed new antennas will be (3) Nokia AEUB Airscale antennas (23.62"x11.97"x4.72"), (1) at each sector, and (6) JMA MX06FR0860-02 antennas (95.9"x15.4"x10.7"), (2) at each sector. (1) JMA X7CAP-665-VRO antenna (72.0"x12.5"x7.1") will remain at each sector for a total of (12) antennas, (4) at each sector.

Site Id 191 Zoning R-10

Structure Type Building Latitude 39.0261111

Address 10301 Grosvenor Pl, Rockville Longitude -77.106778

County Site Name Grosvenor Station Ground Elevation 252

Carrier Site Name Grosvenor City Rockville

Site Owner Grosvenor Tower LP Lease Status Leased

Structure Owner ARCHSTONE GROSVENOR TOWER LP Does the structure require an antenna structure registration under FCC Title 47 No

Existing Structure Height 191

Provide the proposed height of the replacement structure without any antenna (New, Replacement Apps Only)

Distance to Residential Property (New, Replacement, Colocation Only)

Distance to Commercial Property (New, Replacement, Colocation Only)

Justification of why this site was selected:

This site was selected to provide coverage and add capacity to Verizon's network. The new equipment will serve to enhance existing coverage and provide congestion relief for customers in the North Bethesda area. This site was chosen as it would provide th

NearbySites (New, Replacement Apps Only):

Screening considerations(New, Colocations, Replacement Apps Only):

App No:

2019070894

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only)

Yes

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

N/A

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

No

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

N/A

More than four Equipment Cabinets? YN

No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

No

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

No

Does the structure or current installation have concealment elements/measures?

No

If yes, describe how the proposed installation does not defeat the existing concealment.

Small Wireless Facility Questions

Small Wireless Facility?

No

Is the structure 10% taller than adjacent structures?

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet

57

Please list adjacent structure heights

Cumulative volume of the proposed antenna antenna(s) exclusive of equipment

Tribal Lands?

No

ROW Question

PROW?

No

ROW owner

Provide the Right of Way width

Pole Number

Thursday, July 11, 2019

2:09:36 PM

App No: 2019070894

Antenna Model JMA MX06FR0860-02

Frequency 835-845, 880-890, 846.5-849, 891.5-894, 1895-1905, 1975-1985, 1905-1910, 1985-1990, 746-757, 776-787, 173

RAD Center 196 Max ERP 315 Antenna Dimensions 95.9"x15.4"x10.7" Quantity 6

Antenna Model nokia AEUB airscales

Frequency 27500-27925, 27925-28350

RAD Center 196 Max ERP 518 Antenna Dimensions 23.62"x11.97"x4.72" Quantity 3

EXHIBIT L



**To: His Excellency Antonio Guterres, Secretary-General of the United Nations;
Honorable Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization;
Honorable Inger Andersen, Executive Director of the U.N. Environment Programme;
U.N. Member Nations**

International Appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure

We are scientists engaged in the study of biological and health effects of non-ionizing electromagnetic fields (EMF). Based upon peer-reviewed, published research, we have serious concerns regarding the ubiquitous and increasing exposure to EMF generated by electric and wireless devices. These include—but are not limited to—radiofrequency radiation (RFR) emitting devices, such as cellular and cordless phones and their base stations, Wi-Fi, broadcast antennas, smart meters, and baby monitors as well as electric devices and infra-structures used in the delivery of electricity that generate extremely-low frequency electromagnetic field (ELF EMF).

Scientific basis for our common concerns

Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life.

These findings justify our appeal to the United Nations (UN) and, all member States in the world, to encourage the World Health Organization (WHO) to exert strong leadership in fostering the development of more protective EMF guidelines, encouraging precautionary measures, and educating the public about health risks, particularly risk to children and fetal development. By not taking action, the WHO is failing to fulfill its role as the preeminent international public health agency.

Inadequate non-ionizing EMF international guidelines

The various agencies setting safety standards have failed to impose sufficient guidelines to protect the general public, particularly children who are more vulnerable to the effects of EMF. The International Commission on Non-Ionizing Radiation Protection (ICNIRP) established in 1998 the “Guidelines For Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz)”¹. These guidelines are accepted by the WHO and numerous countries around the world. The WHO is calling for all nations to adopt the ICNIRP guidelines to encourage international harmonization of standards. In 2009, the ICNIRP released a statement saying that it was reaffirming its 1998 guidelines, as in their opinion, the scientific literature published since that time “has provided no evidence of any adverse effects below the basic restrictions and does not necessitate an immediate revision of its guidance on limiting exposure to high frequency electromagnetic fields”². ICNIRP continues to the present day to make these assertions, in spite of growing scientific evidence to the contrary. It is our opinion that, because the ICNIRP guidelines do not cover long-term exposure and low-intensity effects, they are insufficient to protect public health.

The WHO adopted the International Agency for Research on Cancer (IARC) classification of extremely low frequency magnetic fields (ELF MF) in 2002³ and radiofrequency radiation (RFR) in 2011⁴. This classification states that EMF is a *possible human carcinogen (Group 2B)*. Despite both IARC findings, the WHO continues to maintain that there is insufficient evidence to justify lowering these quantitative exposure limits.

Since there is controversy about a rationale for setting standards to avoid adverse health effects, we recommend that the United Nations Environmental Programme (UNEP) convene and fund an independent multidisciplinary committee to explore the pros and cons of alternatives to current practices that could substantially lower human exposures to RF and ELF fields. The deliberations of this group should be conducted in a transparent and impartial way. Although it is essential that industry be involved and cooperate in this process, industry should not be allowed to bias its processes or conclusions. This group should provide their analysis to the UN and the WHO to guide precautionary action.

Collectively we also request that:

1. children and pregnant women be protected;
2. guidelines and regulatory standards be strengthened;
3. manufacturers be encouraged to develop safer technology;
4. utilities responsible for the generation, transmission, distribution, and monitoring of electricity maintain adequate power quality and ensure proper electrical wiring to minimize harmful ground current;

¹ <http://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf>

² <http://www.icnirp.org/cms/upload/publications/ICNIRPStatementEMF.pdf>

³ <https://monographs.iarc.fr/wp-content/uploads/2018/06/mono80.pdf>

⁴ <https://monographs.iarc.fr/wp-content/uploads/2018/06/mono102.pdf>

5. the public be fully informed about the potential health risks from electromagnetic energy and taught harm reduction strategies;
6. medical professionals be educated about the biological effects of electromagnetic energy and be provided training on treatment of patients with electromagnetic sensitivity;
7. governments fund training and research on electromagnetic fields and health that is independent of industry and mandate industry cooperation with researchers;
8. media disclose experts' financial relationships with industry when citing their opinions regarding health and safety aspects of EMF-emitting technologies; and
9. white-zones (radiation-free areas) be established.

Initial release date: May 11, 2015

Date of this version: September 21, 2019

Inquiries, including those from qualified scientists who request that their name be added to the Appeal, may be made by contacting Elizabeth Kelley, M.A., Director, EMFscientist.org, at info@EMFscientist.org.

Note: the signatories to this appeal have signed as individuals, giving their professional affiliations, but this does not necessarily mean that this represents the views of their employers or the professional organizations they are affiliated with.

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EXHIBIT M

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.**

STREAMLINING DEPLOYMENT)	
OF SMALL CELL INFRASTRUCTURE)	
BY IMPROVING WIRELESS FACILITIES	)	WT Docket No. 16-421
SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	
)	

**REPORT AND DECLARATION OF ANDREW AFFLERBACH
FOR THE SMART COMMUNITIES SITING COALITION**

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1. Summary

This document describes small cell and DAS wireless deployments, discusses local permitting and oversight process, and suggests strategies to maximize public-private collaboration to facilitate mobile wireless construction. As I explain below, “small cell” refers to the wireless antennas’ coverage areas, not the size of the antennas themselves; because of the large scale of some small cell deployments, the installed equipment may approach the scale of typical macrocells.

The observations in this report are based on my experience over two decades of observing and overseeing build-out of communications infrastructure across the United States and abroad.¹

Accommodating permitting and other local government requirements in public rights-of-way is typically a relatively small part of the cost and time required for design and construction of outside plant for a communications network. In my experience, the fees charged by local governments in connection with broadband represent a small portion of the cost of wireless network deployment, and the process entailed in local oversight of wireless facilities siting represents a very modest portion of the process and timeline of building or upgrading a wireless network, assuming that the wireless company participates in the process.

Local permitting processes and fees have little impact on the decision to deploy broadband in urban versus rural areas. In fact, the permitting process and local government coordination can help and facilitate deployment. When it is done effectively, it protects the integrity of existing infrastructure and public safety, and provides certainty and predictability to wireless carriers and wireless infrastructure companies.

In my experience, the optimal way to facilitate and smooth the wireless siting process is for wireless companies to work with localities by filing complete, accurate, timely siting applications—and by collaborating with the localities in an efficient, mutually-beneficial process of pre-planning, specification development, and reasonable staging of the deployment.

Localities are highly motivated to facilitate and incentivize broadband build-out, and are willing to use permitting and other processes to enable and smooth the deployment process as much as possible. Numerous localities are currently involved in creative efforts to understand private sector needs and to develop ways to work collaboratively. The next generation of wireless broadband deployment can best be achieved if wireless companies undertake a similarly collaborative, constructive engagement with localities.

¹ CTC provides technology engineering and business planning consulting services for public sector and non-profit clients nationwide and abroad. Since 1983, CTC has assisted hundreds of public and non-profit entities to analyze technology needs and strategies; plan and design wired and wireless broadband networks; and work with the private sector to meet local broadband and technology needs.

2. Small cell and DAS facilities in the PROW are neither small nor insignificant in impact

The term “small cell” is used loosely within the industry to refer to a wide variety of installations that are designed to serve a smaller area than traditional “macrocells.” A search of literature suggests that there is no agreed-upon definition that could easily distinguish “small cells” from “macrocells” other than that loose distinction. For purposes of this report, we will treat any radio unit designed to serve a relatively small area as a “small cell” or “small cell and DAS” regardless of its technical configuration. What is critical to this proceeding is that the classification of something as a “small cell” does not mean that the impacts and complexities associated with its installation and maintenance are small.

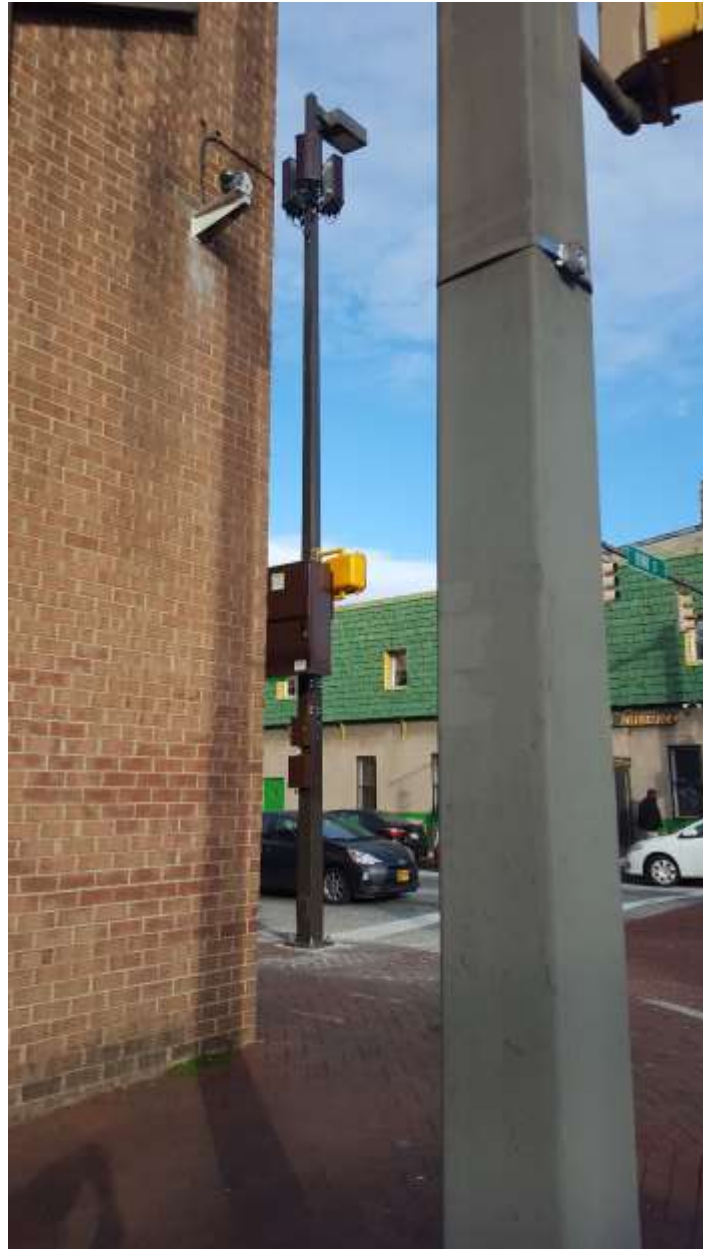
“Small” cell facilities can have significant profiles, including many components additive to the “small” cell antenna.

Over the past decade, service providers have begun to augment tall tower deployment with neighborhood wireless transmission facilities—such as DAS and small cells—that have smaller coverage footprints. In the new distributed wireless architecture, broadband users communicate with localized access points, typically mounted at elevations of 20 to 30 feet above ground level. These neighborhood access sites target service areas with a radius of 250 to 300 feet from the access site.

Small cell technologies vary in size and profile, depending on the functionality they are designed to provide.

A smaller antenna may be used to enhance mobile data capacity in an area that is already mostly served by a macrocell. At the small end is a system for a single band, using fiber optic connectivity to connect to the network. In this case the system might comprise a set of three panel antennas, each approximately 2 foot by 1 foot, attached 20 feet high on an existing light pole.

Figure 1 – Smaller Small Cell Pole with Fiber Optic Backhaul Connectivity



It would be accompanied by an electronics and power cabinet approximately 4 foot by 3 foot mounted between 8 and 12 feet off the ground, and by a power meter and load center five feet off the ground and by electric conduit up the entire length of the pole.

Because of the weight and wind loading of all the new attachments, existing light poles might not support them, and therefore placement of the small cell infrastructure often requires replacing the pole.

A larger system may be proposed in some cases. One reason may be that, instead of augmenting an existing macrocell network, a cluster of small cells or a multifrequency distributed antenna system (DAS) is being used in lieu of the macrocell, potentially because the terrain or aesthetics do not allow for a macrocell nearby. In this case, a provider will want a larger system that carries more spectrum bands. In a larger system that is being deployed instead of a macrocell, there may be a separate building, comparable to the hub building of a macro cell site (typically 25 feet by 50 feet), that manages and operates the cluster of DAS or small cell antennas. The system may require replacement of existing light or utility poles with taller ones, to enable the antennas to be mounted between 40 and 60 feet high. Antennas may be a combination of 2 foot by 1 foot panel antennas and 5 feet long whip antennas. Each pole may require multiple cabinets for the electronics, each approximately 3 foot by 2 feet. The cabinets may fill the entire area at the lower part of the pole. There is also significant cabling.

Figure 2 – Multifrequency DAS Structure with Multiple DAS Antennas



Figure 3– Multifrequency DAS Structure with Multiple DAS Antennas



Figure 4 – Base of DAS Installation With Multiple Cabinets for Radios, Backhaul, and Power



In addition to the physical components shown in these pictures, many “small cell” installations require a wireline connection to a central hub, and may also involve back-up power supplies, which may often be placed in ground cabinets of fairly significant size.

2.1 Some “small” cell facilities approach “macro” site facilities and electric transmission monopoles in size and weight

Because of the large scale of some “small” cell deployments, the deployments may approach the scale of typical macrocells.

In some small cell deployments, the technology does not use fiber or wired infrastructure to connect to the network. The network connectivity, known as “backhaul,” is done wirelessly. In order for backhaul to work effectively using a wireless approach, there needs to be a strong signal between the small cell devices and one or more master backhaul antennas. Some providers are accomplishing this by making the master backhaul antenna especially tall, potentially 70 to 120 feet, which exceeds the height of many macrocells. Mobilitie is one company that uses this architecture and has filed many applications for poles of great height.

The figures below provide examples of exceptionally tall “small” cell deployments in the rights-of-way, including one with the radios placed above high voltage transmission lines. The only visual difference from a macro cell monopole, which is frequently of this height and placement, is the relatively skinnier antenna profile at the top.

Figure 5 – Small Cell Comparable in Height to Macrocell



Figure 6—Small Cell at Height of High Voltage Transmission Lines



2.2 Alternative technologies have smaller form factors

The photographs above reflect the equipment required for particular deployments by particular providers of wireless services or facilities used in the provision of wireless services. The facilities are primarily designed to make more efficient use of commercial cellular wireless spectrum and are designed to provide those services to commercial wireless users. There are, however, design alternatives that could serve the same ends, without the large form factors shown on some of the photographs. That is, to some degree, many of the same functions could be performed using different and potentially less intrusive technologies.

There are also other wireless technologies under development and deployment that have a smaller form factor and lighter equipment. For example, wireless equipment using very high frequencies in the submillimeter spectrum, also known as mmWave, is envisioned as part of the emerging 5G architecture. mmWave equipment typically uses spectrum above 10 GHz and uses much larger channels than the commercial wireless providers. This provides potentially much higher speeds. Examples of mmWave equipment are shown in the figures below. The white devices are mmWave equipment, and these provide intermediate connectivity to the Wi-Fi equipment (black panel antennas). The devices are relatively small, some measuring 12 by 6 inches and weighing a few pounds.

While mmWave equipment is not a full replacement for commercial cellular technology,² it may provide an alternative solution for parts of the cellular architecture, such as the backhaul network connection, and indicates that future generations of wireless equipment might not be as large and heavy as the current generation of small cells. For example, if it operates as a backhaul technology that connects a network to cellular or Wi-Fi equipment on a pole, it can be a lighter-weight and smaller profile alternative to the types of backhaul technologies that require 90- to 120-foot poles.

² mmWave does not support mobile use in its current form. It requires line of sight or near line of sight connections, mmWave user equipment is not yet mass produced at low prices. However, it can be part of a comprehensive wireless solution that does support mobile use.

Figure 7 – mmWave Antennas Providing Backhaul for Wi-Fi Network



Photo courtesy of Siklu Communications

Figure 8 – mmWave Antennas Providing Backhaul for Wi-Fi Network



Photo courtesy of Siklu Communications

Cable operators are also deploying Wi-Fi equipment in the rights-of-way, leveraging their cable attachments on utility poles and devices installed on customer premises. Like the mmWave equipment, the Wi-Fi equipment is smaller and lighter than the cellular small cells. It is powered through the cable system and does not require additional cabinets on the poles. Wi-Fi and future generations of unlicensed technology may be deployed on utility poles and customer premises and may also provide an alternate technology solution for the densification challenge that are currently being addressed by the small cells.

The sorts of deployments proposed by companies like Mobilitie are thus not necessarily critical to ubiquitous broadband, and local efforts to minimize impacts can be entirely consistent with rapid and efficient wireline and wireless deployment.

Figure 9 – Wi-Fi Antenna on Cable TV Attachment



3 Local review protects public safety and critical infrastructure

The recent round of wireless applications, including for the types of tall poles described above in residential neighborhoods, historic districts, or in areas where citizens have spent significant resources on redevelopment, has drawn the attention of the public itself—with large turnouts in public meetings, organized movements, and media stories. As a result, the review processes become more time consuming, but not without good reason. In fact, the review of applications for placement of small cells in the rights-of-way may be far more complex than the review of an application for placement on private land, a rooftop, or the side of a building.

A typical community reviewing an application for use of the rights-of-way considers:

- Effect on public safety communications
- Effect on public safety, including potential impact on pedestrians and vehicles; the likelihood that the object will be hit; and the possibility it will contribute to an accident, for example by blocking a view
- Effect on other public infrastructure, including, for example, storm water systems

- Effect on residents, neighbors, business owners, and customers
- Effect on ADA compliance and on members of the community with disabilities
- Congestion on sidewalk or roadway
- Aesthetics, including the compatibility with the surroundings, blockage of view
- Setback, including the risk of damage or injury if the object falls

These reviews, and the ongoing use of the wireless infrastructure are complicated by the fact that rights-of-way are constantly changing. Aboveground facilities may be moved underground pursuant to a development plan or in response to hazards created by the placement of structures. Sidewalks and roadways may need to be widened, or hazard-free-paths created for pedestrians or cyclists. The addition of occupants to the rights-of-way necessarily complicates the process of coordinating right-of-way uses.

3.1 Local review protects against interference with public safety communications

Applications that are in proximity to public safety communications antennas or collocated on the public safety antenna sites require extra scrutiny for interference. Usually this due diligence is performed by the applicant as a condition of use of those structures, but it requires additional review by the public safety communications staff. The siting review process is a way of ensuring that applications that may pose risk to public safety communications come to the attention of the public safety communication staff, and that the applicant has demonstrated it will not interfere.

3.2 Local review protects public safety and utility worker safety

A well-organized siting review process can systematically evaluate the risks to public safety and utility worker safety. By requiring a complete application, the process requires the applicant to do its homework and conduct all engineering and design in advance, and perform all the necessary evaluation of compliance with local code, land use and transportation corridor rules.

In the review process, a community can identify the clearances between the structure and the road and buildings. It can verify the RF emission and its compliance with FCC rules regarding emissions and signage. It can verify the placement of power meters and power shutoff. It can verify that structural engineering has been performed. It can verify that soil studies and drainage studies have been properly performed, both of which are critically important for structures on the scale of the new poles, especially the tallest, which are nearly four feet in diameter at the base. It can verify that the applicant has coordinated with the existing utilities. It can verify that landowners and community groups will be notified and where appropriate, provide their consent.

Cabinets at ground level or on poles can block traffic or obstruct views. The review process can verify if the placement will have an impact on traffic or the view in a way that can impact public safety or increase the likelihood of accidents. It can verify compliance with safety clear zones. It can verify compliance with DOT rules that allocate different spaces in the rights-of-way to different uses, or ensure that the DOT has an opportunity to perform the review.

3.3 Local review protects critical public infrastructure

One of the main purposes of the rights-of-way is the storm drainage from the road. The review process can verify that the design is in compliance with rules on drainage. Similarly, the review can verify that the design for the structure will not create problems for snow removal.

Placement cannot interfere with potential road widenings. A new structure needs to be placed so as not to interfere with known or potential road widenings, and there needs to be a procedure in place if road widening needs to happen—such as one in which the applicant moves or dismantles the structure.

3.4 Local review allows consideration of impact on ADA compliance

Communities are making large investments in ADA compliance in the rights-of-way. Examples include the placement of ramps at intersections, audio at crossing lights, and sufficient space on sidewalks for wheelchairs. A review process can ensure that a proposed structure is compliant with community rules about the sidewalks and does not reverse these efforts or make them more difficult to implement. Not only the pole needs to be compliant, but cabinets need to be placed such that they do not obstruct. The process also needs to take into account future modifications that may take place on the poles. Since many of these may be done by right, the initial review needs to take into account sufficient margin to accommodate modifications without becoming a risk to people with disabilities.

3.5 Current FCC rules for “minor” modifications increase risk regarding issues such as public safety by creating technical incentives to deploy in inefficient ways

The importance of review of these areas related to safety, ADA compliance, and existing utilities is compounded by the FCC’s existing rules that allow certain increases in size of facilities by right. Indeed, permissive rules for expansion of existing wireless facilities as currently applied to facilities in the rights-of-way actually create more problems than they resolve because they allow for small form factors to be replaced by large form factors.

As a result, a proposed installation that is acceptable as initially installed could create public safety challenges at a future date. And the potential for growth discourages more efficient designs and technology choices that can deliver the same coverage and functionality without the size and complications of Mobilitie-type deployments.

In these ways, the FCC's current modification rules are incenting design inefficiency by the companies and are greatly complicating the local review process.

4 Small cell infrastructure may not enable 5G and IoT deployment

There is no 5G standard—at the moment, 5G is envisioned as a means to providing the next generations of mobile broadband applications, especially low-latency communications for machine-to-machine communications and the Internet of Things (IoT).³ Researchers and industry experts differ on the extent to which this future will be an evolution of LTE and licensed frequencies, the use of mmWave technologies, and the use of unlicensed technologies using small radios at short range—or the degree to which 5G will be ubiquitous or simply for high-traffic corridors and specific applications. And there is no way of knowing, at this point, whether traditional licensed frequencies provide the best option for IoT or whether the IoT is more likely to depend on low-powered unlicensed wireless networks that can use networks of small sensors connected to a fiber backbone to provide real time information. And we do not know how the communications networks will function with are be integrated with wireless charging networks now being tested in the U.S. and elsewhere.

From an engineering standpoint, it may be that the things that companies like Mobilitie want now (large, 120-foot towers) do not provide the best model for the future, and that limited rights-of-way real estate is better dedicated to smaller profile, embedded devices that work in conjunction with fiber and larger wireless networks.

In other words, it is not necessary to clear the path for placement of small cells of any size and form for 5G or IoT – if anything, putting a thumb on the scale favoring Mobilitie's 120-foot deployments may simply interfere with creation of more efficient networks. The Commission's own struggles with LTE-U suggest why not every deployment is necessarily a deployment that will advance 5G or IoT.

5 It is more time-consuming to evaluate applications for facilities in the PROW than on private property

Given the potential impact on safety, the scarcity of space, and the competing needs for the rights-of-way, the review process in the rights-of-way needs to be very extensive. By contrast, on private property, the review process is more limited—does the structure fit into the surroundings, is it safe, have the right people been notified and approved? There is often no need to worry about traffic, drainage, ADA compliance, or existing utilities—or those issues may be more easily addressed.

³ Wirelessly interconnecting electronic devices and machines over the internet.

5.1 Private property offers a workable alternative to rights-of-way for siting small cells and DAS

The public rights-of-way are not the only way “small cell” systems can be built. From a technical standpoint, the network can frequently be designed for similar coverage using private rather than public property. As an example, Mobilitie is requesting approval for a 75-foot structure in a crowded downtown area in suburban Washington, D.C. The proposed structure and its height are indicated by the red arrow. Near the proposed structure are several buildings where the rooftop and façade could be used. There are already macrocell antennas on two nearby rooftops, so clearly backhaul and power are readily available. Using those structures could eliminate the need for the new 75-foot structure. **The only advantage of using the rights-of-way is for Mobilitie to avoid paying rent to the building owners—but this “savings” comes at the expense of the public through the added risk, congestion, and disruption of placing a very large pole in a very busy sidewalk, very close to the road and buildings.**

Figure 10 – Site of Mobilitie Application for New 75-Foot Pole



6 Reducing local fees or processes will have marginal impact on rural broadband deployment

It is deeply misleading to suggest that “streamlining” processes for reviewing small cell deployments will lead to increased build-out in rural areas—because such processes and fees are limited or non-existent in those areas already, and the technology is not well-suited to rural areas.

6.1 Small cell and DAS are typically not deployed in rural areas because the technology is not suited to rural needs

Small cell technologies are best suited to add capacity to mobile wireless networks in areas that are congested and where demand for bandwidth outpaces supply, or where macro cell sites are not suitable for aesthetic or functional reasons.

Small cell networks are designed to maximize the use of spectrum by efficiently reusing the spectrum in many smaller coverage areas rather than across fewer, larger coverage areas (as macro cell sites do). That is, these networks are typically not being used to expand the area covered by existing macrocells; rather, they add capacity in existing coverage areas, or fill in spotty coverage gaps in very targeted areas within a carrier's current coverage area such as, for example, in valleys where the terrain blocks coverage from a macro cell.

For these reasons, these technologies are best suited for urban and suburban markets with high concentrations of users in relatively small areas, and for very limited deployment in high-value rural areas, such as alongside major roads in rugged terrain. They are not intended for most rural or low-density markets where density of users is lower and where fewer, larger macro sites are far more cost effective to deliver service than frequent micro sites.

The following photo illustrates a deployment of DAS in rural areas. This DAS is located alongside U.S. Route 6 in Clear Creek County, Colorado, where a macro site is not possible because of the terrain and the macro sites in the mountains above cannot provide coverage in the narrow canyon below.

Figure 11 – Distributed Antenna Installation on U.S. Route 6 in Clear Creek County, Colorado



6.2 Local process and charges have marginal impact on rural broadband deployment patterns

Based on my experience observing broadband investment patterns since the advent of the wireless and cable platforms in the late 1970s, nationally mandated changes to permitting fees, franchise or license fees, or fees for leasing public property or structures, or changes to local oversight of wireless siting are unlikely to change the return on investment calculus in a way that would result in advanced wireless services being deployed in rural or other underserved areas.

The fundamental dynamic of broadband investment is that network deployments and upgrades are capital-intensive—and capital flows to areas where projected returns are greatest because demand is most concentrated and per customer costs lowest. Shortening the Section 332(c)(7) review times, setting up a national regulatory system to review fees, or nationally regulating rents for use of public property would not change that fundamental dynamic. At best, national standards would mean industry costs would be reduced in rural and urban areas; such standards would not make it more likely that build-out would occur in those areas. In fact, it is my observation that carrier deployment investment decisions are made centrally and the companies' local representatives compete for investment allocations.

As a result, even where the economics of rural build-out could be marginally improved (through elimination or reduction of a cost of doing business), investment patterns do not change because the fundamental economics do not change. In decades of experience, we have never observed a build-out scenario where reduced marginal costs (such as local fees or public process) resulted in

funds that were allocated for build-out in more populous areas being diverted to a rural or underserved area.

Indeed, in most rural communities, local permitting processes and fees do not exist. It is in the most unserved and underserved rural areas where local fees and process are most minimal or non-existent, either because the locality does not see a need for them (for example, traffic control in these areas requires less coordination) or because as a matter of local or state policy, there exists little or no process or fee for permitting communications infrastructure.

In recent years, we have on numerous occasions worked with local government clients to approach carriers to request enhanced build-out and to inquire as to how the locality can facilitate and enable (or even subsidize) such build-out. But even where localities commit to eliminating regulation and fees, we have not seen carriers commit to new investment for which they did not otherwise have existing plans for a business case.

7 Localities exert themselves to attract and facilitate private investment in new or upgraded broadband facilities, including in wireless

Even though the effort does not always bear fruit, local governments are highly motivated to facilitate broadband deployment and attract broadband investment, both in wireline and wireless service. Over the past decade, we have observed countless communities seeking to build processes and incentives for private investment in broadband, and to simultaneously facilitate and smooth the way for private deployers.

We have observed this dynamic in both the wired and wireless areas. With regard to wireline broadband, for example, more than 1,100 cities and counties filed initial requests in response to Google's call to communities to compete for new broadband investment—and Google has been inundated by request and proposals from hundreds more communities in the years since. And those communities that Google Fiber selected for potential deployment undertook multi-year efforts to organize, streamline, facilitate, and enable Google's deployments,⁴ even without any assurance that Google would eventually commit to building in their city.

Those and other cities also undertook similar efforts to recruit other companies, both incumbents (particularly AT&T and CenturyLink, who also availed themselves of public facilitation in response to the Google Fiber competitive threat⁵) and competitors (including a new class of smaller

⁴ Derek Slater, Google Fiber Blog, "Behind the scenes with Google Fiber: Working with city governments," October 7, 2013, <https://fiber.googleblog.com/2013/10/behind-scenes-with-google-fiber-working.html>.

⁵ In the research triangle area of North Carolina, for example, AT&T was granted significant process concessions and reduced fees by a consortium of cities working with local universities to encourage and facilitate broadband

wireline and fixed wireless ISPs that have emerged in the past few years with capital to build new networks in select cities).⁶

In the wireless area, both metro-area and rural communities work to fulfill public demands for better mobile connectivity—sometimes to no avail if the wireless industry does not prioritize the unserved or underserved areas.

We have observed considerable public sector effort to understand and address private sector investment imperatives in mobile wireless, and numerous county and town efforts to recruit mobile companies to improve services in underserved areas. In some cases, public enticements to the industry will begin with meetings and requests but can extend as far as offers to contribute assets, pay for deployment, or subsidize operations.

Summit County, Colorado, for example, offers a good example of how communities seek to facilitate private deployment. The County last year released an RFI “to convey its interest in partnering with a motivated, high-caliber partner to make wireless broadband service available in three underserved areas of Summit County over privately or publicly-constructed infrastructure.”⁷ The County is working energetically to create opportunity and incentive for wireless carriers to deploy in these rural areas, and has offered access to public assets as well as the potential for public contributions of capital to support the private deployment.⁸

A national set of rules that effectively forces local and state resources to be expended to comply with those rules will at best handicap such efforts, in our view.

7.1 Delays in review of applications are frequently created by insufficient or inaccurate applications by carriers

In many cases, delays in processing requests for placement submitted to localities are caused by the applicant’s submission of incomplete or unverified engineering information, and subsequent delays in responding to requests for additional information. In my company’s experience, there exists a pattern with some applicants of consistently filing inaccurate or incomplete applications and then criticizing the locality for not approving these insufficient applications.

investment. North Carolina Next Generation Network (NCNGN) Blog, “NCNGN Selects AT&T,” April 8, 2014, <https://ncngn.org/>.

⁶ In Holly Springs, NC, for example, the Town leased fiber, streamlined permitting, and facilitated entry and construction by competitor Ting Internet. Ting Internet Blog, “Interview with Jeff Wilson, IT Director of Holly Springs” January 26, 2017, <https://ting.com/blog/internet/hollysprings/interview-jeff-wilson-director-holly-springs/>.

⁷ Request for Information for Partnership for Deployment of Wireless Broadband to Three Underserved Areas in Summit County, November 21, 2016, <http://www.co.summit.co.us/DocumentCenter/View/16781?bidId=169>.

⁸ Ibid., page 13.

For all of the public safety, public infrastructure, and ADA compliance reasons described above, localities cannot approve erroneous or incomplete applications – nor would they want to create incentive for the applicants to continue filing insufficient applications.

In contrast, many companies consistently file adequate, complete, professionally prepared documents, which enables expeditious review and resolution of the applications—to the benefit of both public and private sectors.

Challenges can also be created by filing of hundreds of permits at one time, or an unwillingness of carriers to work with the locality to stage applications and mutually determine a schedule that works for both parties. In contrast, if the applicants work with the city or county to plan to stage the filing of permit applications rather than filing hundreds at one time, the processing burden on the locality is spread over a reasonable period of time. In my experience, localities are very willing to work with deployers to establish timetables and processes for reasonable submission—and reasonable review—of permit applications. In a cooperative process, the parties can define a logical construction area for which all necessary applications can be submitted, and a timetable for review that balances applicant needs and competing demands on the locality's staff. In some cases, to accommodate bulk review, the locality must hire additional or outside staff, and the applicant agrees to pay those additional costs. What works depends on the community and on the project.

It is worth emphasizing that submission of applications in bulk does not necessarily reduce the time required to review applications. A bulk submission does allow a locality to understand the overall impacts and design of a network, and that is helpful in understanding the goals of the applicant, and in considering alternatives. However, many elements of a review, discussed above, are site-specific, and the time required may depend on the resources required. In our view, attempting to regulate what is now a cooperative process would not be helpful. In our experience, bulk applications, if only because they do require coordination across many sites, require more time to review than individual applications, particularly individual applications for use of private land. However, in our experience localities have been able to address the bulk review process within the parameters of the FCC's Section 332(c)(7) shot clock through agreements with the operator.

8 The optimal way to enable broadband deployment is to encourage local public-private collaboration

In my experience, the most successful and speediest broadband deployments are those in which public and private entities work collaboratively and willingly.⁹

This collaborative local process is not only a successful strategy for enabling private investment, but is also an efficient means by which to ensure that communications networks are built in efficient, thoughtful ways through comprehensive planning.

Network deployment is likely to be fastest and most efficient if the private deployer will work with the public sector to plan adequately and comprehensively for design, permitting, and staging of construction—and if all private entities will collaborate with each other and the public sector to plan ahead in ways that will make construction more efficient for all.

8.1 Collaborative process facilitates and speeds deployment, while minimizing conflict, both in wireless and wireline

Comprehensive development planning, with frequent collaboration and input from both public and private sectors in the pre-construction phase allow private providers and localities to understand and coordinate each other's plans and timelines. For example, this kind of cooperative planning enables a willing provider to stage permit and inspection requests rather than filing for an overwhelming number of permits at one time. It also allows the provider to strategically plan where it will deploy infrastructure.

An additional benefit of this approach is transparency: both parties are incented to share information to maximize the pre-construction planning and minimize likely points of conflict. Indeed, the need for transparency and communication is mutual: much as the locality should be open about its processes, the private deployer should do the same and should plan and stage its construction to maximize cooperation with the locality.

For example, a comprehensive process was undertaken in 2014 between the City of San Antonio and Verizon Wireless to support Verizon's small cell efforts. Through a collaborative process between the two parties that addressed a city-wide plan and accommodations for historic sites, San Antonio and Verizon Wireless agreed on a master license agreement for use of City rights-of-way for the installation of small cell equipment on utility and traffic light poles.¹⁰ The process

⁹ Speed of deployment, of course, also assumes that private sector processes such as make-ready on utility poles, proceed efficiently, and that private entities do not endeavor to slow down existing or potential competitors by obstructing such processes as make-ready. See, for example, *Ibid*.

¹⁰ This agreement was adopted by the City Council by ordinance in June 2015. "Master License Agreement Between the City of San Antonio and San Antonio MTA, L.P. D/B/A Verizon Wireless for the Use of Public Rights-of-Way," June 2015, <https://webapps.sanantonio.gov/filenetarchive/%7BCDFE105E-763B-4D83-BFC0->

enabled Verizon to plan ahead, with predictability and stability, for its small cell deployment, while simultaneously enabling the City to protect key public interests (such as public safety), critical historic sites (such as the Alamo and historic Missions), and the vibrant tourism economy that is based on those historic sites and the City's unique history.

8.2 Treating wireless deployment like a development plan encourages industry to work with localities and satisfy public concerns

Treating wireless deployment planning like development planning enables creation of a comprehensive infrastructure plan ahead of time so as to ensure adequate capacity and efficiency of construction—with reduced need for subsequent retrofits.

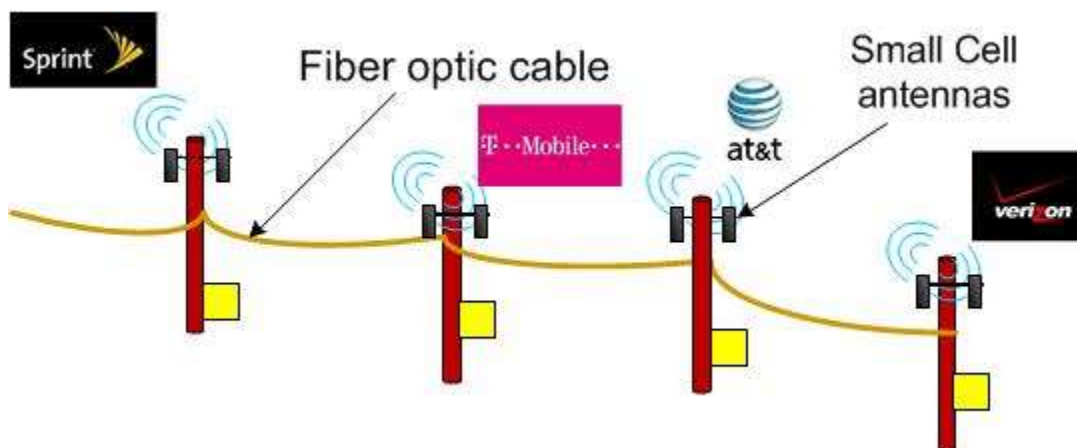
Broadband planning at the local level works best and most efficiently if it aligns with how communities plan for other forms of infrastructure: In new development areas, the community and utilities develop master plans to include all utility constructions in the appropriate locations and with the appropriate easements. This process ensures that there is sufficient space for all utilities and ensures that the utility companies are notified and given opportunity to place their infrastructure at the appropriate time, subject to the agreed-upon design criteria developed during the planning stage. And once the plan is in place, all parties agree not to deviate from it; all are obligated to meet the design parameters of the plan, which minimizes their costs and enables them the opportunity to participate.

Similarly, in the case of significant redesign projects (such as redesign of roads or sidewalks or water utilities), standard planning process requires all utilities to together to ensure coordinated, efficient planning and construction. This reduces the costs for all parties, and gives both public and private sectors certainty. So long as the wireless carriers are willing to work with the locality on such processes, they can benefit from this city-led effort to ensure that infrastructure is deployed efficiently and that the design works for as many of the companies as possible, at the same time as protecting the public interest.

For example, in one likely scenario (illustrated below), comprehensive planning creates mutually-beneficial design parameters that allocate poles to ensure all carriers have access to infrastructure. This effectively grants the carriers siting pre-approval and reduces process for carriers down the road so long as they comply with the design parameters.

[2B4D11E4712A%7D/%7BCDFE105E-763B-4D83-BFC0-2B4D11E4712A%7D.pdf](#). Subsequent agreements have been developed with other entities, including Mobilitie.

Figure 12 – Illustration of Planned Allocation of Poles to Enable Deployment by Four Wireless Carriers



The following examples are illustrative of some of the other creative efforts underway at the local level to seek means of public-private collaboration. This list is by no means exhaustive; rather, hundreds of such processes are underway throughout the country in communities of all sizes.

The City of Seattle in February released a request for information (RFI) seeking private sector input and ideas regarding potential public-private collaboration for deployment of wireless infrastructure and services.¹¹ With one clear goal focused on enabling new access to broadband services by lower-income members of the community, the City's RFI seeks to "gauge the interest of for-profit and non-profit entities in forming collaborations or partnerships with the City to enable the deployment of wireless services in Seattle. The City is seeking ideas from the private sector with regard to ways that public and private sectors can work together, with the City as facilitator, enabler, and potential partner to the private sector, in deploying wireless network infrastructure to support key goals."

The RFI specifically invited "both competitors and incumbents of the communications industry" to respond, as well as "a wide range of non-traditional entities that may be interested" in wireless in Seattle."¹²

In the RFI, the City notes that it "seeks to utilize its assets, capabilities, and other attributes to enable deployment of new and cost-effective wireless services. Among other assets, the City may

¹¹"Request for Information for Collaboration and/or Partnership between the City of Seattle and Private Sector Entities for Wireless Services and Potential Smart Cities Deployments, Including in Low-Income Districts, and Parks," February 2017, <http://www.ctcnet.us/wp-content/uploads/2017/01/Seattle-Public-Wifi-RFI-FINAL.pdf>.

¹² The request is specifically made to such potential respondents as companies involved in the emerging Smart Cities ecosystem, including solutions providers and manufacturers; companies involved in the emerging drone and aerial vehicle ecosystems; non-profit organizations; local businesses, including those in the technology sector; manufacturers of equipment, including of network equipment and of the physical housing and platforms for wireless services; nontraditional wireless providers (e.g., technology companies, technology integrators, software providers, and engineering companies); and investors. Ibid.

be able to make use of conduit, fiber, and wireless siting locations.” The RFI invites responses that would help the City learn “more about what assets and contributions would facilitate the deployment of the provider’s solution. Respondents should discuss permitting, rights-of-way, property usage, conduit access, fiber connections, electricity requirements, and any other required or beneficial contributions.”

The City also offers that it “seeks to maximize its processes and structures to best enable and facilitate new and cost-effective wireless services. In keeping with Mayor Ed Murray’s ongoing commitment to enable private deployment of broadband facilities, the City seeks to determine strategies by which to make itself as friendly as possible to private broadband investment.”¹³

Similarly, the City of Fresno, California released a Request for Qualifications (RFQ) in 2016, seeking private interest in expansion of broadband, both wired and wireless, throughout the City.¹⁴ The RFQ invited private entities to share their ideas about how public and private sectors could work together to expand broadband availability. In the RFQ, the City offers that it would work with the private sector to make available the City’s extensive networks of light poles, towers, rooftops, structures, fiber optics, and conduit. The City also notes its streamlined permitting process and willingness to commit resources to facilitate private deployment.¹⁵

What is critical to these efforts is that the FCC rules are interpreted in a manner that permits localities to work with providers to pursue these solutions. It is, for example, much more difficult to come up with an acceptable development scheme if an acceptably designed facility in the right-of-way can be replaced by intrusive designs of the sort shown earlier in this report.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 8, 2017.



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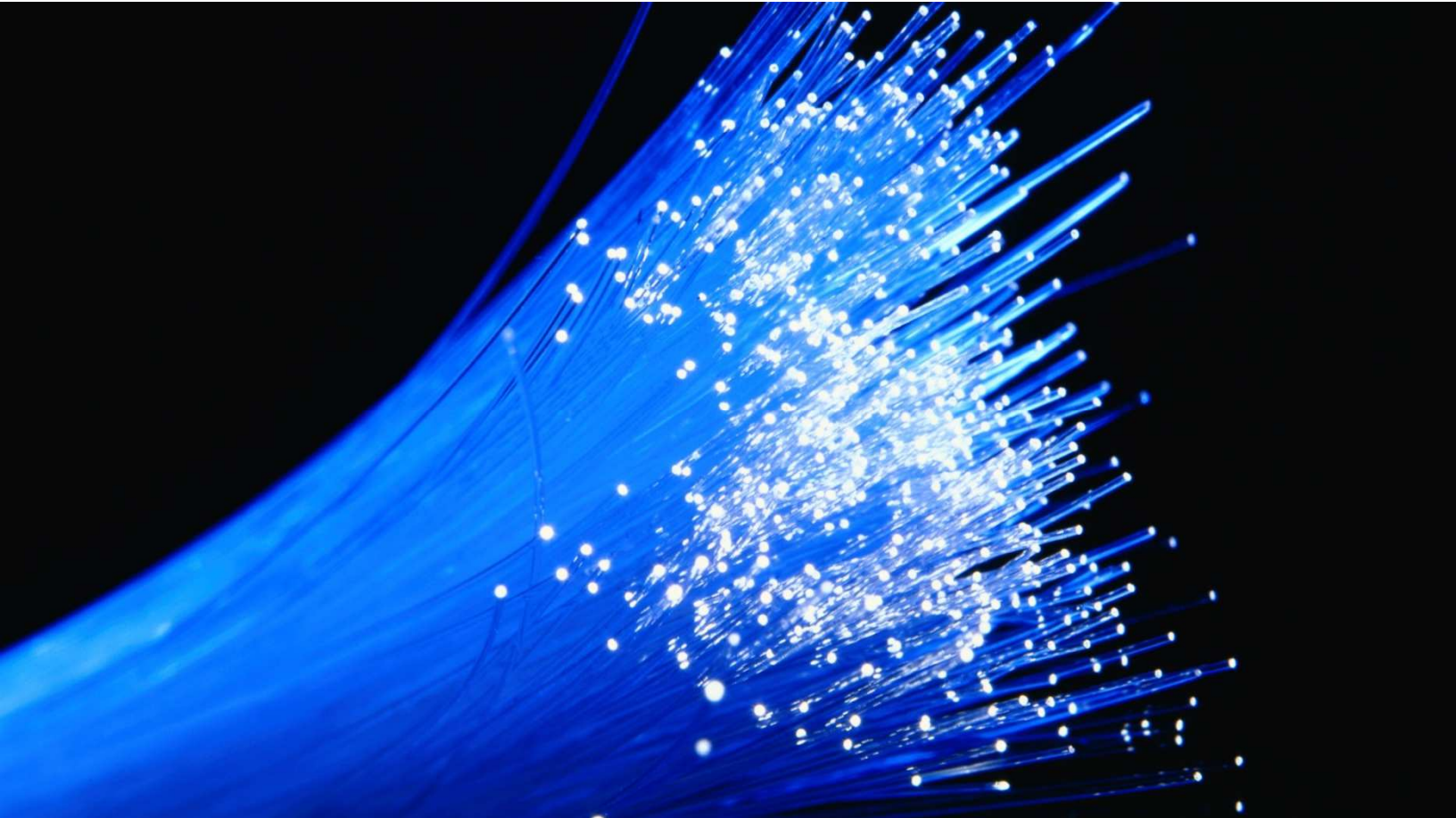
¹³ Responses to the RFI are currently being reviewed by City staff.

¹⁴ https://www.fresno.gov/information/services/wp-content/uploads/sites/15/2016/10/WiFiRFQwithAppendices_FINAL.pdf

¹⁵ Ibid., page 11. Responses to the RFQ were received in November 2016 and are currently under review.

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Definitions of Small Cells, and the Review of Small Cell Applications

Supplemental Report

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April 2017

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This report addresses requests by industry that the Commission adopt a definition of small cell that is based on excerpts from the definitions used to define circumstances under which a collocation is exempt from the Section 106 process; and to address the related suggestion that small cell applications can be reviewed in a shorter period of time.

As I explain, the small cell definition proposed permits installation of facilities that are intrusive and may raise significant safety and other issues that require significant review. As importantly, the definition proposed is not required to permit deployment of wireless facilities. There are some types of proposed installations that can be reviewed more quickly than others where the installation is truly small, and where certain other locational and physical characteristics are satisfied. Unfortunately, as a practical matter, it is now rare that a locality will receive a single small cell application; more often, multiple applications are received at once for a larger project. As a result, while individual applications may be quickly reviewable, “bulk” applications take as much or more time than traditional applications for macrocells.

1. Any Definition of Small Cells Based on Size Should Not Put Large Obtrusive Structures in the Same Category as Small Equipment

If one decided it was appropriate to define a maximum size for a small cell, it is important that this definition include only a configuration that is truly both small and low-impact. I have seen the size of small cells and DAS systems vary widely, over a factor of ten in volume, even within the deployments by the same companies (and this is not even considering the 120-foot “small cells” proposed by Mobilitie). The definitions from NEPA and WIA do not uniquely specify a class of standard equipment. Rather, they are a somewhat arbitrary designation that includes very large equipment, along with what most people would agree is “small”:

- Each antenna is located inside an enclosure of no more than six cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than six cubic feet; and
- All other wireless equipment associated with the facility is cumulatively no more than 28 cubic feet in volume.¹

¹ I am generally responding to the definition in the Comments of the Wireless Infrastructure Association at p. 1, fn 2 (filed Mar. 8, 2017): “WIA will use the term “small wireless facility” to include both individual nodes in a DAS network and also stand-alone small wireless facility installations that are not part of a DAS network. In terms of the size of the equipment, as used in these Comments, WIA will use the volumetric definition contained in the Commission’s First Amendment to the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, Public Notice, Wireless Telecommunications Bureau Announces Execution of First Amendment to Nationwide Programmatic Agreement for Collocation of Wireless Antennas, 31 FCC Rcd 8824, 8829 (2016), as well as legislation recently passed in Ohio (SB 331) and by the Virginia Legislature on February 20, 2017 (SB 1282), which defines a small wireless facility as a facility that meets both of the following qualifications: (i) each antenna is located inside an enclosure of no more than six cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than six cubic feet; and (ii) all other wireless equipment associated with the facility is cumulatively no more than 28

Note that this definition does not obviously include equipment that the Commission treats as part of a base station and that could add significantly to the intrusiveness of an installation, depending on the location. That equipment includes, for example, back-up power supplies, meters and disconnect boxes. Other factors that contribute to larger deployment size include the type of backhaul used (with wireless backhaul requiring more antennas and radios), the number of providers served, the number of spectrum bands connected, the types of antennas (multiple panels versus a single whip) and the service area. Deployments that connect multiple bands or providers not only need multiple antennas but also need multiple radio cabinets, power supplies and power meters. Multiple cabinets may also be needed for interconnection to backhaul.

A deployment that is of reasonable size may become substantially larger if more spectrum bands or carriers are added. Each addition of a band or carrier may require additional antennas, and additional cabinets for power and telecommunications interconnection. Transitioning from one band to two or three can double or triple the volume of equipment needed.

To provide a sense of what the WIA definitions include, Figure 1 illustrates a DAS installation with a large antenna that fits just within the six-cubic foot definition, and multiple cabinets that are well within the 28-cubic foot definition.

cubic feet in volume.” This definition, of course, excludes several other limitations included in the definitions in the Programmatic Agreement that distinguish among and further limit the size of certain installations.

Figure 1: Example DAS Installation within “Small Cell” Definition



While smaller than a macro site, this installation is clearly larger than many other small cell deployments, is highly obtrusive, and is likely to require a different level of review and consideration than a truly small installation.

Figure 2 and Figure 3 illustrate a multi-band DAS deployment with seven cabinets of various sizes for radios, fiber termination, and power. Collectively, these are less than half the 28 cubic feet proposed by WIA.² Two items to note from this example are: 1) a highly functional DAS or small system can be deployed using much less than 28 cubic feet of cabinets—28 cubic feet is significantly more than what is needed in most cases, and 2) even this collection of cabinets is significantly larger than what is seen now on poles, and is highly obtrusive. Cabinets of 28 cubic feet, plus additional cabinets for all the excluded ancillary equipment, can create hazards by blocking views in the right of way, can block sidewalks, and will have a significant aesthetic impact.

² In addition, the WIA proposes to exclude a long list of ancillary equipment from the 28 cubic-foot limit. In this case, the three lower boxes would be excluded from the calculation.

Figure 2: Multi-Band DAS Deployment



Figure 3: Multi-Band DAS Deployment – Detail of Cabinet Installation



By contrast, there are deployments with significantly smaller volumes of equipment that are achieve the goals of the Commission, particularly since those systems typically work in conjunction with existing towers. Figure 4 illustrates a small cell deployment with associated backhaul radio, telecommunications interconnection, and power meter. The small cell radio size is closer to one cubic foot, and total ancillary equipment is a few cubic feet. Figure 5 shows a close-up view of the radio component. This smaller deployment, incidentally, is closer in physical size to the original vision of 5G technology, using many small devices rather than the larger equipment shown earlier. In New York, carriers have been able to deploy small cells in the rights of way that occupy less than 3 cubic feet, and as important, are installing cells so that the width of the equipment is about the width of the pole.

As discussed, equipment sizes vary depending on the application sought by the deployer. Larger equipment can do different things than smaller equipment, and there is a place in the wireless ecosphere for the larger equipment, just as there is a place for wireless macrocells. But, there are often alternatives to the placement of the larger equipment that do not raise the issues raised when physically large equipment is placed in the right of way.

What is most important to consider is that the definition proposed by WIA for a small cell includes equipment that is by no means small, and that creates a radically different impression and impact than an installation that is dramatically smaller. If the Commission does adopt a small cell definition, it would be inappropriate to treat as identical installations that take up 28 cubic feet as equipment that is one-tenth that size. It is also critical that the FCC not base rules on the assumption that facilities being proposed are or remain small while some in the wireless industry seek to treat much larger equipment as “small”.

A truly small cell – one that does not involve back-up power, has a relatively small vertical antenna (designed to minimize wind loading), and small associated equipment flush mounted to existing utility poles, and of relatively small height, width or depth - will typically be reviewable in a shorter period than a facility that does not have those characteristics – at least assuming the Commission’s rules do not mandate approvals of expansions of these small cells. However, experience suggests that localities will be receiving applications for approval of multiple small cells at once.

While it may be faster in most cases to review a single small cell application, in reality, applications received in bulk will require more time to review than contemplated by the Commission’s current rules. Likewise, there may be particular situations (historical areas, undergrounded areas or environmentally sensitive areas and intersections – discussed in the next section) where even small cells may require significant review time.

In addition, it is often possible to install small cells without excavation or movement of existing utilities. Where excavation is required – particularly in the rights of way – additional issues arise. The effect on existing utilities and infrastructure must be considered, and that is particularly time-consuming where, e.g., the work requires removal and replacement of decorative sidewalks and streets, as well as potential impacts on accessibility.

Figure 4: Small Cell Deployment with Lower Impact



Figure 5: Small Cell Deployment with Lower Impact—View of Radio



2. The Importance of Assessing Risk of Placing Infrastructure in or Near Intersections

Intelligent equipment placement in intersections enables a small cell or DAS deployment to both use a single placement to cover a greater volume of potential users at once, and also use a smaller number of cells to cover a given area. All things being equal, it is always more efficient to place small cells and DAS at intersections rather than alongside a road, away from an intersection. However, there are many other important issues to consider when placing new infrastructure, including the need to avoid existing congestion due to traffic signals and associated signal cabinets, the density of existing utilities, the importance of keeping a clear view of traffic, and the need to keep a clear path for pedestrian access to crosswalks.

According to the Federal Highway Administration, intersection-related crashes make up 23 percent of total fatal crashes, and 50 percent of combined fatal and injury crashes,³ despite the fact that intersections make up a much smaller percentage of the total right of way—these are essentially hotspots of risk. Thus, additional scrutiny of potential hazards from a new structure or attachment in or near an intersection is warranted, and that can translate into additional review time even for truly small cells, and more complex reviews for larger facilities of the sort that fit within the WIA definition.

3. Items and Issues That Require Review in Permitting

To have a fair, uniform, and complete process; wireless permitting should take the following issues into account:

- Proximity to or potential for interference with public safety communications (where public property is being used),
- Potential options for colocation of the structure, and understanding why colocation sites were not used,
- Potential alternatives for location that are less obtrusive,
- Improvement in coverage or capacity,
- Compliance with FCC standards for RF emissions,
- Implication for surrounding area, including residents and property owners,
- Justification for height and scale of deployment,
- Completeness and accuracy of application,
- Zoning in the proposed location,
- Verification that the landowner has been contacted and approved siting,
- Verification that the surrounding community has been given notice,
- Compliance with height and setback, screening, and other zoning requirements,
- Environmental impact,
- Impact on historical areas,
- Structural engineering review,
- Traffic plan for construction,
- Excavation and restoration requirements, and
- Noise and exhaust impact (if backup power is included)

The level of effort for review depends on many factors, including: the completeness and accuracy of the original application, the characteristics of the proposed location, the consistency of the proposed siting with previous sitings, and the scale of the proposed siting. Depending on the application, review may require a site visit, and consultation with several parties—including the applicant and the landowner. For some applications, there needs to be a meeting for public comment. And, depending on the application, there may need to be review by different permitting staff including transportation, building permitting and electrical permitting.

Many of these factors apply for small as well as larger sites, and for facilities in the rights of way, there may be other coordination/sight line/safety issues that require consideration. The cost of review can be

³ Federal Highway Administration Research and Technology, Intersection Safety, <https://www.fhwa.dot.gov/research/topics/safety/intersections/>, accessed March 25, 2017.

lower if the applicant provides a complete application that is compliant with applicable regulations and is submitted after a careful review of the location.

It is common that an applicant becomes accustomed to the process and greatly reduces the time and expense of the process. However, there is frequent turnover among the permitting and site acquisition staff of carrier and tower companies, which wastes considerable time and expense, both for the applicant and for the permitting authorities. Further, the process for installations that fall within the WIA definition can require significant technical analysis and many hours of work for each location.

EXHIBIT N

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

STREAMLINING DEPLOYMENT OF
SMALL CELL INFRASTRUCTURE BY
IMPROVING WIRELESS FACILITIES
SITING POLICIES;

MOBILITIE, LLC
PETITION FOR DECLARATORY RULING

WT Docket No. 16-421

THE ECONOMICS OF LOCAL GOVERNMENT RIGHT OF WAY FEES
DECLARATION OF
KEVIN E. CAHILL, PHD

March 8, 2017

THE ECONOMICS OF LOCAL GOVERNMENT RIGHT OF WAY FEES

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I. INTRODUCTION

A. Author

1. My name is Kevin E. Cahill, PhD. I am a project director and senior economist at ECONorthwest, a public policy and economics consulting firm based in Portland, Oregon. I have published on a variety of topics related to applied microeconomics and have presented my research at academic conferences nationwide. I am also experienced in commercial litigation and antitrust matters, labor economics, and public policy and have testified numerous times in deposition and at trial. I earned my BA in mathematics and economics (with honors) from Rutgers College and MA and PhD in economics from Boston College. My professional and academic qualifications are described in my curriculum vitae, which is attached as Appendix A.

B. Purpose

2. My declaration in this matter addresses two topics: 1) the economic criteria that municipalities should apply when considering rights-of-way (ROW) charges, such as those at issue in the Mobilitie, Inc. (“Mobilitie”) Petition;¹ and 2) the appropriate measures of economic cost for determining a fair, reasonable, and nondiscriminatory rate.

C. Summary of Opinions

3. Economic principles provide a clear justification for why municipalities should charge market-rate fees to access government-owned property such as rights-of-way.² First, market-rate fees ensure the efficient use of ROW—the allocation of this scarce resource that

¹ Mobilitie, LLC. 2016. Petition for Declaratory Ruling. Before the Federal Communications Commission, In the Matter of Promoting Broadband for All American by Prohibiting Excessive Charges for Access to Public Rights of Way, WT Docket No. 16-421 (November 15).

² Mobilitie’s petition, as I understand it, addresses two very different charges: regulatory fees, which are designed to capture the cost associated with regulating a particular voluntary activity in which a user engages, and market rents, which capture the costs associated with providing a benefit to a particular entity in return for a use of public properties. From an economics perspective the term “cost” as it pertains to access to ROW, and the “market rate” based on this cost, incorporates both those associated with regulatory fees (e.g., administrative costs and operations and management costs) and those associated with market rents (e.g., opportunity costs and negative externalities). As I note throughout this report, these costs should be fully considered in the price that municipalities charge for access to ROW in order for an efficient allocation of resources to take place. Further, while most of this report is focused on costs related to market rents, it bears emphasizing that, unless fees are set at a level that recovers all costs associated with a regulatory activity, that activity effectively is being subsidized by others and a marketplace benefit is being provided to the entity that is allowed to avoid these costs.

maximizes social welfare. Restricting fees below the market rate creates excess demand for ROW and leads to its overutilization. Second, the market rate should compensate the municipality not only for the administrative costs and operations and maintenance (O&M) costs associated with ROW access, but also for the fixed costs that the municipality incurred to create the ROW, the opportunity costs associated with occupying the ROW (e.g., increased costs in planning for future projects), and any negative externalities associated with placement of a facility in the rights of way (e.g., negative impacts on community aesthetics and property values). These components reflect the true cost to the municipality of granting access to its ROW.

4. Municipalities do not “profit” when users pay the full cost of accessing the ROW, nor is the socially-optimal level and rate of deployment of a new technology achieved when fees are restricted to just cover administrative costs and operations and maintenance costs. Quite the contrary. Such restrictions harm municipalities because resources are misallocated. The fact that some organizations might benefit from these restrictions—namely, by lowering their costs of production and supplying more of their product—does not imply that municipalities and its citizens and businesses also realize a net benefit (they do not).
5. Simply put, the efficient allocation of ROW is achieved when users pay the market price for accessing the ROW.

II. THE ECONOMIC PRINCIPLES OF ACCESSING ROW

6. Economics is the study of the efficient allocation of scarce resources. In an economic sense, a resource is scarce when demand or wants exceed the available supply. Very few resources would *not* be considered scarce—sand in the desert or seawater at the beach are two examples. Each household, city, state, and country has a limited supply of scarce resources (e.g., labor, land, knowledge, energy), and each entity decides how to allocate their resources. Municipalities, too, have scarce resources—land, infrastructure, vehicles, buildings—which they hold in trust for residents, businesses owners, and taxpayers.³

³ Mankiw, G. 2015. *Principles of Microeconomics*. Stamford, CT: Cengage Learning; Samuelson, P. and W. Nordhaus. 2005. *Economics*. New York, NY: McGraw-Hill International Edition; Hall, R. and M. Lieberman. 1998. *Microeconomics: Principles and Applications*. Cincinnati, OH: South-Western College Publishing.

7. Economies allocate scarce resources via markets and prices. In general, producers want to sell their goods at the highest price possible and consumers want to buy their goods at the lowest price possible. A price must be acceptable to both producers *and* consumers for an exchange to occur because each party has the freedom not to participate in the exchange. Economists generally refer to the market-clearing or equilibrium price as one that satisfies two conditions: 1) the price enables producers to cover their costs and 2) the price satisfies consumers' willingness to pay given their preferences. A price below the market-clearing price will result in too many consumers willing to buy and too few producers willing to sell (excess demand) and a price above the market-clearing price will result in too few consumers willing to buy and too many producers willing to sell (excess supply). Price adjustments help ensure a match between supply and demand and an efficient allocation of scarce resources.⁴

A. Charging a fee to access ROW ensures the efficient allocation of a scarce resource

8. A municipal ROW—constrained by location and dimension—is a scarce economic resource. Because it is a scarce resource, charging a fee to access a municipal ROW makes good economic sense and is consistent with the trust responsibilities of municipal officials. Charging a market rate to access a municipal ROW is consistent with the economic principle of using prices to efficiently allocate scarce resources. The closer the charged rate is to the market price the closer the allocation of the ROW is to the efficient outcome.
9. Because a municipal ROW is a scarce resource choosing one use for the ROW means that the municipality foregoes other opportunities to use (or not use) the resource, so long as the user maintains its access to the ROW. The creation of a pedestrian-only mall prevents access to adjoining properties by vehicles, for example, and the placement of a pole may make use of a sidewalk more difficult for a pedestrian. Economists refer to the foregone use as an opportunity cost associated with the resource-allocation decision. Economists consider opportunity costs in resource allocation decisions because resources can be used in

⁴ Mankiw, G. 2015. *Principles of Microeconomics*, 7th Edition. Stamford, CT: Cengage Learning; Samuelson, P. and W. Nordhaus. 2005. *Economics*. New York, NY: McGraw-Hill International Edition.

alternative ways and decisions made today can impact what choices are available in the future.⁵

10. Occupying space in the above- or below-ground portions of the ROW has opportunity costs. Access by others entities, including the locality, may become more expensive or more difficult, or in some cases, may be foreclosed. The three-dimensional space occupied by a given wire obviously cannot be occupied by another. Allowing one wireless provider to use a light pole may foreclose, or limit the use by others, unless the dimensions of the pole are substantially changed. Also, depending on the specifics of the use, the installation, the maintenance, and the replacement of any given facility in the ROW may create problems for and impose costs on the city, other users of the ROW, and on property owners adjacent to the ROW. For these reasons charging a fee to access ROW helps ensure that the ROW will be used in an efficient manner.

B. Below-market pricing results in excess demand

11. As noted above, if a price is set below the market-clearing price then there will be too many consumers willing to buy the product at that price and too few producers willing to sell the product at that price, resulting in an excess demand for the good or service. In the case of ROW, if a municipality is forced to sell access to its ROW at a below-market rate, then users will not fully consider the cost of accessing the ROW and will over utilize it. One form in which this overutilization could manifest itself is that existing ROW could become overcrowded, and be unable to accommodate new, innovative technologies. Another form is that a company like Mobilitie may abandon property for which it does pay rent in order to access property that it hopes to occupy at no charge, or at a heavily regulated charge.
12. Allocating the ROW by first-come, first-serve or on some other non-market price makes little economic sense, especially given the external costs imposed on third parties if a ROW is over-consumed by any user. The same result follows if one artificially limits a community to charging fees without regard to value. Charging a ROW fee that reflects the ROW as a

⁵ Mankiw, G. 2015. *Principles of Microeconomics, 7th Edition*. Stamford, CT: Cengage Learning; Samuelson, P. and W. Nordhaus. 2005. *Economics*. New York, NY: McGraw-Hill International Edition; Nicholson, W. 1997. *Intermediate Microeconomics and Its Application*. Oak Brook, IL: The Dryden Press.

valuable asset or resource for which there are important and competing uses easily prevents this.

C. Above-market pricing is disciplined by municipal competition

13. Municipalities compete to attract business and jobs, retirees and their savings, and high-skilled workers. They use a variety of means to do this, such as by offering favorable tax policies and subsidies, providing municipal amenities, and investing in infrastructure.⁶ Many cities have economic development departments whose purpose includes attracting businesses away from other jurisdictions to locate in their city and employ their residents. These activities are part of municipal managers' responsibilities to protect and support their community's quality of life and economic health and wellbeing.
14. Telecommunication services are an important component of cities' economic development plans.⁷ The extent to which a community has high quality telecommunications services—including, in particular, high-quality broadband Internet access—can affect economic-development prospects and general quality of life. As such, some municipalities may choose to price access to ROW below the market rate in order to obtain these telecommunications services before other communities.
15. Critically, any given municipality is constrained by market forces if it attempts to charge an above-market price.⁸ Consider the case in which a municipality attempts to extract excess revenues from interested users of a ROW with a fictitious opportunity cost argument. Some interested users of the ROW will no doubt opt not to use the ROW because of the higher price, leading to excess supply in the municipality's existing ROW. Meanwhile, its competitor municipalities have every incentive to take advantage of this misstep by pricing access to their own ROW such that no excess capacity exists. The result will be an enhanced availability of services in the competing municipalities. The enhanced services can then be

⁶ O'Sullivan, A. 2012. *Urban Economics*. New York, NY: McGraw-Hill Irwin.

⁷ Lucky, R. and J. Eisenberg (eds.). 2006. *Renewing U.S. Telecommunications Research*. Committee on Telecommunications Research and Development, National Research Council. ISBN: 0-309-66396-2. <http://www.nap.edu/catalog/11711.html>; Salt Lake City. No date. *Economic Development – Research: Utilities and Telecommunication*. <http://www.slcgov.com/economic-development/utilities-and-telecommunication>.

⁸ Price is just one factor. Market forces can also limit other outcomes, such as excessive regulation, that might be detrimental to a municipality's citizens and businesses.

touted by the competitor municipalities to lure away individuals and businesses from the municipality with excess capacity in its ROW.

16. Another form of competition exists *within* municipalities—leaders compete for the votes of their constituents. Unlike corporations, municipalities are not profit maximizers; rather, municipalities have an obligation to their citizens to promote economic development. If leaders within a municipality obstruct market forces and fail to establish market prices that invite technological innovation, citizens and businesses will no doubt be unsatisfied with such decisions and seek new leadership in subsequent elections. This threat of being voted out of office serves to discipline leaders within a municipality from demanding above-market prices.
17. Another disciplinary force is the option to use private property instead of a municipality's ROW. The right of way is, as I understand it, not necessarily the only property on which wireless facilities may be placed. While there may be different costs associated with placing facilities on private property (including costs of negotiation), the fact that there are alternatives to using the rights of way limits the pricing power of a municipality.
18. The key takeaway is that market forces—both across and within municipalities and between municipalities and private property owners—discipline those that seek to extract surplus revenues from ROW users. The argument that municipalities should be restricted from setting prices for fear that they will extract excess revenues from interested users is highly flawed because it ignores these disciplinary market forces.

III. QUANTIFYING FAIR, REASONABLE, AND NONDISCRIMINATORY PRICES

19. The previous section describes the economic principals of accessing ROW, and the importance of pricing in such a way that leads to the efficient allocation of this scarce resource. In this section, I describe the various components of such pricing. A key takeaway is that an artificial constraint that restricts municipalities to charging only the current out-of-pocket marginal cost of accessing the ROW will inevitably lead to an inefficient outcome that harms the municipality, its citizens, and its businesses.⁹

⁹ For simplicity, I refer to administrative costs and operations and management costs as out-of-pocket marginal costs. Opportunity costs and those associated with negative externalities are technically marginal costs as well, in the sense that they increase incrementally with the introduction of a new user of a ROW.

A. Administrative and operations and maintenance (O&M) costs

20. In its Petition for Declaratory Ruling, Mobilitie states that, “The Commission should first declare that the phrase ‘fair and reasonable compensation’ means charges that enable a locality to recoup its reasonable costs to review and issue permits and manage its rights of way, and that additional charges are unlawful.”¹⁰
21. Mobilitie is correct insofar as it acknowledges that municipalities should be able to charge for the (full) incremental administrative and operations and maintenance (O&M) costs that a municipality incurs when it grants access to ROW. As I note above, these sorts of costs are typically included in regulatory fees associated with issuing permits for activities inside or outside of the rights of way. These charges can include the cost of personnel time for permitting and maintenance of the ROW, the cost of any modifications to the ROW that are necessary and borne by the municipality, and any costs associated with regulation compliance with rules for use of the rights of way. These charges should also include any necessary engineering reviews, field inspections, utility adjustments, or site restoration tasks. Moreover, it is important to note that some of these costs are not one-time events. In these cases municipalities should be able to recover, over time, any costs related to access of ROW that are ongoing.
22. Economically speaking, however, these regulatory costs do not reflect what an economist would view as the full cost of use of the rights of way. Other components include fixed costs, opportunity costs, and negative externalities. Ignoring these components will lead to a below-market rate, excess demand, and an economically inefficient use of ROW (as well as a subsidy for users, such as Mobilitie).

B. The importance of including fixed costs

23. Mobilitie is incorrect in its assertion that pricing above current out-of-pocket marginal costs implies that municipalities are somehow profiting from the use of ROW. Specifically, Mobilitie states, “The Commission should declare, however, that additional charges that exceed these [marginal] costs are unlawful. Thus, a locality’s one-time and recurring charges

¹⁰ Mobilitie, LLC. 2016. Petition for Declaratory Ruling. Before the Federal Communications Commission, In the Matter of Promoting Broadband for All American by Prohibiting Excessive Charges for Access to Public Rights of Way, WT Docket No. 16-421 (November 15), p. 24.

and fees cannot be set at levels that are designed to raise revenues for the locality, because those charges would allow the locality to profit from its exclusive control of rights of way.”^{11,12}

24. Pricing above out-of-pocket marginal cost does not imply that municipalities earn “profits.”

The reason is that municipalities incur fixed costs and opportunity costs, and may experience impacts from negative externalities. First, municipalities have likely incurred at least some of the cost of establishing and maintaining the ROW up until the present time. Myrtle Beach, for example, has expended hundreds of millions to redevelop its beachfront, underground utilities and rebuild its roads.¹³ It is economically nonsensical to imply that the municipality should be compelled to give away for free the fixed-cost value of establishing the ROW and maintaining it through the present time simply because the municipality incurred these costs in the past. Far from earning “profits,” municipalities would be incurring a very tangible loss if they were not allowed to charge users for their fixed costs—or would be simply transferring costs which ought to be borne by those occupying the rights of way to others, such as taxpayers.

25. Municipalities can and have invested in infrastructure with the expectation that they would recoup at least some portion of such investment spending. For example, jurisdictions in Oregon charge a system development charge (SDC) for new residential and commercial development. The purpose of SDC is to recover the fixed costs of infrastructure capacity that serves new development. As new residential developments come on line they pay their portion of the fixed costs for infrastructure capacity needed to serve the new development.¹⁴ Forcing municipalities to give away these assets for free makes little economic sense and could inhibit municipalities’ investments in infrastructure going forward.

¹¹ Mobilitie, LLC. 2016. Petition for Declaratory Ruling. Before the Federal Communications Commission, In the Matter of Promoting Broadband for All American by Prohibiting Excessive Charges for Access to Public Rights of Way, WT Docket No. 16-421 (November 15), p. 24.

¹² I note that the “exclusive control” of the rights of way is something of a misnomer. Property owners have exclusive control of their property but my understanding is that such exclusive control is rarely in and of itself viewed as a justification for regulating rates for access.

¹³ MyrtleBeachOnline. 2016. “Myrtle Beach metro area again one of the fastest-growing in the country.” March 24. <http://www.myrtlebeachonline.com/news/local/article67886402.html>.

¹⁴ Galardi Consulting, Dr. A. Nelson, and Beery, Elsner and Hammond. 2007. *Promoting Vibrant Communities with System Development Charges*. Metro. July; Leung, M. 2015. *System Development Charges*. Portland Water Bureau. May 27.

26. Importantly, allowing municipalities to charge for their fixed costs does not imply that all municipalities will do so. The ROW is an asset to the municipality and some municipalities might decide to waive their fixed costs to compete with other municipalities to attract certain types of investment. This flexibility is a key feature of how municipalities compete, to the benefit of its citizens and businesses. This dimension of competition would be stifled if municipalities are not allowed to recoup their fixed costs.

C. The importance of including opportunity costs

27. As noted above, a municipality's ROW is a scarce resource in an economic sense. The potential for restricted availability and fewer options in the future is a cost to the municipality for granting access to the ROW today. As such, municipalities must be able to charge for their opportunity cost to achieve an efficient allocation of its ROW. Further, allowing a locality to recover its opportunity costs ensures that users pay the full cost associated with the use of the facility—or ensures that the municipality makes a conscious decision to subsidize certain behaviors. For example, a municipality might have a vested interest in encouraging the deployment of technologies to underserved areas and, to encourage such deployment, the municipality might set a discounted price, or even a zero price, for accessing its ROW in particular areas. Such decisions can be optimal depending on the objective function or strategy of the municipality. As with fixed costs, restricting municipalities from including opportunity costs, either in full or in part, constrains competition across municipalities and inevitably leads to inefficient outcomes.

D. The importance of taking negative externalities into account

28. Decision makers within municipalities must also consider any negative impacts that use of ROW might impose on the community. Such negative impacts are referred to in the economics literature as externalities—an impact, either positive or negative, to an outside party. In the case of access to ROW, a telecommunications company's cell tower might impose a negative externality in the community due to its unsightliness. Municipalities have attempted to mitigate such negative impacts on the community by requiring users to address the negative externalities they impose, for example, by requiring providers to make cell

towers look like trees.¹⁵ In other cases, access to certain locations in or outside of the rights of way (for example, for locations in front of historic structures) may be subject to strict scrutiny.

29. Quantifying the impact of negative externalities on a given community can be complicated, and the challenges in doing so illustrate why it is important to let each municipality decide how to weigh the trade-offs associated with such negative impacts. Some communities might value the impact of a negative externality more so than others, just as some communities might value access to the latest telecommunications technology more than others. Competitive pricing allows municipalities to achieve an allocation of resources that takes these preferences into account. For example, if a locality charges a fee for use that is higher for those who place large facilities in the rights of way, and less for those who do not, the locality will encourage deployment of smaller facilities.
30. A key takeaway is that communities differ in how they view the impacts of negative externalities. Limiting municipalities' ability to set the prices they can charge (as well as limiting authority to mitigate impacts through land use regulation), therefore, will lead to a situation in which communities' preferences toward negative externalities are not taken into account, inevitably resulting in an economically inefficient outcome.

E. The importance of economic factors in assessing nondiscriminatory fees

31. In an economic sense, a fee is nondiscriminatory if entities pay similar fees for using a ROW in similar ways and under similar circumstances. Uses differ, and not all telecommunications providers use the ROW in the same way. For example, a wireline company may have hundreds or thousands of miles of fiber in a ROW. A wireless company, in contrast, may place only a few facilities in the ROW, but with more substantial negative externalities. One could reasonably distinguish among these types of providers for the purpose of arriving at compensation for access to the ROW.

¹⁵ Chicklas, D. 2014. "City code required cell phone tower to be disguised as tree." *Fox 17 West Michigan*. July 28. <http://fox17online.com/2014/07/28/city-code-required-cell-phone-tower-to-be-disguised-as-tree/>; Hecht, P. 2015. "Dressed up as trees, cellular towers stir debate." *The Sacramento Bee*. Dec. 5, <http://www.sacbee.com/news/investigations/the-public-eye/article48213030.html>.

32. In addition, economic conditions change over time. All else equal, providers that enter the market at different points in time face different economic conditions. In a competitive market, such providers would likely face different costs for the resources they use. Likewise, it would not necessarily be either discriminatory or non-neutral for the details of the ROW access charges between each of such providers and a city to differ.
33. It follows that there may be many different ways to capture fair market value for property and other resources used. For example, it is common in pricing to include a gross revenues based component. This is a common measure where a ROW grant gives someone a right to place facilities throughout the right of way (cable and telecommunications franchises, for example) but is also common in private markets (shopping centers, for example). Alternatively, an entity can price per site, price based on some measure of area (linear footage, square footage, or cubic footage), or price based on provision of non-monetary benefits that reduce costs to both parties (e.g., installation of excess conduit that reduces the need for future road cuts). Different pricing models may fit some policy goals better than others or some business plans better than others. Just as competition leads to market-based prices and an efficient allocation of scarce resources, competition also leads to an optimal form in which payments are made.
34. Finally, other factors can affect ROW pricing in ways that are non-discriminatory in nature, such as opportunity costs and externalities. Regarding opportunity costs, it would be non-discriminatory from an economic perspective to charge higher ROW fees in highly congested portions of the ROW because congestion in ROW can limit future access for municipal services. Likewise, telecommunications companies may inflict negative externalities on communities by installing unsightly telecommunications equipment in historical districts or in neighborhoods with strict visual standards (e.g., signage limitations and requirements, limited or specified paint colors, period or culturally aesthetic architecture building codes). ROW fees that take these consequences into consideration would not be considered discriminatory in an economic sense.

IV. FACTORS SPECIFIC TO SMALL CELL DEPLOYMENT

35. Mobilitie notes that access to ROW for the purposes of 5G technology differs from prior cellular technology uses. The technology requires more densely distributed equipment and,

therefore, access to many more ROW points. Mobilitie then argues that these technical requirements somehow imply that the economics of access to ROW should be different. In fact, the economic principles of access to ROW hold no matter what the technology, including 5G and taking Mobilitie’s technical arguments at face value.

36. One of the major differences between the anticipated roll out of small cell and DAS networks from current wireless technology is the number of antenna attachments and deployments that municipalities will process. Mobilitie’s Petition for Declaratory Ruling, states that 200,000 cell towers currently exist in the United States. These towers were not all installed in one year, rather they accumulated over time. In contrast, it is anticipated that one million new small cell and DAS antenna could be deployed in the next five years.¹⁶ On average, municipalities would have to process ROW antenna requests at an annual rate equivalent to all cell towers currently in operation, each year, for the next five years.
37. Mobilitie claims that, due to the large number of expected access requests, a more uniform system of gaining access to ROW might be required. It is beyond the scope of this report to consider the costs associated with imposing a “uniform” permitting scheme on localities across the nation, except to note that it would likely be quite significant, potentially involving changes in ordinances, software systems, forms and the like. But a critical piece of information left out of Mobilitie’s argument is that municipalities have every incentive to work with telecommunications companies and advance 5G technology to the extent that such technology offers value to its constituents. If the value is as alluring as Mobilitie claims it to be, municipalities have every incentive to facilitate its adoption within the community. No declaratory ruling or mandated uniformity would be required.
38. Likewise, market-based pricing mechanisms are consistent with and not in conflict with rapid deployment. As a society, we do not want the most rapid deployment imaginable; we want the speed of deployment that is consistent with the most efficient use of available resources. This rate of deployment leads to intelligent choices among types of properties that may be used to deploy wireless facilities. The methodology Mobilitie proposes will predictably lead to inefficient deployment at substantial social cost.

¹⁶ Mobilitie, LLC. 2016. *Petition for Declaratory Ruling*. Before the Federal Communications Commission, In the Matter of Promoting Broadband for All Americans by Prohibiting Excessive Charges for Access to Public Rights of Way. Washington, DC. November 15.

39. Moreover, as a basic economic principle, firms will first deploy in the areas that are most profitable. The areas that are most profitable under a system with market-based prices will, when ROW are underpriced, likely remain among the most profitable areas (albeit *more* profitable due to lower costs). The systematic underpricing of access to ROW is unlikely to lead to increased deployment in underserved areas over existing profitable ones.

V. CONCLUSION

40. An efficient, market-based price to access ROW compensates a municipality for its administrative costs and operations and management costs, its fixed costs of establishing and developing the ROW, its opportunity cost of granting access to the user, and any negative externalities from the user. Restricting fees below the market rate, as proposed by Mobilitie, creates excess demand for the ROW, leading to an overutilization and suboptimal allocation of ROW.
41. Concerns about municipalities extracting rents from potential users of ROW are unwarranted because competitive forces within and across municipalities, and between municipalities and private property owners, discipline such behavior. Municipalities that attempt to extract higher-than-market rates will simply be undercut by other municipalities that do not, or sidestepped by private property owners, and risk falling behind technologically. Leaders who advocate for extracting higher-than-market rates will be forced to explain to voters why their municipality is falling behind technologically, and risk losing their positions. The result is that municipalities and their leaders cannot sustain above-market prices.
42. The most rapid rate of deployment imaginable for 5G technology is not the socially-optimal outcome; rather what is socially optimal is the speed of deployment that is consistent with the most efficient use of available resources. The efficient allocation of ROW is achieved when users pay the full cost of accessing the ROW. The closer the fee is to the market price the closer the allocation of ROW access is to the social optimum.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 8, 2017.

A handwritten signature in blue ink, consisting of a stylized 'K' followed by a horizontal line and a small flourish.

Kevin E. Cahill, PhD
Project Director
ECONorthwest

VI. APPENDIX A: Curriculum Vitae

CURRICULUM VITAE

KEVIN E. CAHILL

Education

Ph.D. Economics, Boston College, Chestnut Hill, MA, 2000
M.A. Economics, Boston College, Chestnut Hill, MA, 1997
B.A. Mathematics and Economics (with honors), Rutgers College, New Brunswick, NJ, 1993

Professional Experience

2012 – present	ECONorthwest: Project Director / Senior Economist
2005 – present	Center on Aging and Work at Boston College: Research Economist
2005 – 2010	Analysis Group, Inc.: Associate (2005 – 2008); Manager (2009 – 2010)
2004 – 2005	Tinari Economics Group: Economist and Expert Witness
2003	Center for Retirement Research at Boston College: Associate Director for Research
2000 – 2002	Abt Associates, Inc.: Associate

Academic Papers and Publications

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. *submitted*. “Is Bridge Job Activity Overstated?” *Monthly Labor Review*.

Quinn, Joseph F. and Kevin E. Cahill. *submitted*. “The Relative Effectiveness of the Minimum Wage and the Earned Income Tax Credit as Anti-Poverty Tools.” *Religions*.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2016 “To What Extent is Gradual Retirement a Product of Financial Necessity?” *Work, Aging and Retirement*. doi: 10.1093/worker/waw027.

Cahill, Kevin E., Andrew Dyke, John Tapogna, and Michael D. Giandrea. 2016. “The Impact of Oregon’s Pension Legacy Costs on New Teacher Turnover and Quality.” U.S. Bureau of Labor Statistics Working Paper, 491 (August).

Principi, Andrea, Sara Santini, Marco Socci, Deborah Smeaton, Kevin E. Cahill, Sandra Vegeris, and Helen Barnes. 2016. “Retirement Plans and Active Aging: Perspectives in Three Countries.” *Ageing & Society*; doi: 10.1017/S0144686x16000866.

Cahill, Kevin E., Michael D. Giandrea, Andrew Dyke, and John Tapogna. 2016. “Pension Generosity in Oregon and its Impact on the K12 Workforce.” U.S. Bureau of Labor Statistics Working Paper, 488 (April).

Quinn, Joseph F., and Kevin E. Cahill. 2016. “The New World of Retirement Income Security in America.” *American Psychologist*, 71(4), 321-333; doi: 10.1037/a0040276.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2015. Evolving patterns of work and retirement. In L. George & K. Ferraro (Eds.), *The Handbook of Aging and the Social Sciences (8th Edition)*. New York, NY: Elsevier.

Cahill, Kevin E., Jacquelyn B. James, and Marcie Pitt-Catsouphes. 2015. "The Impact of a Randomly Assigned Time and Place Management Initiative on Work and Retirement Expectations." *Work, Aging and Retirement*, 1(3); doi: 10.1093/worker/wav012.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2015. "Retirement Patterns and the Macroeconomy, 1992 – 2010: The Prevalence and Determinants of Bridge Jobs, Phased Retirement, and Re-entry among Three Recent Cohorts of Older Americans." *The Gerontologist*, 55(3), 384-403; doi: 10.1093/geront/gnt146.

Cahill, Kevin E., Tay K. McNamara, Marcie Pitt-Catsouphes, and Monique Valcour. 2015. "Linking Shifts in the National Economy with Changes in Job Satisfaction, Employee Engagement, and Work-Life Balance." *Journal of Behavioral and Experimental Economics*, 56, 40-54; doi: 10.1016/j.socec.2015.03.002.

Pitt-Catsouphes, Marcie, Jacquelyn B. James, Kevin E. Cahill, and Tay K. McNamara. 2015. "Relationships between Team Performance and Managers Who Are Innovators and Early Adopters of Flexible Work Options." *Journal of Change Management*; doi: 10.1080/14697017.2015.1035665.

Cahill, Kevin E., Deborah Smeaton, Andrea Principi, Marco Socci, & Sara Santini. 2015. "Does the Option of Continued Work Later in Life Result in a More Optimistic View of Retirement?" Papers and Proceedings of the 68th Annual Scientific Meeting of the Gerontological Society of America (November).

Cahill, Kevin E., and Joseph F. Quinn. 2014. "A Balanced Look at Self-Employment Transitions Later in Life." *Public Policy & Aging Report*, 24, 134-140; doi: 10.1093/ppar/pru40.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2014. "How Might the Affordable Care Act Impact Retirement Transitions?" Papers and Proceedings of the NAFE Sessions at the 89th Annual Conference of the Western Economics Association International (June).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2014. "The Impact of Hours Flexibility on Career Employment, Bridge Jobs, and the Timing of Retirement." U.S. Bureau of Labor Statistics Working Paper, 472 (March).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2013. "Are Gender Differences Emerging in the Retirement Patterns of the Early Boomers?" U.S. Bureau of Labor Statistics Working Paper, 468 (September).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2013. "New Evidence on Self-Employment Transitions among Older Americans with Career Jobs." U.S. Bureau of Labor Statistics Working Paper, 463 (April).

Pitt-Catsouphes, Marcie, Jacquelyn B. James, Stephen Sweet, Kevin E. Cahill, David Snow, Kim DeAngelis, Suzanne Lawler, Maureen O'Keeffe, and Danielle Hartmann. 2013. Schedule optimization at the local level. In R. Disselkamp (Ed.), *Workforce asset management book of knowledge*. Hoboken, NJ: Wiley.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2013. Bridge employment. In M. Wang (Ed.), *The Oxford Handbook of Retirement*. New York, NY: Oxford University Press.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2012. "The Relationship between Work Decisions and Location Later in Life." U.S. Bureau of Labor Statistics Working Paper, 458 (October).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2012. "Older Workers and Short-term Jobs: Employment Patterns and Determinants." *Monthly Labor Review*, 135(5), 19-32 (May).

Quinn, Joseph F., Kevin E. Cahill, and Michael D. Giandrea. 2011. "Early Retirement: The Dawn of a New Era?" TIAA-CREF Institute *Policy Brief* (July).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2011. "Reentering the Labor Force after Retirement." *Monthly Labor Review*, 134(6), 34-42 (June).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2011. "How Does Occupational Status Impact Bridge Job Prevalence?" U.S. Bureau of Labor Statistics Working Paper, 447 (July).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2010. "Employment Patterns and Determinants among Older Individuals with a History of Short-Duration Jobs." U.S. Bureau of Labor Statistics Working Paper, 440 (August).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2010. "The Role of Re-entry in the Retirement Process." U.S. Bureau of Labor Statistics Working Paper, 439 (June).

Jaff, Michael R., Kevin E. Cahill, Andrew P. Yu, Howard G. Birnbaum, and Luella M. Engelhart. 2010. "Clinical Outcomes and Medical Care Costs among Medicare Beneficiaries Receiving Therapy for Peripheral Arterial Disease." *Annals of Vascular Surgery*, 24(5), 577-587 (July).

Cahill, Kevin E., Michael D. Giandrea, and Melissa Brown. 2010. "Stepping Stones and Bridge Jobs: Determinants and Outcomes." Papers and Proceedings of the NAFE Sessions at the AEA/ASSA 2010 Annual Meetings.

Giandrea, Michael D., Kevin E. Cahill, and Joseph F. Quinn. 2009. "Bridge Jobs: A Comparison across Cohorts." *Research on Aging*, 31(5), 549-576.

Duh, Mei Sheng, Kevin E. Cahill, Pierre Emmanuel Paradis, Pierre Y. Cremieux, and Paul E. Greenberg. 2009. "The Economic Implications of Generic Substitution of Antiepileptic Drugs: A Review of Recent Evidence." *Expert Opinion on Pharmacotherapy*, 10(14), 2317-2328.

Wu, Eric Q., Pankaj A. Patel, Reema R. Mody, Andrew P. Yu, Kevin E. Cahill, Jackson Tang, and Eswar Krishnan. 2009. "Frequency, Risk, and Cost of Gout-related Episodes Among the Elderly: Does Serum Uric Acid Level Matter?" *The Journal of Rheumatology*, 36(5), 1032-1040.

Giandrea, Michael D., Kevin E. Cahill, and Joseph F. Quinn. 2008. "Self Employment as a Step in the Retirement Process." Sloan Center on Aging & Work *Issue Brief*, No. 15 (September).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2008. "A Micro-Level Analysis of Recent Increases in Labor Force Participation among Older Workers." Center for Retirement Research at Boston College Working Paper, 8 (February).

Giandrea, Michael D., Kevin E. Cahill, and Joseph F. Quinn. 2008. "Self Employment Transitions among Older Workers with Career Jobs." U.S. Bureau of Labor Statistics Working Paper, 418 (May).

Lee, Lauren J., Andrew P. Yu, Kevin E. Cahill, Alan K. Oglesby, Jackson Tang, Ying Qiu, and Howard G. Birnbaum. 2008. "Direct and Indirect Costs among Employees with Diabetic Retinopathy in the United States," *Current Medical Research and Opinion*, 24(5), 1549-1559.

Wu, Eric Q., Pankaj A. Patel, Andrew P. Yu, Reema R. Mody, Kevin E. Cahill, Jackson Tang, and Eswar Krishnan. 2008. "Disease-related and Total Health Care Costs of Elderly Patients with Gout," *Journal of Managed Care Pharmacy*, 14(2), 164-175.

Yu, Andrew P., Kevin E. Cahill, Howard G. Birnbaum, Lauren J. Lee, Alan K. Oglesby, Jackson Tang, and Ying Qiu. 2007. "Direct and Indirect Costs and Resource Utilization Associated with Photocoagulation and Vitrectomy Procedures among Employees with Diabetic Retinopathy" *Value in Health*, 10(3) doi:10.1016/S1098-3015(10)68726-8.

Giandrea, Michael D., Kevin E. Cahill, and Joseph F. Quinn. 2007. "An Update on Bridge Jobs: The HRS War Babies." U.S. Bureau of Labor Statistics Working Paper, 407 (May).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2007. "Down Shifting: The Role of Bridge Jobs After Career Employment." *Sloan Center on Aging & Work Issue Brief*, No. 6 (April).

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2006. "Retirement Patterns from Career Employment." *The Gerontologist*, 46(4), 514-523.

Tinari, Frank D., Kevin E. Cahill, and Elias Grivoyannis. 2006. "Did the 9/11 Victim Compensation Fund Accurately Assess Economic Losses?" *Topics in Economic Analysis and Policy*, Vol. 6, Issue 1.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2005. "Are Traditional Retirements a Thing of the Past? Recent Evidence on Retirement Patterns and Bridge Jobs." U.S. Bureau of Labor Statistics Working Paper, 384 (September).

Tinari, Frank D., Kevin E. Cahill, and LeeAnn M. Pounds. 2005. "The Effects of a Gender-Neutral Life Expectancy Table in New Jersey Litigation." Tinari Economics Group Working Paper.

Tinari, Frank D., Kevin E. Cahill, and Elias Grivoyannis. 2005. "A Retrospective Examination of the 9/11 Victim Compensation Fund Awards." Papers and Proceedings of the NAFE Sessions at the Allied Social Science Associations 2005 Annual Meeting.

Tinari, Frank D., and Kevin E. Cahill. 2004. "A Note on a Perverse Result under New York State's Rule 50-B: The Case of Pensions." Tinari Economics Group Working Paper.

Cahill, Kevin E., and Robert L. Clark. 2004. Economics of Aging. In L.S. Noelker, K. Rockwood, and R.L. Sprott (Eds.), *The Encyclopedia of Aging*, 4th Edition. New York, NY: Springer Publishing Company.

Cahill, Kevin E., and Alicia H. Munnell. 2004. "The Impact of Raising the Earliest Eligibility Age on Social Security-Dependent Americans." Research funded by the Russell Sage Foundation (unpublished manuscript).

Munnell, Alicia H., Kevin E. Cahill, Andrew D. Eschtruth, and Steven A. Sass. 2004. "The Graying of Massachusetts: Aging, the New Rules of Retirement, and the Changing Workforce." The Massachusetts Institute for a New Commonwealth (MassINC).

Munnell, Alicia H., Kevin B. Meme, Natalia A. Jivan, and Kevin E. Cahill. 2004. "Should We Raise Social Security's Earliest Eligibility Age?" Center for Retirement Research *Issue in Brief*, No. 18 (June).

Cahill, Kevin E., and Sheila Campbell. 2004. "Basic Investment Theory Explained." Center for Retirement Research *Just the Facts*, No. 9 (January).

Cahill, Kevin E., and Mauricio Soto. 2003. "How Do Cash Balance Plans Affect the Pension Landscape?" Center for Retirement Research *Issue in Brief*, No. 14 (December).

Munnell, Alicia H., Kevin E. Cahill, and Natalia A. Jivan. 2003. "How Has the Shift to 401(k)s Affected the Retirement Age?" Center for Retirement Research *Issue in Brief*, No. 13 (September).

Marshall, Nancy L., Cindy L. Creps, Nancy R. Burstein, Kevin E. Cahill, Wendy W. Robeson, Sue Y. Wang, Nancy Keefe, Jennifer Schimmenti, and Frederic B. Glantz. 2003. "Massachusetts Family Child Care Today: A Report on the Findings from the Massachusetts Cost and Quality Study." Wellesley Centers for Women, Wellesley, MA.

"401(k) Plans and Retirement Saving: Lessons for Personal Accounts." 2002. Summary document of a presentation by William G. Gale and James M. Poterba prepared for the Social Security Administration (November).

Beecroft, Erik, Kevin E. Cahill and Barbara D. Goodson, 2002. "The Impacts of Welfare Reform on Children: The Indiana Welfare Reform Evaluation." Abt Associates Inc. (December).

Burstein, Nancy, Jean I. Layzer, and Kevin E. Cahill. 2001. "National Study of Child Care for Low-Income Families: Patterns of Child Care Use Among Low-Income Families." Abt Associates Inc. (August).

Wrobel, Marian V., and Kevin E. Cahill. 2001. "An Evaluation of the Choosing Health Program." Abt Associates Inc. (April).

Cahill, Kevin E., 2000. "Heterogeneity in the Retirement Process: Patterns and Determinants of Labor Force Withdrawal among Individuals with Low-Wage and Short-Duration Jobs." Boston College Doctoral Dissertation.

Quinn, Joseph F., Richard V. Burkhauser, Kevin E. Cahill, and Robert Weathers. 1998. "Microeconomic Analysis of the Retirement Decision: United States." The OECD Economics Department Working Paper No. 203, Paris.

Professional Activities, Honors and Awards

Member, Founding Editorial Board of *Work, Aging and Retirement*, 2014 – present.

Member, Editorial Board of *Research on Aging*, 2016 – present.

Member, Editorial Board of *Journal of Aging & Social Policy*, 2016 – present.

At-Large Vice President, Board of Directors, National Association of Forensic Economics, 2013 – 2016.

2011 Lawrence R. Klein Award for best *Monthly Labor Review* article by joint BLS and non-BLS authors.

Ad hoc referee, 2000 – 2016, *The Gerontologist*, *Journal of Gerontology: Social Sciences*, *Journal of Applied Gerontology*, *Industrial and Labor Relations Review*, *Journal of Human Resources*, *Work, Aging and Retirement*, *Demography*, *Population Research and Policy Review*, *Journal of Population Economics*, *Research on Aging*, *Applied Health Economics and Health Policy*, *Sociology Quarterly*, *Journal of Aging and Social Policy*, *Ageing & Society*, *Atlantic Economic Journal*, *Social Problems*, *Australian Journal of Social Issues*, *Asian Social Science*, *The Journal of Forensic Economics*, *AARP*, *Alfred P. Sloan Foundation*, *Oxford University Press*

American Economics Association, member, 2002 – present.

Gerontological Society of America, member, 2012 – present, investment committee, 2015 – present.

Western Economics Association, member, 2004 – 2008, 2012 – present.

National Association of Forensic Economics (NAFE), member, 2004 – present;

NAFE, organizer of ASSA conference sessions, 2015, 2016 (with Larry Spizman), 2017 (with Scott Gilbert)

Eastern Economics Association, member, 2005 – 2010, 2014

Allied Social Sciences Associations Annual Meeting, Conference Book Cover, 2017, 2015, 2014, 2013, 2012.

Salmon River Art Guild, Regional Art Show, Other Media: First Place (2014, 2012); Second Place (2016, 2011); Third Place (2016, 2011); Honorable Mention (2016, 2014).

Reviewer of grant proposals, Sandell Grant Program, 2002 – 2003.

Doctoral Fellowship, Social Security Administration, Center for Retirement Research, 1999.

Teaching Excellence Award, Boston College Graduate School of Arts and Sciences, 1998.

Michael Mann Summer Dissertation Award, Boston College Department of Economics, 1997.

Graduate Student Fellowship, Boston College Department of Economics, 1995 – 1998.

Henry Rutgers Scholar, Rutgers College, Department of Economics, 1993.

Presentations and Conferences Attended

“Notable Economic Trends in Idaho and the Pacific Northwest.” Invited speaker at the Northwest Credit Union Association’s Governmental Affairs Conference, Boise, ID, January 26, 2017.

“What Determines Gradual Retirement? Differences in the Path to Retirement between Low- and High-Educated Older Workers.” Discussant at the 2017 Annual Meeting of the Allied Social Science Associations, Chicago, IL, January 8, 2017.

“The Impact of Oregon’s Pension Legacy Costs on New Teacher Turnover and Quality” Presentation at the 2017 Annual Meeting of the Allied Social Science Associations, Chicago, IL, January 7, 2017.

“Pension Generosity in Oregon and Its Impact on Mid-Career Teacher Attrition and Older Teachers’ Retirement Decisions.” Presentation at the 2016 Fall Research Conference of the Association for Public Policy Analysis and Management (APPAM), Washington, DC, November 6, 2016.

“How Do You Study the Impact of Immigrant Inclusion? Considerations for Quantitative Research.” Presentation at the Welcoming Economies Global Network Conference, Philadelphia, PA, October 20, 2016.

“Economic Damages in Employment Cases.” Presentation for the Multnomah Bar Association, Portland, OR, September 20, 2016, and the Oregon Trial Lawyers Association, Portland, OR, October 5, 2016.

“Pension Generosity in Oregon and its Impact on the K12 Workforce.” Presentation at the 91st Annual Conference of the Western Economic Association International, Portland, OR, July 1, 2016.

“Measure of Damages for Employer-Paid Health Insurance Denied While Working.” Discussant at the 91st Annual Conference of the Western Economic Association International, Portland, OR, July 1, 2016.

“Is Bridge Job Activity Overstated?” Presentation at the 2016 Annual Meeting of the Allied Social Science Associations, San Francisco, CA, January 4, 2016.

“Does the Option of Continued Work Later in Life Result in a More Optimistic View of Retirement?” Presentation at the 68th Annual Scientific Meeting of the Gerontological Society of America (GSA), Orlando, FL, November 22, 2015.

“To What Extent is Gradual Retirement a Product of Financial Necessity?” Presentation at the 68th Annual Scientific Meeting of the Gerontological Society of America (GSA), Orlando, FL, November 21, 2015.

“The Impact of a Time & Place Intervention on Economic Outcomes at a Large Healthcare Organization.” Presentation at the 68th Annual Scientific Meeting of the Gerontological Society of America (GSA) Pre-Conference Workshop: Change in the Meaning and Experience of Work Later in Life, Orlando, FL, November 18, 2015.

“The Economic Dynamics and Fiscal Impacts of an Aging Society.” Invited panelist at the 10th Annual Conference of the Oregon Oral Health Coalition, Oral Health in the Age of Aging: Perspectives on Epigenetics, Gerontology, and Chronic Diseases, Portland, OR, October 2, 2015.

“Pathways to Retirement in the United States: An Evolving Process.” Invited speaker at the Center for Senior Policy’s Conference on Extending Working Life: The American Experience, Oslo, Norway, September 15, 2015.

“Midyear Commercial Real Estate Economic Forum.” Invited panelist at a forum sponsored by TitleOne Corporation, Boise, ID, June 17, 2015.

“Boomers and the Future of Oregon’s Economy.” Speaker at a jointly-sponsored ECONorthwest–AARP event on leveraging Oregon’s 50-plus population, Portland, OR, March 17, 2015.

“The Impact of a Randomly-Assigned Time & Place Management Initiative on Work and Retirement Expectations.” Presentation at the 2015 Annual Meeting of the Allied Social Science Associations, Boston, MA, January 4, 2015.

“A Balanced Look at Self-Employment Transitions Later in Life.” Presentation at the 67th Annual Scientific Meeting of the Gerontological Society of America (GSA), Policy Series: Self-Employment and Entrepreneurship: The Aging Workforce’s ‘Encore’?, Washington, DC, November 8, 2014.

“How Might the Affordable Care Act Impact Retirement Transitions?” Presentation at the 89th Annual Conference of the Western Economic Association International, Denver, CO, June 28, 2014.

“Hours Flexibility Preferences and Work/Retirement Decisions.” Presentation at the Work and Family Researchers Network (WFRN) 2014 Conference, New York, NY, June 19, 2014.

“Bridge Jobs and the New Era of Retirement.” Invited speaker at the Sloan Foundation’s Workshop on Measuring, Modeling, and Modifying Late in Life Workplace Dynamics, New York, NY, June 5, 2014.

“The Impact of Hours Flexibility on Retirement Transitions.” Presentation at the Pacific Northwest Regional Economics Conference (PNREC) 2014, Portland, OR, May 8, 2014.

“Job Transitions among Today’s Older Americans: Challenges and Opportunities.” Keynote speaker at AARP’s Finding Work at 50+ Event, Beaverton, OR, April 22, 2014.

“Retirement Communities – the Golden Age of Real Estate.” Invited panelist at a forum sponsored by the Idaho Business Review, Boise, ID, April 1, 2014.

“Transitions into Self-Employment at Older Ages: 1992 to 2012.” Presentation at the 40th Annual Conference of the Eastern Economics Association, Boston, MA, March 8, 2014.

“What Forensic Economists Need to Know about Societal Aging.” Presentation at the NAFE Sessions of the 40th Annual Conference of the Eastern Economics Association, Boston, MA, March 8, 2014.

“Preparing for the Aging Boom: Best Practices for Employers.” Invited panelist at a forum sponsored by the Vision Action Network and the Washington County Chamber of Commerce Partnership, Portland, OR, January 29, 2014.

“The New Era of Retirement.” Presentation at the Osher Lifelong Learning Institute at Boise State University, Boise, ID, January 9, 2014.

“The Impact of Hours Flexibility on Career Employment, Bridge Jobs, and the Timing of Retirement.” Presentation at the 2014 Annual Meeting of the Allied Social Science Associations, Philadelphia, PA, January 4, 2014.

“Schedule Matches and Work-life Fit among Older Healthcare Workers.” Presentation at the 66th Annual Scientific Meeting of the Gerontological Society of America (GSA), New Orleans, LA, November 21, 2013.

“Self-Employment Transitions among Older Americans.” Invited speaker at the AARP Public Policy Institute Roundtable on Crafting a Workforce Development System that Better Meets the Needs of Older Jobseekers and Workers, Washington, DC, November 7, 2013.

“The Uncertainty of Planning for Retirement.” Invited guest on Chicago Public Radio, WBEZ’s “Morning Shift,” Chicago, IL, November 4, 2013.

“The Role of Gender in the Retirement Patterns of Older Americans.” Invited speaker at the U.S. Department of Labor’s Older Women Workers Roundtable, Washington, DC, September 27, 2013.

“Are Gender Differences Emerging in the Retirement Patterns of the Early Boomers?” Presentation at the 88th Annual Conference of the Western Economic Association International, Seattle, WA, June 30, 2013.

“Getting Older, Getting Hired.” Invited guest on WGBH’s “Boston Public Radio,” Boston, MA, January 22, 2013.

“Employment Experiences of Older Workers in the Context of Shifts in the National Economy.” Presentation at the 65th Annual Scientific Meeting of the Gerontological Society of America (GSA), San Diego, CA, November 17, 2012.

“Retirement Patterns and the Macroeconomy, 1992 to 2010: The Prevalence and Determinants of Bridge Jobs, Phased Retirement, and Reentry among Different Cohorts of Older Americans.” Presentation at the 2012 Fall Research Conference of the Association for Public Policy Analysis and Management (APPAM), Baltimore, MD, November 9, 2012.

“New Evidence on Self-Employment Transitions among Older Americans with Career Jobs.” Presentation at the 87th Annual Conference of the Western Economic Association International, San Francisco, CA, June 30, 2012.

“Work after Retirement: Lessons for Employers and Policymakers from the United States.” Invited speaker at Eurofound’s “Income from Work after Retirement” Expert Workshop, European Foundation for the Improvement of Living and Work Conditions, Brussels, Belgium, June 15, 2012.

“The Relationship between Work Decisions and Location Later in Life.” Presentation at the 2012 Annual Meeting of the Allied Social Science Associations, Chicago, IL, January 7, 2012.

“Building Your Bridge to Retirement’?” Invited guest on AARP’s “Inside E Street” for Public Television, Washington, DC, December 7, 2011.

“How Does Occupational Status Impact Bridge Job Prevalence.” Presentation at the 2011 Annual Meeting of the Allied Social Science Associations, Denver, CO, January 8, 2011.

“Stepping Stones and Bridge Jobs: Determinants and Outcomes.” Presentation at the 2010 Annual Meeting of the Allied Social Science Associations, Atlanta, GA, January 4, 2010.

“Adapting U.S. Retirement Behavior.” Discussant at the 2009 Annual Meeting of the Eastern Economic Association, New York, NY, February 27, 2009.

“Retirement Patterns and Determinants among Individuals with a History of Short-Duration Jobs.” Presentation at the 2009 Annual Meeting of the Allied Social Science Associations, San Francisco, CA, January 4, 2009.

“The Role of Bridge Jobs in the Retirement Process.” Presentation at The Ann Richards Invitational Roundtable on Gender and the Media, Older Workers: Benefits and Obstacles for Women’s and Men’s Continued Employment, Brandeis University, Waltham, MA, October 24, 2008.

“The Role of Re-entry in the Retirement Process.” Presentation at the 2008 Annual Meeting of the Allied Social Science Associations, New Orleans, LA, January 4, 2008.

“A Micro-level Analysis of Recent Increases in Labor Force Participation among Older Workers.” Presentation at the Korea Labor Institute Conference on Panel Data, Seoul, Korea, October 25, 2007.

“Bridge Jobs and Retiree Well-being.” Presentation at the 2007 Annual Meeting of the Western Economic Association, Seattle, WA, July 2, 2007.

“Self Employment Transitions among Older Workers with Career Jobs,” Presentation at the 2007 Annual Meeting of the Eastern Economic Association, New York, NY, February 24, 2007.

“A Micro-level Analysis of Recent Increases in Labor Force Participation among Older Workers.” Presentation at the 2006 Annual Meeting of the Western Economic Association, San Diego, CA, July 2, 2006.

“Retirement Patterns and Bridge Jobs among the HRS War Babies.” Presentation at the 2005 Annual Meeting of the Western Economic Association, San Francisco, CA, July 7, 2005.

SEAK Annual National Expert Witness Conference, Hyannis, MA, June 16-17, 2005.

“The Social Security Debate: Why Should I Care about Reforms?” Invited guest for a panel discussion on Social Security Personal Accounts, Drew University Economics Department, Madison, NJ, April 12, 2005.

“The Role of the Economist in Assessing Damages for Defendants.” Presentation at Liberty Mutual Group, Marlton, NJ, March 18, 2005.

“Was the 9/11 Victim Compensation Fund a Success? A Forensic Economist’s View.” Presentation at the 2005 Annual Meeting of the Eastern Economic Association, New York, NY, March 5, 2005.

“Recent Evidence on Retirement Patterns and Bridge Jobs.” Presentation at the 2005 Annual Meeting of the Eastern Economic Association, New York, NY, March 4, 2005.

“A Retrospective Examination of the 9/11 Victim Compensation Fund Awards: Calculated vs. Actual Economic Loss Awards.” Presentation at the 2005 Annual Meeting of the Allied Social Science Associations: Expanding the Frontiers of Economics, Philadelphia, PA, January 8, 2005.

“Are Traditional Retirements a Thing of the Past?” Presentation at the U.S. Bureau of Labor Statistics, Washington, DC, December 16, 2004.

“How Well Prepared Are Massachusetts Families for Retirement?” Presentation at the New England Study Group, Federal Reserve Bank of Boston, Boston, MA, October 12, 2004.

Annual Meeting of the Allied Social Science Associations, San Diego, CA, January 3-5, 2004.

“Securing Retirement Income for Tomorrow’s Retirees.” Session Chair for the Sandell Grant Program Presentations at the Fifth Annual Conference of the Social Security Retirement Research Consortium, Washington, DC, May 15-16, 2003.

“Retirees Back at Work.” Invited guest for “On Point,” *National Public Radio*, Boston, MA, March 12, 2003.

“The Changing Retirement Income Landscape.” Presentation at the Ethics and Aging Seminar Series at Boston College, Chestnut Hill, MA, February 3, 2003.

“Social Security Reform: The Relationship between Today’s Program and Tomorrow’s.” Discussant at the 55th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA, November 26th, 2002.

“Patterns of Child Care Use among Low-Income Families.” Presentation at the National Association for Welfare Research and Statistics (NAWRS) 42nd Annual Workshop: Research, Reauthorization, and Beyond, Albuquerque, NM, August 25-28, 2002.

Annual Meeting of the Allied Social Science Associations, Boston, MA, January 7-9, 2000.

“The Outlook for Retirement Income.” Second Annual Conference of the Social Security Retirement Research Consortium, Washington, DC, May 17-18, 2000.

“New Developments in Retirement Research.” First Annual Joint Conference of the Social Security Retirement Research Consortium, Washington, DC, May 20-21, 1999.

“AHEAD (Asset and Health Dynamics Among the Oldest Old) Summer Workshop.” Survey Research Center, The University of Michigan, Ann Arbor, MI, Summer 1997.

“GSOEP-PSID Summer Workshop.” Center for Policy Research, Syracuse University, Syracuse, NY, Summer 1997.

Conference Posters

Cahill KE, James JB, Pitt-Catsoupes M, “How Do Older Healthcare Workers’ Preferences for Flexibility Affect Work and Retirement Decisions?” Gerontological Society of America (GSA) 66th Annual Scientific Meeting, November 20-24, 2013.

Wu E, Cahill KE, Bieri C, Ben-Hamadi R, Yu AP, Erder MH, “Comparison of Hospitalization Use and Health Care Costs of Elderly Major Depressive Disorder (MDD) Patients Treated with Escitalopram, Generic SSRIs, and SNRIs,” International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 14th Annual International Meeting, May 16-20, 2009.

Cahill, KE, Giandrea MD, Quinn JF, “Retirement Behavior among Individuals with Erratic Work Histories,” Gerontological Society of America (GSA) 61st Annual Scientific Meeting, November 21-25, 2008.

Jaff MR, Engelhart L, Rosen E, Yu AP, Cahill KE, “Clinical and Economic Outcomes among U.S. Medicare Beneficiaries with Lower Extremity Peripheral Arterial Disease (PAD),” International Symposium on Endovascular Therapy (ISET), January 20-24, 2008.

Giandrea MD, Cahill KE, Quinn JF, “Self Employment Transitions among Older Workers with Career Jobs,” Gerontological Society of America (GSA) 60th Annual Scientific Meeting, November 16-20, 2007.

Lee LJ, Yu AP, Cahill KE, Birnbaum HG, Oglesby AK, Tang J, Qiu Y, “Direct and Indirect Costs among Employees with Diabetic Retinopathy,” American Diabetes Association (ADA) 67th Scientific Sessions, June 22-26, 2007.

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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

STREAMLINING DEPLOYMENT OF
SMALL CELL INFRASTRUCTURE BY
IMPROVING WIRELESS FACILITIES
SITING POLICIES;

MOBILITIE, LLC
PETITION FOR DECLARATORY RULING

WT Docket No. 16-421

**REPLY DECLARATION OF KEVIN E. CAHILL, PHD
REGARDING THE ACCENTURE REPORT AND
THE ECONOMICS OF LOCAL GOVERNMENT RIGHT OF WAY FEES**

April 7, 2017

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REGARDING THE ACCENTURE REPORT AND
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I. INTRODUCTION

A. Author

1. My name is Kevin E. Cahill, PhD. I am a project director, senior economist, and litigation practice area lead at ECONorthwest, a public policy and economics consulting firm based in Portland, Oregon. I have published on a variety of topics related to applied microeconomics and have presented my research at academic conferences nationwide. I am also experienced in commercial litigation and antitrust matters, labor economics, and public policy and have testified numerous times in deposition and at trial. I earned my BA in mathematics and economics (with honors) from Rutgers College and MA and PhD in economics from Boston College. My professional and academic qualifications are described in my curriculum vitae, which is attached as Appendix A to my March 8, 2017 Declaration in this matter.¹

B. Purpose

2. This Reply Declaration addresses a recent report by Accenture that was submitted during the Comment phase in this matter.² Specifically, I address four topics in the Accenture Report that pertain to my Declaration dated March 8, 2017. These four topics are: 1) access to public rights of way; 2) local permitting and regulations; 3) fee structures; and 4) subsidizing 5G technology.

C. Summary of Opinions

3. The efficient allocation of rights of way (ROW) comes about when municipalities can charge fair market rates for ROW access. As I explained in my Declaration dated March 8, 2017, the fair market rate should “compensate the municipality not only for the administrative costs and operations and maintenance (O&M) costs associated with ROW access, but also for the fixed costs that the municipality incurred to create the ROW, the opportunity costs associated with occupying the ROW ... and any negative externalities associated with placement of a

¹ Declaration of Kevin E. Cahill, PhD, *The Economics of Local Government Right of Way Fees*, Before the Federal Communications Commission. In the Matter of Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling, WT Docket No. 16-421 (March 8, 2017) (“Cahill Declaration”).

² Amine, M. A., Mathias, K., and Dyer, T. 2017. *Smart Cities: How 5G Can Help Municipalities Become Vibrant Smart Cities*. Report commissioned by CTIA. Toronto, Canada: Accenture (“Accenture Report”). https://newsroom.accenture.com/content/1101/files/Accenture_5G-Municipalities-Become-Smart-Cities.pdf.

facility in the rights of way ...”^{3,4} Such pricing does not inefficiently limit the economic benefits of 5G technology described in the Accenture Report. Quite the contrary. Such pricing leads to the efficient allocation of ROW, a scarce resource, and can also be expected to lead to the most efficient deployment of 5G, which may or may not be within the rights of way.

4. Regarding the benefits of 5G, the authors of the Accenture Report estimate that, “This next generation of wireless technology is expected to create 3 million new jobs and boost annual GDP by \$500 billion, driven by a projected \$275 billion investment from telecom operators.”⁵ Competition within and between municipalities, and between municipalities and private land owners, implies that municipalities have little incentive to impede the rollout of 5G technology and every incentive to work with telecom operators to bring such sizable benefits to their communities.
5. Regarding local permitting and regulations, the Accenture Report largely ignores the costs to municipalities for processing and managing the volume of anticipated industry requests for 5G ROW access. My understanding is that a common model is to charge a fee that covers the costs that a municipality incurs in conducting the inspections and proceedings required to allow entry, fees that cover ongoing costs associated with inspection or expansion of facilities, and a rent that reflects, in effect, the value of the property occupied. All of these costs, including the fixed and variable costs associated with managing requests to access ROW, need to be taken into account by a municipality to achieve the efficient allocation of the ROW. Indeed, one way to ensure that municipalities have adequate resources to respond to the increase in ROW requests is by charging market rates. As noted above, this rate should include the full incremental administrative and operations and management (O&M) costs, in addition to considering fixed costs, opportunity costs, and negative externalities.

³ Cahill Declaration, ¶ 3.

⁴ Throughout this report I use the term “market rate” in an economic sense. As I noted in my Declaration dated March 8, 2017, “[f]rom an economics perspective the term ‘cost’ as it pertains to access to ROW, and the ‘market rate’ based on this cost, incorporates both those associated with regulatory fees (e.g., administrative costs and operations and management costs) and those associated with market rents (e.g., opportunity costs and negative externalities)” (Cahill Declaration, fn. 2).

⁵ Accenture Report, p. 3.

6. Regarding fee structures, the Accenture Report implies that fees structures could be a barrier to the deployment of 5G technology and make implementation financially unfeasible.⁶ This statement simply does not pass any reasonable smell test. It seems implausible that the economic benefits of 5G technology are expected to increase GDP *annually* by one half *trillion* dollars but that a subsidy is required due to existing fee structures. More realistically, competitive forces will reveal the optimal fee structure for ROW access in addition to the optimal level.
7. Regarding subsidies, allowing telecom operators to access ROW at below-market rates constitutes an implicit subsidy that will result in the overutilization of ROW for the purposes of deploying 5G technology. Such overutilization would likely inhibit the rollout of subsequent generations of technology and thereby discourage the most efficient deployment of 5G in an intertemporal sense. As I understand it, based on the report by Andrew Afflerbach, no 5G standards have been adopted yet, and it is far from clear how 5G will be deployed, and with what form factors.⁷ Essentially, by placing a thumb on the scale in the form of a subsidy, the FCC could be encouraging deployment with high negative externalities (e.g., deployments that reduce the value of adjoining properties or affect third party use of assets) because municipalities will be unable to charge rates that discourage such deployments.

II. COMMENTS ON ACCESS TO PUBLIC RIGHTS OF WAY

8. The Accenture Report notes the importance of access to public rights of way to the rollout of 5G technology. The report states, “Without Public Rights of Way, the deployment of next-generation small-cell technology will continue to suffer—and communities will not be able to enjoy its benefits.”⁸ I note at the outset of this report that, as a technical matter, my understanding is that there is evidence before the Commission, submitted in the report by

⁶ Accenture Report, p. 13.

⁷ Report and Declaration of Andrew Afflerbach for the Smart Communities Siting Coalition, Before the Federal Communications Commission. In the Matter of Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilite, LLC Petition for Declaratory Ruling. WT Docket No. 16-421 (March 8, 2017) (“Afflerbach Declaration”), p. 15.

⁸ Accenture Report, p. 13.

Andrew Afflerbach, that calls this assertion into question on several basic levels.⁹ For the purposes of this report, I will take this statement as true. As I explain below, even if this statement is true, it does not necessitate limiting fees that can be charged by localities (whether for permits or for rents) to administrative costs and operations and maintenance (O&M) costs.

9. As I documented in my Declaration dated March 8, 2017, a municipal ROW is a scarce economic resource.¹⁰ As such, a municipality's choice to allocate ROW for one purpose means that, so long as the user has access to the ROW, the municipality foregoes other opportunities to use the resource.¹¹ The efficient allocation of this scarce resource depends on the price municipalities charge users to access the ROW. A price set too low (i.e., below the market-clearing price) will result in excess demand and an overutilization of the resource. A price set too high will lead to insufficient demand and an underutilization of the resource. Moreover, one would expect that different uses of ROW would have different impacts on surrounding properties, a point made in the report before the Commission on potential impacts on property values.¹² Underpricing right of way encourages deployments with negative externalities, because municipalities cannot charge to discourage such uses, and further discourages investment on behalf of potential users that may result in more innovative deployments.
10. Accenture estimates that, "This next generation of wireless technology is expected to create 3 million new jobs and boost annual GDP by \$500 billion, driven by a projected \$275 billion investment from telecom operators."¹³ Municipalities have every incentive to work with telecom operators to bring such sizable benefits to their communities and have little or no incentive to impede the rollout of 5G technology. As I noted in my Declaration dated March

⁹ Afflerbach Declaration, p. 16.

¹⁰ Cahill Declaration, ¶ 8.

¹¹ This statement does not imply that the ROW cannot be shared. My point is that the use of ROW forecloses the use of that space by others. For example, the placement of a structure, such as a pole, in the right of way favors the pole owner and those who wish to place facilities on the pole. The presence of the pole, however, can block other uses of the ROW (e.g., the placement of a public trash can at that spot that helps keep streets clean).

¹² Report and Declaration of David E. Burgoyne for the Smart Communities Siting Coalition, Before the Federal Communications Commission. In the Matter of Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling. WT Docket No. 16-421 (March 7, 2017) ("Burgoyne Declaration"), pp. 1-2; 5-9.

¹³ Accenture Report, p. 3.

8, 2017, competition both within and across municipalities and between municipalities and private property owners disciplines municipalities from overcharging for access to ROW.¹⁴

11. The determination of the fair and reasonable market price for accessing public ROW will depend on the circumstances of each municipality, including the preferences of its citizens. To be sure, some municipalities may choose to price below the market rate, an implicit subsidy, to attract telecommunications companies, just as localities sometimes subsidize new business entry into a community. Indeed, an economist would expect differences in pricing to encourage the efficient use of the rights of way, and such differences in pricing can manifest itself in many different ways (e.g., public-private financing, service subsidies). In contrast, a situation in which every community is required to charge less than market value for the deployment of a particular technology is equivalent to requiring all municipalities to offer a subsidy, regardless of whether such a subsidy is justified. Such forced subsidies (when not the outcome of a well-vetted public policy objective) will inevitably lead to an inefficient outcome with respect to the use of ROW and possibly also with respect to the use of private property.
12. In short, charging the market rate to access public ROWs will help ensure efficient allocation of the ROW resource.¹⁵ It will also help ensure that municipalities have sufficient labor and related resources to process the expected dramatic increase in 5G ROW requests, discussed in the following section.

III. COMMENTS ON LOCAL PERMITTING AND REGULATIONS

13. The Accenture Report notes that deploying 5G technology throughout municipal ROW will “pose a tremendous challenge to both telecom operators and municipalities.”¹⁶ The remainder of this section in the Accenture Report, however, describes problems exclusively associated with telecom operators, such as slow turnaround and approval times, numerous tribunals for approval, and discretionary reviews of installations. Further, very few specifics are provided in this section, and it is not clear whether the authors of the Accenture Report have any

¹⁴ Cahill Declaration, ¶¶ 13-18.

¹⁵ I use the term “market rate” in an economic sense. See footnote 4 for more information.

¹⁶ Accenture Report, p. 13.

significant basis for their assertions or whether the authors have conducted any independent effort to assess delays.

14. Setting aside these verification issues, the Accenture Report ignores the difficulties that *municipalities* will face processing and managing the volume of industry requests for 5G ROW access. The Accenture Report notes that ROW requests could be up to 100 times greater than requests for current technology.¹⁷ Increasing such requests by a factor of 100 will place unprecedented demands on municipal staff, resources, and budgets, as shown in the Smart Communities filing, and the filing by other municipalities in this docket.¹⁸
15. The Accenture Report implies that 5G technology will be deployed coincidentally with existing towers: “Existing towers will provide coverage for miles, while small cells will support the increased needs of a Smart City.”¹⁹ Such an approach burdens municipalities with managing existing antenna sites in the ROW, along with the rollout of 5G ROW requests, and thereby increases costs on municipalities beyond just the demands for 5G ROW access.
16. As I describe in my Declaration dated March 8, 2017, one way of ensuring that municipalities have adequate resources to respond to the increase in ROW requests is by charging market rates to access municipal ROWs.²⁰ In addition to taking into account fixed costs, opportunity costs, and negative externalities, the rate should also take into account the full incremental administrative and operations and management (O&M) costs that come with granting access to ROW.²¹ Restricting what municipalities can charge would result in an implicit subsidy to telecom operators at the expense of municipalities and lead to an inefficient allocation of ROW.
17. A related point is that the Accenture Report, in commenting about “slow” turnaround and approval times and partial approvals, is silent about instances in which these outcomes are due to telecom operators’ actions. Incomplete applications for ROW access, for example, and the increased burden this imposes on municipalities, can be a significant driver of turnaround

¹⁷ Accenture Report, p. 13.

¹⁸ Afflerbach Declaration, pp. 15; 20-21.

¹⁹ Accenture Report, p. 12.

²⁰ Again, I use the term “market rate” in an economic sense. See footnote 4 for more information.

²¹ Cahill Declaration, ¶¶ 21-22.

times for processing applications.²² Yet such explanations are left out of the Accenture Report.

18. Finally, the Accenture Reports provides no documentation or citations to support the purported challenges that telecom operators face when having to comply with municipal permitting and regulation requirements. The Accenture Report includes statements such as, “In many cities...,” and “Some cities ...,” without attribution or support.²³ As such, their description of alleged problems amounts to unsubstantiated anecdotes.

IV. COMMENTS ON FEE STRUCTURES

19. The Accenture Report implies that fees structures could be a barrier to the deployment of 5G technology and make implementation unfeasible. “In many instances, fees imposed on small cells are comparable to those imposed on macro cells without regard to their differences. The application fees and other acquisition fees (including rental) of macrocell sites are applied to each of the 50 to 100 small cells required resulting in costs being multiplied and deployment becoming financially unfeasible.”²⁴
20. As the reports prepared by the Smart Communities have shown, however, placement in the rights of way can involve significantly different and more complex issues than, say, placement of a tower on farmland.²⁵ While the latter undoubtedly requires important analyses, deployment of small cell technology requires coordination with other utilities, consideration of Americans with Disabilities Act (ADA) impacts, potential traffic interference/sight line, and other issues that may not arise at all for a larger facility. Likewise, the “small cell” may not be physically “small” at all as the term refers to its covering a small area. It is far from obvious that because one cell covers a large area, and another serves a small area, that issues for the placement of one are less costly to consider than the other.²⁶

²² Afflerbach Declaration, pp. 20-21.

²³ Accenture Report, p. 13.

²⁴ Accenture Report, p. 13.

²⁵ Afflerbach Declaration, pp. 2-8; Report and Declaration of Steven M. Puuri for the Smart Communities Siting Coalition, Before the Federal Communications Commission. In the Matter of Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies; Mobilitie, LLC Petition for Declaratory Ruling. WT Docket No. 16-421 (March 7, 2017) (“Puuri Declaration”), pp. 1-5.

²⁶ Afflerbach Declaration, pp. 2-11.

21. Setting aside the issue that no supporting documentation is provided for the Accenture Report's claim regarding "small cell" fees, and that their claim is in fact contradicted by evidence before the Commission,²⁷ this statement indicates that 5G technology might not be financially feasible if telecom operators are required to pay the market rate. In effect, the industry needs municipalities to subsidize 5G technology for deployment to be financially feasible. This statement simply does not pass any reasonable smell test. It seems implausible that the economic benefits of 5G technology are expected to increase GDP *annually* by one half *trillion* dollars but that a subsidy is required due to existing fee structures. If the technology is as beneficial as Accenture claims, one would expect that the industry would be able to charge for services in a manner that allows it to pay fair market value for the resources it will use. If the industry will be unable to pay fair market value for its inputs, then that implies the economic benefits touted in the Accenture Report are overstated. Generally speaking, either the economic benefits are very large or the industry needs to be subsidized.
22. Another reason that arguments about fee structures do not make sense is that municipalities have every incentive to implement an efficient fee structure. As I noted in my Declaration dated March 8, 2017, competition not only reveals the market rate for ROW access, but competition also reveals the optimal form in which payments are made.²⁸ If the benefits of 5G are as large as Accenture claims them to be, municipalities have every incentive to work with telecom operators with respect to the level and structure of fees to facilitate the adoption of the new technology in an economically efficient manner.
23. Finally, given the competitive environment in which municipalities reside, one economically meaningful approach to assessing the validity of the industry's arguments regarding 5G ROW requests is to consider the municipalities' perspective. Does a municipality incur fewer costs to process and manage ROW requests for 5G versus existing technology? Are economies of scale possible when a municipality processes a 100-fold increase in ROW requests from multiple providers in a short timeframe? If cost savings can be obtained through a different pricing structure, a municipality will adopt that structure lest its competitors do so and gain a strategic advantage in the process.

²⁷ Afflerbach Declaration, pp. 2-8; 15.

²⁸ Cahill Declaration, ¶ 33.

V. COMMENTS ON SUBSIDIZING 5G TECHNOLOGY

24. Just because an activity has an economic benefit, however large, does not imply that the activity is worthwhile or that a subsidy is warranted. The benefits of any activity need to be weighed against the costs in order to achieve an economically efficient outcome. The Accenture Report focuses almost exclusively on the telecom industry's interests, and ignores the municipalities' perspective and the costs municipalities will incur. The fact that 5G deployment will support jobs, for example, is no reason to require municipalities to charge below-market ROW fees to promote the rollout of 5G technology.²⁹ Such an action would simply transfer costs from the industry—and from their customers, the consumers of 5G technology—to municipalities. Critically, if the economic impact analysis conducted by Accenture is correct, we would expect to see these economic benefits even if the market value for ROW access is charged.
25. Pricing below the market rate amounts to an implicit subsidy for 5G technology. Of course, in many instances, it is in societal interest to subsidize an industry. As noted above, for example, and as stated in my initial Declaration, some municipalities might offer discounts for ROW access in order to promote an earlier adoption of 5G technology in their communities. Further, some broad-based policy in which subsidies are applied to all communities could be socially optimal should the Commission decide that deployment of 5G technology serves some broader social interest or that some market failure exists in the industry, such as a free-rider problem. Crucially, the Accenture Report provides no justification for such a society-wide subsidy for 5G technology, yet the industry's advocacy for a below-market rate is, at its core, a request for such a subsidy. As noted throughout this report, forcing municipalities to offer a subsidy via below-market pricing for access to its ROW will inevitably result in an overutilization of ROW and an inefficient deployment of 5G technology.
26. For example, one consequence of subsidizing 5G deployment through below-market rates is that overutilization of ROW for the purposes of deploying 5G technology could very well inhibit the rollout of subsequent generations of technology. This places regulators in the

²⁹ The Accenture Report states, "Communities of all sizes are likely to see jobs created. Small to medium-sized cities with a population of 30,000 to 100,000 could see 300 to 1000 jobs created. In larger cities like Chicago, we could see as many as 90,000 jobs created" (p. 4).

position of picking “winning” technologies, from a chronological standpoint, rather than having market forces dictate the efficient outcome. Another consequence is that below-market pricing could inhibit innovation with respect to how ROW are used, such as a recent innovative collaborative between Philips and PG&E with respect to how a two-way communicating meter was attached to a smart pole.³⁰

VI. CONCLUSION

27. The efficient allocation of ROW access comes about when municipalities can charge a market rate for public ROW access. This rate should compensate the municipality for its administrative costs and O&M costs, its fixed costs that were incurred to create the ROW, its opportunity costs of providing access to the ROW, and any negative externalities from the user. This market rate will not inhibit the efficient rollout of 5G technology, nor will it inefficiently limit the economic benefits of 5G technology described in the Accenture Report.

³⁰ Philips. 2015. *Philips and City of San Jose Partner to Deploy Philips SmartPoles Pilot Project Combining Energy Efficient LED Street Lighting with Wireless Broadband Technology from Ericsson*. Somerset, NJ: Philips. <http://www.philips.com/a-w/about/news/archive/standard/news/press/2015/20151208-Philips-and-City-of-San-Jose-partner-to-deploy-Philips-SmartPoles-pilot-project.html>.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 7, 2017.

A handwritten signature in blue ink, appearing to be 'K. Cahill', with a long horizontal stroke extending to the right.

Kevin E. Cahill, PhD
Project Director
ECONorthwest

EXHIBIT O



BURGOYNE
APPRAISAL COMPANY

DAVID E. BURGOYNE ASA SR/WA
CERTIFIED GENERAL REAL ESTATE APPRAISER
MICHIGAN, INDIANA, NORTH AND SOUTH CAROLINA
AQB CERTIFIED USPAP INSTRUCTOR

MARK J. ST. DENNIS
BRIAN A. O'NEILL SR/WA RW-AC
SCOTT M. CARLSON
RICHARD J. ANTIO
GOKHAN ANDI

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

STREAMLINING DEPLOYMENT)	
OF SMALL CELL INFRASTRUCTURE)	
BY IMPROVING WIRELESS FACILITIES	)	WT Docket No. 16-421
SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	
)	

REPORT AND DECLARATION OF DAVID E. BURGOYNE
FOR THE SMART COMMUNITIES SITING COALITION



BURGOYNE

APPRAISAL COMPANY

DAVID E. BURGOYNE ASA SR/WA
CERTIFIED GENERAL REAL ESTATE APPRAISER
MICHIGAN, INDIANA, NORTH AND SOUTH CAROLINA
AQB CERTIFIED USPAP INSTRUCTOR

MARK J. ST. DENNIS
BRIAN A. O'NEILL SR/WA RW-AC
SCOTT M. CARLSON
RICHARD J. ANTIO
GOKHAN ANDI

Burgoyne Appraisal Company has investigated the impact of communication towers and communication equipment on nearby property values, including residential properties, commercial properties, and properties in historically designated areas. Our report on such impacts is based upon our more than thirty years of professional appraisal experience and drawing upon literature search of other articles and appraisal papers.

Please note that due to the nature of the report our investigation is general in nature and is not specifically related to any given location.

IMPACT OF COMMUNICATION TOWERS AND EQUIPMENT ON NEARBY PROPERTY VALUES

I. Executive Summary

- The Burgoyne Appraisal Company ("Burgoyne"), drawing upon its thirty-two (32) years of experience as a Real Estate Appraiser specializing in detrimental conditions, takings, adverse impacts and right-of-way, finds that:
- As a general matter, assuming two generally comparable areas, aesthetics will have the most significant impact on property values. If, for example, I assume two houses of equal age, size and condition in the same residential area, the relative value of one home will be most affected by the aesthetics in the immediate vicinity of that home.
- As a general matter, visible utility structures do adversely affect property values. This is reflected in the fact that, as a general matter property values are higher in areas where there are no aboveground utility facilities (other than lighting) than in areas where utilities are aboveground.
- The impact will generally be related to the size of the facility, the characteristics of the facility, its location (including proximity), and visibility. That is to say, I would expect a tower or other structure that is larger than existing structures to have a greater impact on property values than a structure that is similarly sized and in keeping with other structures. I would expect that installation of equipment that is widely visible to have a more significant impact than equipment that is not (so, for example, a transformer at the top of a pole would have less of an impact than a box of similar size that is within a normal site line, or on the

ground). The characteristics of the facility are also important. An unorganized conglomeration of various boxes and wires would have a greater impact than a streamlined and contained single cabinet.

The literature does not tell us the impact of various iterations of DAS designs on residential properties; there is more information about towers of the sort imposed by Mobilitie. Nonetheless, based on my experience, it would be unwise to assume that the impact of additional ground cabinets, or of structures of the sort that entities would be entitled to install under the FCC's Section 6409 rules is zero or so near to zero. Just looking at the literature on property values in underground v. non-underground areas, there are reasons for concern that justify maintenance of significant latitude at the local level over siting and compensation.

While it is certainly recognized that DAS systems and Cellular antennas are an important part of our nation's infrastructure, and that it is inevitable that new antennas will need to be installed as we move into the future, it is important for municipalities (and property owners, in the case of right-of-way easements) to retain significant control over the size, location, scope, expansion, and characterization of the installations. This is because adverse impacts from negative externalities vary considerably with the size, location, scope, expansion, and characterization of the installations.

Hidden, smaller, and neatly mounted "small cells," will have an impact, but that impact will be lesser than other alternatives. Likewise, there needs to be control over future growth of installed facilities. It is my opinion that the Commission needs to analyze those impacts in detail before considering additional rules. It is also my opinion that municipalities need to retain some regulatory control over these installations in order to minimize impacts and protect the health, welfare, and safety of their residents in the same way that other regulations and the exercise of reasonable police powers do.

II. Qualifications

David E. Burgoyne, ASA, SR/WA, is a native of Ann Arbor, Michigan and attended Greenhills School in Ann Arbor. He graduated in 1981 from Colgate University in Hamilton, New York with a Bachelor of Arts Degree in Liberal Arts with a concentration in Physics-Astronomy. He also served as a graduate instructor at the University of Wyoming as a Doctoral Candidate in Astrophysics.

Mr. Burgoyne is an independent fee appraiser currently licensed as a Certified General Real Estate Appraiser by the States of Michigan, Indiana, North and South Carolina. Mr. Burgoyne is a Senior Member of the American Society of Appraisers holding the ASA Designation for Real Property. Mr. Burgoyne is currently re-accredited as an ASA through June 10, 2017. He is also a senior member holding the SR/WA designation and is a Past Chapter President of the International Right of Way Association. Mr. Burgoyne is currently re-certified as an SR/WA through June 15, 2018.

Mr. Burgoyne is an AQB certified USPAP instructor #44603 (expiring March 31, 2018) and is also a CLIMB Certified Instructor of right-of-way appraisal and other courses for IRWA, including courses on the appraisal of partial takings, easement valuation, appraisal review, ethics and standards, USPAP, adult education, and the valuation of contaminated properties. In 2015, Mr. Burgoyne was awarded the 2014 W. Howard Armstrong International Instructor of the Year Award by the International Right of Way Association.

Mr. Burgoyne has qualified as an expert witness in the United States Court of Claims, the United States District Courts for the Eastern and Western Districts of Michigan; the Michigan Circuit Courts of Allegan, Barry, Cass, Eaton, Genesee, Grand Traverse, Huron, Ingham, Jackson, Kent, Lapeer, Leelanau, Lenawee, Macomb, Montmorency, Muskegon, Oakland, Ottawa, Tuscola, Washtenaw, Wayne, and Wexford Counties; Hamilton and Marion Counties in Indiana, The Michigan Public Service Commission, and The Michigan Tax Tribunal. He has also been appointed as an independent appraiser by the U. S. District Court, Eastern District of Michigan.

FORMAL EDUCATION

Greenhills School - Ann Arbor, Michigan (1976)

Colgate University - Hamilton, New York: BA in Liberal Arts - concentrating in Physics-Astronomy (1981)

Courses included Architecture, Economics, Mathematics, Statistics and Economic Geography.

University of Wyoming - Laramie, Wyoming: Ph.D. candidate in Astrophysics. (1981-1982)

III. Introduction

Our analysis and the literature we reviewed is focused on single family residential units, and does not take into account any location-specific analysis. For example, we do not consider whether there are special impacts of an installation on particular historic properties, or commercial properties. Burgoyne understands that this report will be contained in a filing by Smart Communities Siting Coalition in response to the Federal Communications Wireless Telecommunications Bureau request for public input¹ including, but not limited to suggestions offered by Mobilitie in its Petition for Declaratory Ruling.²

Burgoyne provides the following analysis following a literature scan on appraiser research on communications towers impact and on Mr. Burgoyne's more than 32 years in business.

¹ Public Notice, *Comment Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies*; *Mobilitie, LLC Petition for Declaratory Ruling*, WT Docket No. 16-421 (released Dec. 22, 2016)("Public Notice").

² See *Mobilitie, LLC Petition for Declaratory Ruling, Promoting Broadband for All Americans by Prohibiting Excessive Charges for Access to Public Rights of Way* (filed Nov. 15, 2016)(*Mobilitie Petition*).
DET02:2350248.1

IV. Background

The FCC Notice focuses on small cells and DAS systems. It is our understanding that the placement of these systems could involve:

- Erection of a new tower or monopole 100 to 120 feet in height in public right-of-way. This in fact appears to be proposed by applicant Mobilitie.
- Placement of new base station equipment on existing utility poles in the rights of way, which may involve an initial extension of anywhere between 3-15 feet to that pole for placement of an antenna at the top of the pole, and addition of equipment cabinets, plus additional utility infrastructure (meters and disconnect boxes). It is our understanding that the wireless industry is seeking authority in several states to place equipment cabinets as large as 28 cubic feet on the poles, which could then be expanded significantly as of right under the FCC's Section 6409 rules. In addition, there may be ground cabinets for back-up power or for equipment that might otherwise be placed on the poles of up to 50 cubic feet. Under Section 6409, the placement of these facilities could result in up to three additional ground cabinets being added in the right of way in front of a residential unit.
- Erection of new utility poles, sometimes exceeding 40 feet in height, in the public right-of-way for placement of the above referenced equipment
- Please note that public road rights-of-way are often owned in fee by the municipality but are also not uncommonly easements over private property owned in fee by a private citizen or company. This can be common in areas served by the Government Survey System (outside of the original 13 colonies as well as portions of Ohio, Kentucky and Tennessee). As a result, in these cases, neither the municipality, nor the utility, have complete authority to dictate what is permitted within the right of way.³
- From the point of view of sound appraisal practice, it is necessary to presume and consider full utilization of rights granted by virtue of a particular authorization. That is, one must consider the impact of a 120 foot pole if a 120 foot is allowed as of right (even if only a 100 foot pole is installed in the instant case at this time). Likewise, in assessing whether the impact of the authorization of a DAS in a residential neighborhood, one would consider the additions and expansions that would be permitted as of right under the Commission's Section 6409 rules.

³ "... "[a]ctivities by the owner of the dominant estate [easement holder] that go beyond the reasonable exercise of the use granted by the easement may constitute a trespass to the owner of the servient estate." *Schadewald v Brule*, 225 Mich App 26, 40; 570 NW2d 788 (1997)... p.2

....we decline to infringe on the private property rights of a landowner through unsupported implication, particularly when there is a complete absence of any legislative intent in the LDA to give a public utility free reign to build on an easement as it pleases. ... AT&T provided no legal basis, facts, or documentary evidence to establish that the city or county has the legal authority to decide on the nature, size, or scope of equipment a utility may install in a utility easement or whether the city or county actually considers said questions when they issue a building permit...p.3. 289 Mich App 70 (2010)

Thus, unless a provider can agree otherwise, if a DAS cabinet is not subject to concealment elements, it appears an appurtenance up to 6 feet could be attached horizontally to the same pole, and that appurtenance would only be subject to the limits that might be imposed by the owner of the pole.

- In this case, I have attempted to consider the impacts of various “small cell” and “DAS” installations by Mobilitie and others, both in light of, and without considering the impact of the FCC Section 6409 rules. I have also looked at state legislation and considered possible impacts if facilities of the permitted size were installed.

V. Areas of Concern

The following areas of concern have been considered and investigated. The most significant are discussed in the following sections.

- Market resistance (or stigma) in general.
- Aesthetics.
- Underground Utilities.
- Changes in the highest and best use of properties.
- Wireless infrastructure and service providers’ history of paying for the right to place towers on private property.
- Perceived safety risks from potential failure of a structure.
- Right of way easements

A. Market Resistance

Market resistance (or stigma) in general is quantified in scholarly articles and peer-reviewed journal publications as it relates to the impact of communication towers and equipment on nearby property values. Hedonic studies and surveys generally address market resistance to the placement of new towers or equipment without regard to the cause of said market resistance.

There has been significant research regarding the question of the impact on residential property values from construction of cell phone towers in neighborhoods. The results of these studies vary but they commonly indicate that there is a significant impact. While the magnitude of the impact varies, the studies uniformly indicate that there is a significant impact on residential property values from installation of cell phone towers. Not surprisingly, the studies that show little or no impact are universally commissioned by and paid for by the telecommunications industry.

Most studies have dealt with more conventional, larger towers and not DAS installations. These studies would nevertheless be directly applicable to the proposed 100 to 120 foot monopole referenced on the previous page. As to “small cell” and DAS

installations, it should be noted that “small cell” references the size of the coverage area and not necessarily the size of the equipment. Furthermore, small cell and DAS installations will generally be located much closer to nearby properties and they will be installed in hundreds of locations ubiquitously. The FCC Public Notice dated December 22, 2016 states “Although the facilities used in these networks are smaller and less obtrusive than traditional cell towers and antennas, they must be deployed more densely – *i.e.*, in many more location – to function effectively (Page 1).

In addition, to numbers that exceed the location of larger towers by orders of magnitude, small cell and DAS installations are often directly within the line of site (midway up a 40 foot pole, for example) and even include ground cabinets, which are particularly egregious. Even if the individual impact of small cells is lesser than for larger towers (which is by no means a given), this may be offset or partially offset by the location, closer proximity and the numbers that exceed tower installations by orders of magnitude. Some of the studies are briefly discussed below.

Sandy Bond and Ko-Kang Wang performed a 2005 study in New Zealand where they support a 15% diminution in residential property value within 300 Meters of communication antennas. Their Summer 2005 publication in the *Appraisal Journal* (as published by the Appraisal Institute, Summer 2005, Pages 256 – 277) summarizes this study. They indicate survey results ranging from 10% to over 20% diminution, which is supported by multiple regression analysis (a hedonic study) indicating 21% diminution in residential property values.

Sandy Bond also performed and presented a study from December 2003 in Florida that supported just over 2% diminution.

Stephen L. Locke and Glenn C. Blomquist published “The Cost of Convenience: Estimating the Impact of Communication Antennas on Residential Property Values” in *Land Economics* in February 2016. This is the most current study. They conclude that a visible antenna up to 1,000 feet away (vs 4,500 feet as the control) results in a market diminution of 1.82% for residential homes (\$3,342 per home in the market studied). While this seems like a relatively small percentage, they correlate this to an Aggregate impact of a reduction of market value of Ten Million Dollars when applied to all of the homes around a single tower in their study area.

While there have not been any scientific studies of the impact on property values from small cell and DAS deployments, there are many anecdotal examples indicating both a negative market perception and adverse impacts on property values. (Of course, negative market perception is precisely what causes an adverse impact on property values). These include published articles and petitions from Real Estate Professionals ranging from Manhattan to Burbank indicating negative impact, reduced property value, and market resistance. From an August 10, 2010 article in the New York Times...

“TINA CANARIS, an associate broker and a co-owner of RE/MAX Hearthstone in Merrick, has a \$999,000 listing for a high ranch on the water in South Merrick, one of a handful of homes on the block on the market. But her listing has what some consider a disadvantage: a cell antenna poking from the top of a telephone pole at the front of the 65-by-100-foot lot. “Even houses where there are transformers in front” make “people shy away,” Ms. Canaris said. “If they have the opportunity to buy another home, they

do.” She said cell antennas and towers near homes affected property values, adding, “You can see a buyer’s dismay over the sight of a cell tower near a home just by their expression, even if they don’t say anything.”

B. Aesthetics and Underground Utilities

In 32 years of experience as a Real Estate Appraiser specializing in detrimental conditions, takings, adverse impacts and right-of-way, I have found that aesthetics (or rather the adverse impact on aesthetics) of externalities routinely has the largest impact on property values. As a result, proximity to towers of all types (cell, wind turbine, and electric transmission) has an impact on property values. The same is true with all sorts of surface installations such as pump stations and communication equipment boxes. This would apply to new small cell and DAS equipment, although again, one would expect that the less intrusive the facility, the less significant the impact. Small cell and DAS installations can be unsightly, bulky, inconsistent, and even noisy. A few demonstrative photos are included on Page 10.

While it is certainly recognized that DAS systems and Cellular antennas are an important part of our nation’s infrastructure, and that it is inevitable that new antennas will need to be installed as we move into the future, it is important for municipalities (and property owners, in the case of right-of-way easements) to retain some control over the size, location, scope, expansion, and characterization of the installations. This is because adverse impacts from negative externalities vary considerably with the size, location, scope, expansion, and characterization of the installations.

All things being otherwise equal...

- Larger facilities have a greater impact than smaller facilities.
- Facilities on the ground and located closer to common sight lines have a greater impact than those that are less visible.
- Underground facilities have a lesser impact than above-ground facilities in most instances (although there are cases where the structures required for vaulting may be as intrusive as the above-ground facilities).
- Streamlined and contained facilities have a lesser impact than unorganized conglomerations of diverse elements.
- Impact tends to lessen over time as a facility remains unchanged so that changes and expansions have an additional negative impact.
- Facilities that are designed to be in balance with existing utility structures have a lesser impact than less harmonious installations. For example, an above ground facility will have a greater impact in an area with existing underground utilities. And a new pole that is three times higher than existing poles will have a greater impact than a new pole that is the same height as existing poles. Please reference the proposed Tx 120 (120 foot) Mobilitie tower shown below (particularly as compared to the existing wood utility poles).



Likewise, please compare this set of examples of unorganized and uncontrolled conglomerations of diverse elements with more streamlined installations.



It is not an accident that the articles, cases, and publications of the wireless industry often address circumstances that involve *hiding* wireless facilities, or show pictures of physically small “small cells” neatly mounted. Hidden, smaller, and neatly mounted “small cells,” will have an impact, but that impact will be lesser than other alternatives. Likewise, there needs to be control over future growth of installed facilities.

It is my opinion that the Federal Communications Commission should analyze the potential impact of small cell and DAS deployments in detail before considering additional rules. It is important for the Commission to have information as to which installations may have *De Minimis* impacts and which may have significant impacts before establishing national rules.

It is also my opinion that municipalities need to retain significant regulatory control over these installations in public rights-of-way in order to minimize impacts and protect the health, welfare, and safety of their residences in the same way that other regulations and the reasonable exercise of police powers have over the last hundred years.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 7, 2017.

A handwritten signature in black ink, appearing to read 'David E. Burgoyne'.

David E. Burgoyne, ASA, SRWA
Certified General Real Estate Appraiser
(Indiana, Michigan, North and South Carolina)

EXHIBIT P

6480 Zeeb Road, Dexter, MI 48130

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

In the Matter of)	
COMMENT SOUGHT ON STREAMLINING	)	WT Docket No. 16-421
DEPLOYMENT OF SMALL CELL)	
INFRASTRUCTURE BY IMPROVING WIRELESS)	
FACILITIES SITING POLICIES;)	
)	
MOBILITIE, LLC)	
PETITION FOR DECLARATORY RULING)	

**REPORT AND DECLARATION OF STEVEN M. PUURI
FOR THE SMART COMMUNITIES SITING COALITION**

About the Author

I have been involved in road design safety issues for 25 years on behalf of Washtenaw County Road Commission, Michigan, and most recently as a consultant to the County Road Association of Michigan. My formal education includes an engineering bachelor of science degree in 1978 from Michigan State University, as well as various continuing education workshops and seminars on road safety and operation. The commentary and opinions I offer below are based upon this education and experience dedicated to keeping roadways safe for the motoring public as well as other users of the rights of way. See my CV attached as **Exhibit A**.

Background

Road agencies across the State of Michigan and the rest of the United States, have recognized for years that roadsides should be maintained as near free of obstacles as possible. A roadside obstacle is defined as any object that projects above the ground more than 4 inches and which is rigid or non-forgiving when struck by a vehicle. A considerable amount of effort has been invested in Michigan to maintain the roadsides clear of non-critical obstacles that can be hazardous to drivers and passengers if their vehicle leaves the improved portion of the roadway or road surface.

Nationally Recognized Road Safety Guidelines

The American Association of State Highway and Transportation Officials (AASHTO) is the primary source of guidance on road and road right of way safety design and has established guidelines for state and

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local agencies in the United States. AASHTO has created various standing committees that review transportation research studies and promulgate guidelines on specific areas of road safety. The AASHTO Highway Subcommittee on Design developed the roadside design guidelines, which in my opinion specifically apply to those Communication Service Providers (CSP) installations recently being proposed along roadways. This committee developed guidelines that establish nationally recognized best practices for safe roadside design which are published in the AASHTO Roadside Design Guidelines.

Roadside Design Guidelines

The AASHTO Roadside Design Guidelines 4th edition was published in October 2011 and has been updated most recently as of 2015. Typically, the Michigan Department of Transportation adopts the guidelines for use in Michigan and then each road agency can and typically does adopt the guidelines for use on their particular road system. These guidelines include recommended best safe design practices to assure that roadsides are free of obstacles or, if an obstacle must be placed within the clear zone, it recommends that a crash tested barrier system should also be installed to minimize the injuries to drivers and passengers should an errant vehicle collide with the roadside obstacle. The reason that these are treated as guidelines, rather than adopted as strict code requirements, is that there are enough locally unique variations in roadways (as a result of the historical evolution of particular roadways, as well as conditions and uses of surrounding property) that states and localities require latitude in the application of the guidelines. Nonetheless, these guidelines reflect practices developed over years of experience and the accumulation of extensive accident statistics to ensure that roadways are as safe as possible. Safety encompasses immediate concerns (will a structure add to the risk of death or injury to those using the roadway; will it interfere with uses of the roadbed by other utilities) but also longer term concerns: (for example, will the road be more vulnerable to collapse risks, will the road be more likely to crack or buckle, will the underpavement structure of the road be adversely affected?).

Documents Reviewed

In addition to reviewing certain of the AASHTO Guidelines, some of which are discussed herein and attached as Exhibit B,¹ I have reviewed several other documents including:

- a. The attached Mobilitie, LLC Site Plan proposed in Leelanau County, Michigan and attached here as Exhibit C as well as other Mobilitie site plans and drawings.
- b. A photograph and the related accident report pertaining to a vehicle/CSP crash that occurred with an improperly located DAS related pole located in the right of way in Genesee County, Michigan, attached here as Exhibit D.

¹ Some of the other sections of the AASHTO guidelines that also warrant consideration, but not specifically addressed here in an attempt at some level of brevity, include Sections 4.8, discussing technical specifications in detail and the risks associated with utility poles and which includes a discussion for example, of breakaway standards regarding same. See also Section 10.2.2.3.1 discussing similar technical aspects of utility pole placement and guarding considerations in urban areas. Copies of these sections are attached to the AASHTO excerpts at Exh B.

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Opinions

The addition of structures in the right of way such as those proposed by Mobilitie and other similar entities, create immediate hazards to travelers. This hazard can be mitigated but not eliminated, and it is serious, as records of highway accidents suggest. The hazard exists in urban, suburban and rural areas where structures are placed in the rights of way. Further, the placement of roadside barriers themselves, as protective installations and as discussed, are themselves also a form of a hazard.

The addition of structures in the rights of way create immediate issues for maintenance of the rights of way, and to the extent that the structures must be maintained and modified over time, can interfere with traffic flow at significant cost to the public.

The addition of structures complicates planning, installation, modification and maintenance for other utilities, including storm water drainage and other systems. Moreover, every aboveground structure presents a potential hazard for other systems (e.g. if a pole is of a height that a falling pole may knock out electrical and other communications lines).

The addition of structures may affect emergency responses. Utility poles do fail during storms, and it is often up to the governmental entity that manages the roadway to clear the road of hazards so that rescue vehicles and repairs can begin. If facilities like the 120 foot Mobilitie tower are placed in the right of way, it may exceed the emergency response capabilities of many entities to remove it. And of course, if it cannot be cleared using standard equipment, then Mobilitie must have the equipment and response teams in place to respond very quickly.

The cost of planning, emergency response, and of reviewing proposed facilities is expensive and can be time-consuming depending on the complexity of the roadway and the systems surrounding it. See estimates of local government materials costs of providing a safe roadside both initially and annually thereafter attached as Exhibit E.

Conditions may vary from location to location, so submission of information in batches may simplify some reviews but not site specific location-related reviews.

Basis of Opinions

In addition to the AASHTO guidelines referenced, according to the Insurance Institute for Highway safety, about 20 percent of motor vehicle crash deaths “result from a vehicle leaving the roadway and hitting a fixed object alongside the road. Trees, utility poles, and traffic barriers are the most common objects struck. AASHTO data reflects 12% of these, attributable to collisions with utility poles. Almost half of the deaths in fixed object crashes occur at night. Alcohol is a frequent contributing factor. Motorists also run off the road because of excessive speeds, falling asleep, inattention or poor visibility. Efforts to reduce these driver errors are only somewhat effective, so it's important to remove fixed objects or avoid putting them along roads in the first place if feasible, especially on roads where vehicles are more likely to leave the pavement. Less preferred options include using breakaway objects, shielding objects and increasing the visibility of objects.” <http://www.iihs.org/iihs/topics/t/roadway-and-environment/fatalityfacts/fixed-object-crashes> NHTSA's study

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"The Economic and Society Impact of Motor Vehicle Crashes, 2010," suggests that automobile accidents impose a staggering cost on the economy – about \$891 billion in damage annually.

While my opinions recognize that under AASHTO guidelines, a rigid pole can be in the road right of way if it is protected by a crash tested barrier system (AASHTO Section 5.1.1; Section 5.1.2; Table 5-3); it should be recognized, the crash tested barrier systems themselves constitute a roadside hazard (AASHTO Figure 1-2, page 1-3). So placement of these systems should be limited to only those roadside hazards or obstacles that must be placed within the roadside clear zone.

To begin to understand some of the costs and risks created by placement of facilities that could be placed elsewhere, on rights of way, it is important to understand the complexity of the design of rights of way. I focus here on examples rights of way in rural areas in Michigan, but equally and more complex issues arise with respect to placement in suburban and urban areas, where designs accommodate increased overall traffic as well as foot and bicycle use and multiple utilities.

Attached as Exhibits F and G are representative diagrams of a typical rural (open ditch) roadside where a barrier system is placed to protect the vehicles from a roadside non-breakaway pole, such as the 120 foot towers proposed by Mobilitie, LLC (Exh C). These sketches also depict placement of a culvert/storm sewer system to provide unimpeded storm water flow with an appropriate culvert end protection (AASHTO Figure 3-12, page 3-18). Also displayed is an appropriately designed guardrail system, which is crash tested to protect a vehicle occupant from crashing into the proposed 120-foot steel tower or the foundation which obviously projects above the ground by more than 4 inches.

Clear Zone

In Michigan, a typical 66-foot wide rural road right of way includes a roadbed, shoulders, steep front slopes (steeper than 3 on 1 are considered non-recoverable; AASHTO Figure 3-2) and roadside ditches to accommodate storm runoff. These road features typically encompass the entire 66-foot width of the right of way. Also, the established speed limit in Michigan for these rural roads is 55 mph. The AASHTO Roadside Design guideline has established a method to determine the recommended clear zone that should be provided along rural roads (AASHTO Section 3.3).

The AASHTO roadside clear zone width for rural roads is based on the speed limit, traffic volume, and roadside recovery width which include traversable slopes (recoverable slopes flatter than 4 on 1). Typically, rural roads in Michigan do not include recoverable front slopes so the clear zone is extended beyond the bottom of the ditch (AASHTO Table 3-1).

Additionally, the roadside ditch slopes are often too steep to be included in the clear zone calculation, therefore the clear zone often extends partially up the ditch backslope (AASHTO Section 3.3.2). The typical clear zone along rural roads would extend beyond the near edge of a 6-foot diameter foundation assuming this foundation is placed one foot inside the right of way.

Typical Cross Section Sketch

Exhibit F depicts a cross section of a typical rural roadside in Michigan, where a fixed obstacle is placed within the clear zone. This sketch includes a non-recoverable side slope (steeper than 4 on

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1) that warrants a barrier system. Additionally, Exhibit F depicts the additional features required to maintain a reasonably safe roadside, if a tower and foundation is placed within an established clear zone. This sketch demonstrates the need to modify the roadside ditches to be enclosed in storm sewers and the need to install a crash tested barrier system to shield the fixed objects from traffic.

Typical Plan View Sketch

Exhibit G depicts a plan view of a typical rural roadside in Michigan, where a fixed obstacle is placed within the clear zone. This sketch illustrates the typical length of modifications along the roadside, as well as the typical placement of road drainage and barriers in relation to the road edge. The actual lengths and placement would be dependent on the unique and specific road parameters and detail design calculations.

Additionally, Exhibit G depicts the additional features required to maintain a reasonably safe roadside, if a tower and foundation is placed within an established clear zone. This sketch demonstrates the need to modify the roadside ditches to be enclosed in storm sewers with protected end treatments; and the need to install a sufficient amount of crash tested barrier system to shield the fixed objects from traffic approaching from both directions of travel, including barrier end treatments. Once again, the actual placement, size and type of features would be dependent on the specific road parameters.

Conclusion

Note that not only does the placement of these facilities create unnecessary hazards in and of themselves, they lead to other modifications which themselves impact roadway safety. Moreover, the placement of foundations and supporting structures may affect drainage, and undermine the roadway itself in the short term and over the long term. The risks and harms are not speculative, as the statistics and the photograph of the destroyed DAS pole suggests (Exh D). Nor are these concerns addressed by application of generalized building or electrical codes to a proposed structure.

From the stand point of both safety design for the sake of the public, and bearing cost in mind, these proposed and installed communications related structures represent very significant concerns to all rights of way responsible agencies. Accordingly, such installation proposals must be very carefully addressed, viable alternative off right of way sites closely considered and where approved, proper preparation and guarding utilized, in order to reduce the risk of harm to the public as much as possible.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 3-7-17.

Steven M Puuri, P.E. Digitally signed by Steven M Puuri, P.E.
DN: cn=Steven M Puuri, P.E., o=Puuri
Engineering, LLC, ou,
email=spuuri@gmail.com, c=US
Date: 2017.03.08 09:24:52 -05'00'

Steven Puuri, P.E.

6480 Zeeb Road, Dexter, MI 48130

Exhibit A

Steven M. Puuri, P.E.

6480 Zeeb Road
Dexter, MI 48130

734-426-3097
spuuri@gmail.com

Career Summary

A proficient transportation infrastructure chief executive with an impressive background of building partnerships, securing innovative funding and delivering context sensitive solutions. An accomplished engineering director with an established track record of accomplishing projects on time and on budget. Mentored technical staff to handle challenges associated with rapid growth and workload expansion. An assertive public relations leader who successfully engaged stakeholders from US Congress, State Legislators, Local Officials as well as project stakeholders in a progressive university community.

Areas of Expertise/Core Competency

Extensive executive level expertise in Road Construction, Design, Traffic Operations, Routine

Maintenance, Construction Contracts, Transportation Funding, Legal Issues, Property Acquisition, Board Relations, Government Relations, Employee and Public Relations

Extensive experience in Michigan County Road Law, Tort Liability, Road Construction, Road Maintenance, Traffic Operation, Riparian Rights, Storm Water Management, Wetland Mitigation, Organizational Policies, Management Dashboards, Information Technology and Computer Networks.

Extensive working knowledge of American Association of State Highways and Transportation

Officials Guidelines; Michigan Department of Transportation Guidelines and Specifications; Michigan Vehicle Code; Michigan Manual For Uniform Traffic Control; Federal NEPA Guidelines and Federal Relocation & Assistance Guidelines.

Work Experience

Puuri Engineering LLC

2014 - Present

Engineering Specialist

Serves as an engineering consultant to advise the County Road Association, Michigan Municipal League and the Michigan Department of Transportation on technical matters related to local road agencies. Provides the Road Commissions and Michigan Municipal League with an experienced road engineering resource to assist with road maintenance and

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construction initiatives related to legislation, policy development, rule writing and dispute resolutions.

Puuri Engineering LLC

2012 - Present

Managing Director

Owner and lead engineer of a consulting engineering practice which provides technical advice on legislative and policy development related to local road agencies. Provides planning, design and construction engineering services for transportation projects. Serving a variety of Municipal and private clients to assist with advancing infrastructure improvements. I have also provided expert witness services for many years on road liability cases, including cases where I have been qualified and testified in several Michigan Courts as a road design, drainage and maintenance expert. Also I have never been rejected by a court to testify as an expert.

Washtenaw County Road Commission

1987 - 2011

Managing Director

2003 - 2011

As the Chief Executive Officer provided direction and leadership for the Board of Directors and 156 employees. Led a \$70 million organization recognized as a progressive trendsetter in management practices. Successfully administered an autonomous organization requiring transparent Board Meetings, Audited Financial Statements, Tort Liability, Self Funded Insurance programs, fleet acquisition and maintenance for 150 licensed vehicles, property management of 25 building and 300 acres, public relations, extensive construction and maintenance programs for 1650 miles of roads, 111 bridges and 150 traffic signals.

In this capacity key accomplishments included:

- Established a 5 Year Capital Improvement Program which dramatically improved the coordination of all projects in the region
- Established a multi-year budgeting process creating consistently increasing reserves
- Recognized innovative project funding leader who delivered results
- Established design, construction and maintenance standards that lead to high quality projects, cost effective maintenance practices and improved road safety.
- Established a model partnership program that successfully collaborated with private developers resulting in over \$100 million of private investment in public infrastructure projects
- Transformed accounting methods to fully recognize unfunded liabilities
- Successfully negotiated benefit reductions to sustainable levels
- Established Planning and Public Relations programs leading to enhance stakeholder involvement and documented improvements in public perception
- Modernized stormwater management and environmental programs earning recognition from community environmental leaders as an outstanding example for maintenance practices and environmental stewardship

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- Conducted organization assessments implemented cultural transforming strategies earning recognition from local officials for improvements in performance
- Lead an innovative public agency initiative obtaining recognition for Best Management Practices International Standards Organization 9001-2008

Director of Engineering

1990 - 2003

Engineer responsible for providing technical leadership for a rapidly developing community while modernizing construction practices, rigorously enforcing contractual and permit compliance. Supervised a department of 56 engineers, professional specialist and administrative staff. Established a quality based consultant selection program leading to improved consultant performance and financial accountability. Successfully completed hundreds of major infrastructure projects totaling over \$200 million. Administered a state of the art traffic operations program including construction and maintenance of integrated operations center for 150 signals, 30,000 signs and 800 miles of pavement markings. Successfully served as Project Engineer on planning, design, property acquisition and construction projects often handling numerous concurrent projects in various stages of development. Served as the Contract Administrator on numerous construction and consultant contracts involving preparation of contract documents, advertising, awarding, claims resolution and legal disputes. Successfully served as an expert witness for numerous tort liability cases.

Key accomplishments in this capacity:

- Jackson Road \$50 million multi-phase boulevard construction and research project
- Dixboro Road bridge \$20 million 550 ft. long multi-lane multi-modal bridge
- US 23, Geddes Rd, Dixboro Rd. and Huron River Dr. \$5 million corridor expansion project
- Earhart Road \$3 million new road enabling 100-acre medical & commercial development
- Ellsworth Road \$8 million realignment & corridor expansion project
- Served as the local catalyst for \$50 million in state interchange expansion projects
- Served as the Project Engineer on 8 Federal NEPA clearance projects involving interchanges, new road alignments, capacity projects, wetland mitigation, new and historic bridges
- Served as Project Manager for 27,000 sf. new office building construction project involving architectural design, interior planning, access roads, parking areas, landscaping, relocation coordinator and building demolition
- Served as the Lead Engineer who successfully collaborated with hundreds of Residential and Commercial Developers to assure that the new developments were completed with appropriate public infrastructure investments

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Assistant Director of Engineering 1987 - 1990

Provided direction and leadership for design, construction, survey and traffic services. Transformed the culture of a 23 member engineering staff by successfully solving low morale, improving quality and increasing productivity. Developed a staffing plan to address rapid population growth challenges, secured Management endorsement, leading to increasing staff capabilities, increased project output and improved project quality.

USDA Soil Conservation Service 1978 - 1987

Area Engineer 1983 - 1987

Provided design and field engineering services for stream and shoreline stabilization, flood control and storm water management projects for several counties in Northwest Michigan. Ensured prompt delivery of project services including land surveys, design, contract documents, construction administration and claims resolution. Successfully worked with public officials and private landowner to accomplish a variety of clients in a positive work relationship. Supervised technicians and clerical staff in regional office locations. Key accomplishments:

- Rouge River Flood Control Projects Design and Construction
- Numerous Private Landowner drainage systems design and construction

Civil Engineer 1978 – 1983

Assisted the State Office Hydraulic Engineer and Other Professional Staff Specialists to develop watershed hydraulic analysis and flood plain mapping projects.

- Petoskey Winter Sports Park Drainage Construction
- Woolsey Airport Tile Drainage Construction

Education

B.S. Civil Engineering Michigan State University 1978

Extensive Continuing Education Credits and training programs in water resources and transportation related areas

Professional Associations & Boards

Professional Engineering License in Michigan No. 29798

National Association County Engineers

County Road Association of Michigan

County Road Association Engineering Committee Chair

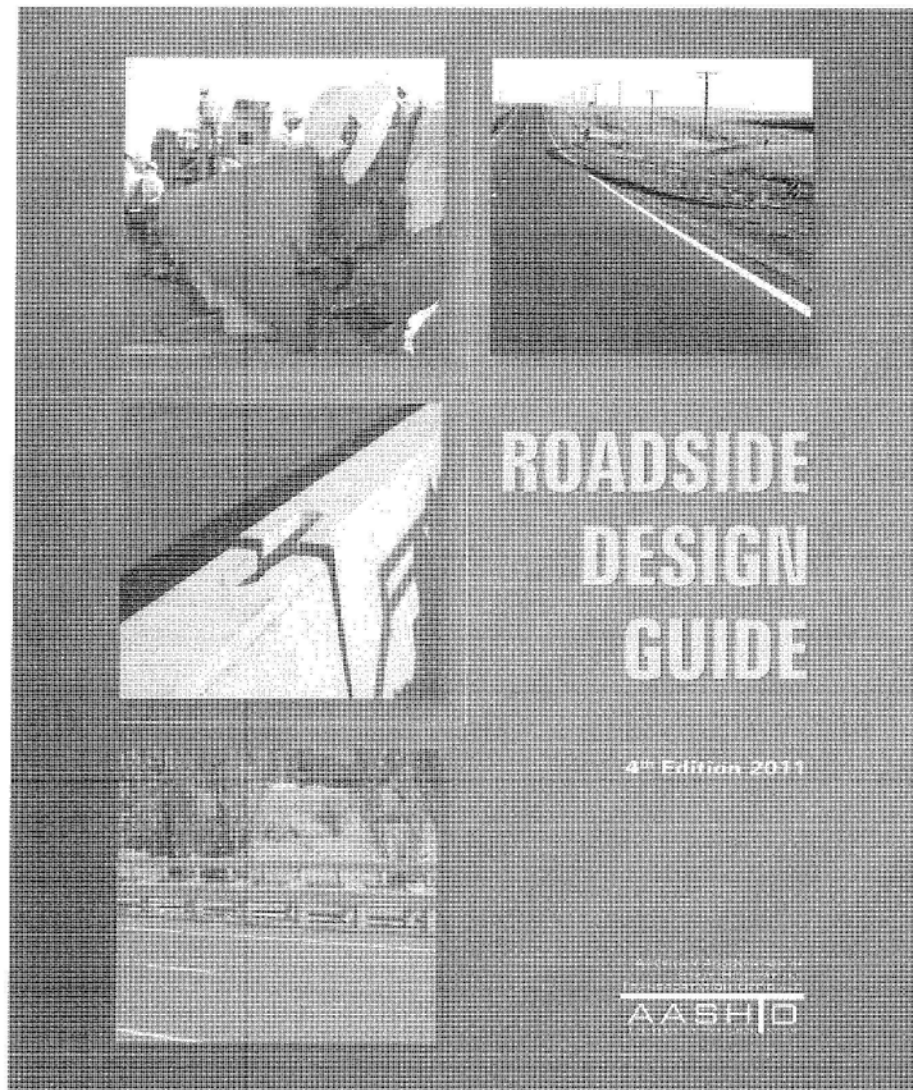
Governors Traffic Safety Advisory Commission

Michigan County Road Association Self-Insurance Pool Board

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Exhibit B

AASHTO Citations



This reprint of the book incorporates errata changes through February 2012.

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5.2.3 Bystanders, Pedestrians, and Bicyclists

The conventional criteria presented in the previous sections cannot be used to establish barrier needs for pedestrians or bicyclists. For example, a major roadway may be relatively close to a schoolyard, but the boundaries are beyond the clear distance. There are no criteria that would require that a barrier be installed. If, however, a barrier is installed, it could be placed near the school boundary to minimize the potential for vehicle impacts. Reference should be made to Section 5.6.1 for lateral placement criteria. Consideration might also be given to installing a barrier to shield businesses and residences that are near the right-of-way, particularly at locations having a history of run-off-the-road crashes. Occasional functions that use, or are adjacent to, public right-of-way with concentrated pedestrian activity such as farmer's markets and street fairs may be considered for temporary barriers or delineation.

Pedestrians and cyclists along a route are a concern that might be given design consideration. Depending on the route type, traffic volumes, number of bicyclists and pedestrians, and traffic speed, a possible solution might be to separate them from vehicular traffic. Since this solution is not always practical, alternate means of separating them from vehicular traffic are sometimes necessary. Currently there are no objective criteria to draw on for pedestrian and cyclist barrier recommendations.

On low-speed streets, the practice generally is to separate pedestrians from traffic by a sidewalk separated from the roadway by a raised curb. However, at speeds of over 40 km/h [25 mph] a vehicle may mount the curb for relatively flat approach angles. Furthermore, it is generally impractical to separate pedestrians from the roadway with a longitudinal roadside barrier. Thus, for streets with speeds of over 40 km/h [25 mph], separating the sidewalk from the edge of the roadway with a buffer space is encouraged. See Chapter 10 for more information.

When sidewalks or multi-use paths are adjacent to the traveled way of high-speed facilities, some provision might be made to shield the sidewalk or path from vehicular traffic on the roadway. Factors to consider for barrier protection include traffic and pedestrian volumes, roadway geometry, sidewalk/path offset, and cross-section features.

5.2.4 Motorcycles and Barrier Design

Nationwide, there have been some instances where roadside barriers have contributed to the severity of crashes involving motorcycles. Motorcyclists have a higher risk of being seriously injured or killed in a crash as compared to occupants in automobiles. This is mostly due to the higher level of occupant safety provided in modern automobiles. It has been noted that motorcyclists involved in crashes with some types of open-faced traffic barriers have sustained serious to fatal injuries, particularly after contacting the edges of steel guardrail posts or the tops of these posts where they project above the rail element. Some European countries have attempted to address these concerns at locations having both high motorcycle use and a high number of crashes by adding a lower rubrail to the design or by padding the posts with expanded foam. However, no systematic approach toward this issue has been developed because of the random nature of motorcycle crashes and the questionable effectiveness of modifications to existing barriers. Based on the experience of other countries and the lack of any system-wide, cost-effective countermeasures or barrier designs, there appears to be little basis for developing guardrails designed for motorcyclists for all barrier installations. There is some perception that a smooth, solid-faced barrier such as a concrete safety shape may be less likely to cause traumatic injuries to motorcyclists upon contact. Additional research is being conducted regarding motorcycle interaction with barriers.

5.3 TEST LEVEL SELECTION FACTORS

Many barriers have been developed to accommodate both small cars and pickup trucks in accordance with NCHRP Report 350 and MASH testing criteria. Properly designed and installed barrier systems have proven to be very effective in reducing the amount of damage and lessening the severity of personal injuries. However, in certain locations it may be appropriate to utilize a higher performance barrier capable of redirecting large vehicles such as tractor-trailer combination trucks. Although objective warrants for the use of higher performance traffic barriers do not presently exist, subjective factors most often considered for new construction or safety upgrading include:

- High percentage of heavy vehicles in the traffic stream or a high concentration of trucks at an interchange
- Hazardous materials routes

- Adverse geometrics, such as sharp curvature, which are often combined with limited sight distance, or long downhill grades combined with horizontal curvature
- Severe consequences associated with penetration of a barrier by a large vehicle, such as multi-level interchange ramps, highly sensitive environmental areas, or critical highway components (nationally significant bridges or tunnels).

Some of the above-listed factors become worthy of more consideration when they occur in combination with other factors. For example, a moderate length bridge over a portion of a reservoir may be at low risk for environmental consequences unless combined with geometric factors that increase the likelihood of truck impact with the rail.

These same factors also apply to reconstruction or rehabilitation projects. However, in these cases, the designer will usually have the added benefit of past crash history, the past performance of the system, and maintenance costs associated with the existing barrier. In addition, a higher performance barrier is likely to lessen the severity of future crashes or reduce maintenance costs significantly. Section 5.4 includes information on the size of vehicle for which each system has been successfully crash tested.

5.4 STRUCTURAL AND SAFETY CHARACTERISTICS OF ROADSIDE BARRIERS

This section includes information on the most commonly used roadside barriers. Separate subsections address standard sections of roadside barriers and transition sections. Figure 5-4 graphically depicts each of these elements for typical installations. Information on the structural and safety characteristics of each system is presented in narrative format. Refer to Section 5.1 for additional information on FHWA acceptance letters and individual barrier systems.

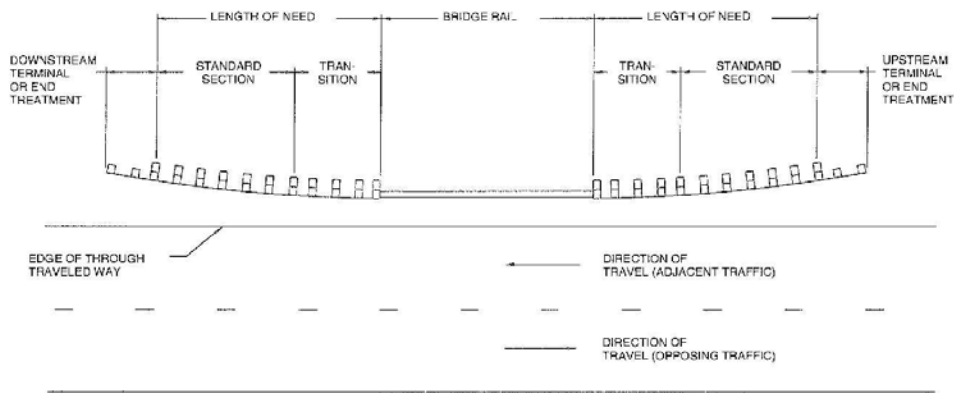


Figure 5-4. Definition of Roadside Barriers

5.4.1 Standard Sections of Roadside Barriers

Roadside barriers are usually categorized as flexible, semi-rigid, or rigid, depending on their deflection characteristics resulting from an impact. Flexible systems are generally more forgiving than the other categories since much of the impact energy is dissipated by the deflection of the barrier and lower impact forces are imposed upon the vehicle. This section is not intended to be all-inclusive, but to cover the most widely used roadside barriers. The barriers and approved test levels included in the following subsections are listed in Table 5-3.

For additional barrier systems, including barriers tested to meet MASH criteria, please refer to the FHWA for acceptance letters and the AASHTO Task Force 13 website for design details, as mentioned previously in Sections 5.1.1 and 5.1.2.

Unfortunately, roadside crashes still account for far too great a portion of the total fatal highway crashes. In 2008, 23.1 percent of the fatal crashes were single-vehicle, run-off-the-road crashes. These figures mean that the roadside environment comes into play in a very significant percentage of fatal and serious-injury crashes.

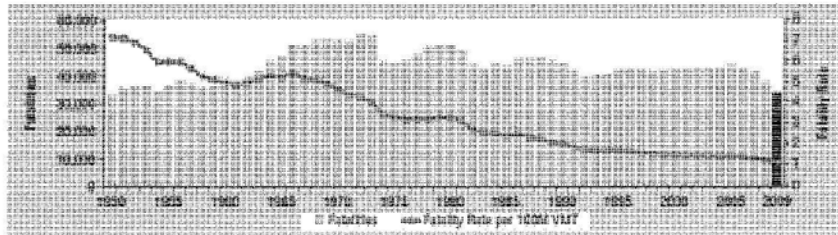


Figure 1-1. Motor Vehicle Crash Deaths and Deaths Per 100 Million Vehicle Miles Traveled, 1950-2008 (6)

1.2 STRATEGIC PLAN FOR IMPROVING ROADSIDE SAFETY

According to the Insurance Institute for Highway Safety (IIHS) and Highway Loss Data Institute (HLDI), the proportion of motor vehicle deaths involving collisions with fixed objects has fluctuated between 19 and 23 percent since 1979 (4). Almost all fixed-object crashes involve only one vehicle and occur in both urban and rural areas. Figure 1-2 shows the percentage distribution of fixed-object fatalities by the object struck in 2008. Trees were by far the most common object struck, accounting for approximately half of all fixed-object fatal crashes. Utility poles were the second most common objects struck, accounting for 12 percent of all fixed object crashes, followed by traffic barriers with 8 percent. Furthermore, for 2008, 18 percent of fixed-object crashes involved vehicles that rolled over, while 18 percent involved occupant ejection. More detailed crash statistics are available from the following website at <http://www.nhtsa.gov/FARS>.

In 1967, the American Association for State Highway Officials (AASHO; currently the American Association for State Highway and Transportation Officials [AASHTO]) released its *Highway Design and Operational Practices Related to Highway Safety* (1), the first official report that focused attention on hazardous roadside elements and suggested appropriate treatment for many of them. This guide, also known as the AASHTO "Yellow Book," was revised and updated in 1974 with the introduction of the forgiving roadside concept. In 1989, AASHTO published the first edition of the *Roadside Design Guide*.

In 1998, AASHTO approved their Strategic Highway Safety Plan (3), which provides objectives and strategies for keeping vehicles on the roadway and for minimizing the consequences when a vehicle does encroach on the roadside. The National Cooperative Highway Research Program (NCHRP) also has published a series of guides, called the NCHRP Report 500 (9), to assist state and local agencies in their efforts to reduce injuries and fatalities in targeted emphasis areas. These guides correspond to the emphasis areas outlined in AASHTO's Strategic Highway Safety Plan. The Strategic Highway Safety Plan and associated NCHRP Report 500 guides are available from the AASHTO website at <http://safety.transportation.org/guides.aspx>.

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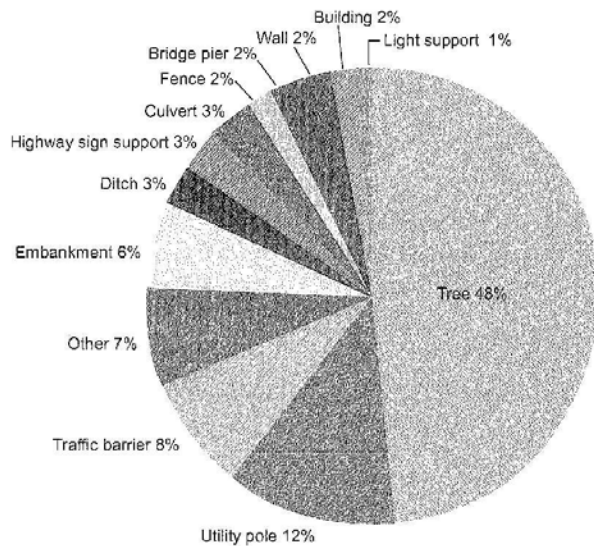


Figure 1-2. Percent Distribution of Fixed-Object Fatalities by Object Struck, 2008 (4)

For roadside design, Volumes 3, 6, and 8 of NCHRP Report 500 address collisions with trees in hazardous locations, run-off-the-road collisions, and the reduction of collisions involving utility poles.

A vehicle will leave the roadway and encroach on the roadside for many reasons, including the following:

- Driver fatigue
- Driver distractions or inattention
- Excessive speed
- Driving under the influence of drugs or alcohol
- Crash avoidance
- Adverse roadway conditions, such as ice, snow, or rain
- Vehicle component failure
- Poor visibility

Regardless of the reason for a vehicle leaving the roadway, a roadside environment free of fixed objects and with stable, flattened slopes enhances the opportunity for motorists to regain control of their vehicles and reduce crash severity. The forgiving roadside concept allows for errant vehicles leaving the roadway and supports a roadside design in which the serious consequences of such incidents are reduced.

Through decades of experience and research, the application of the forgiving roadside concept has been refined to the point where roadside design is an integral part of the transportation design process. Design options for reducing roadside obstacles, in order of preference, are as follows:

equal to that of a standard headwall design as a result of decreased entrance turbulence. In those locations where headwater depth is critical, a larger pipe should be used or the parallel drainage structure may be positioned outside the clear zone, as discussed in the following section.

3.4.3.3 Relocate the Structure

Some parallel drainage structures can be moved laterally farther from the through traveled way. This treatment often affords the designer the opportunity to flatten the transverse slope within the selected clear-zone distance of the roadway under design. If the embankment at the new culvert location is traversable and likely to be encroached upon by traffic from either the main road or side road, safety treatment should be considered. It is suggested that the inlet or outlet match the transverse slope regardless of whether additional safety treatment is deemed necessary. Figure 3-11 shows a suggested design treatment, while Figure 3-12 shows a recommended safety treatment for parallel drainage pipes.

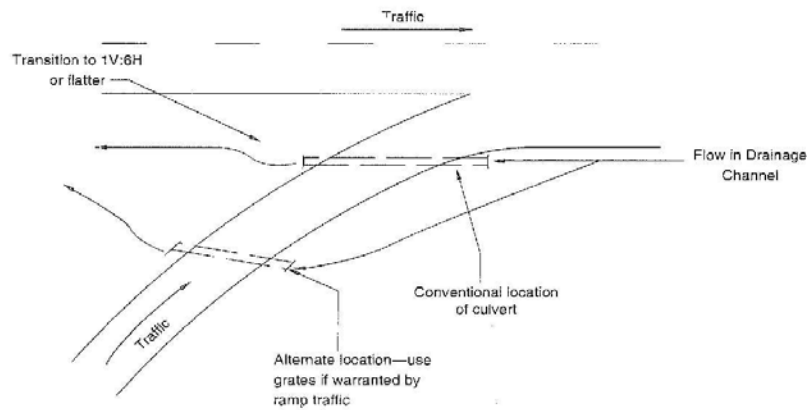


Figure 3-11. Alternate Location for a Parallel Drainage Culvert

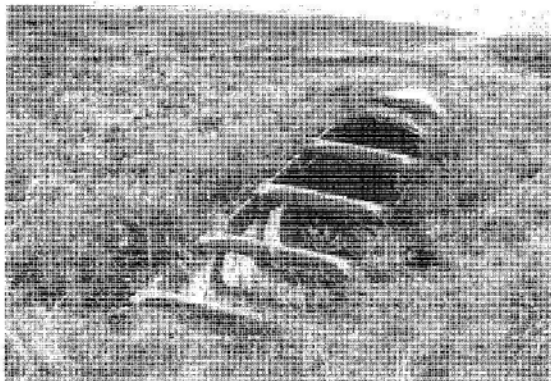


Figure 3-12. Safety Treatment for Parallel Drainage Pipe

3.4.3.4 Shielding

In cases in which the transverse slope cannot be made traversable, the structure is too large to be safely treated effectively, and relocation is not feasible, shielding the obstacle with a traffic barrier may be necessary. Specific information on the selection, location, and design of an appropriate barrier system is in Chapter 5.

3.4.4 Drop Inlets

Drop inlets can be classified as on-roadway or off-roadway structures. On-roadway inlets are usually located on or alongside the shoulder of a street or highway and are designed to intercept runoff from the road surface. These include curb opening inlets, grated inlets, slotted drain inlets, or combinations of these three basic designs. Because they are installed flush with the pavement surface, they do not constitute a significant safety problem to errant motorists. However, they should be selected and sized to accommodate design water runoff. In addition, they should be capable of supporting vehicle wheel loads and should be pedestrian and bicycle compatible.

Off-roadway drop inlets are used in medians of divided roadways and sometimes in roadside ditches. Although their purpose is to collect runoff, they should be designed and located to present a minimal obstacle to errant motorists. This goal can be accomplished by building these features flush with the channel bottom or slope on which they are located. No portion of the drop inlet should project more than 100 mm [4 in.] above the ground line (10). The opening should be treated to prevent a vehicle wheel from dropping into it; however, unless pedestrians are a consideration, grates with openings as small as those used for pavement drainage are not necessary. Neither is it necessary to design for a smooth ride over the inlet; it is sufficient to prevent wheel snagging and the resultant sudden deceleration or loss of control.

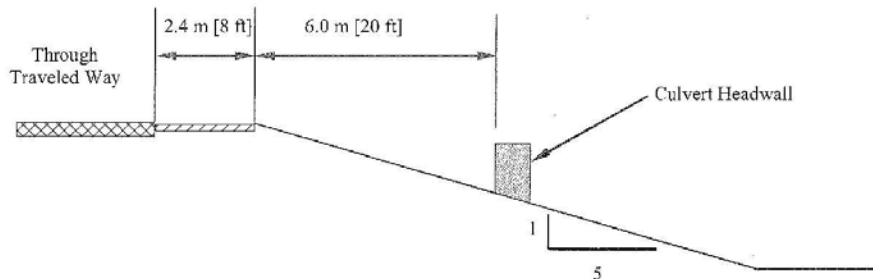
3.5 EXAMPLES OF THE CLEAR-ZONE CONCEPT TO RECOVERABLE FORESLOPES

EXAMPLE 3-A

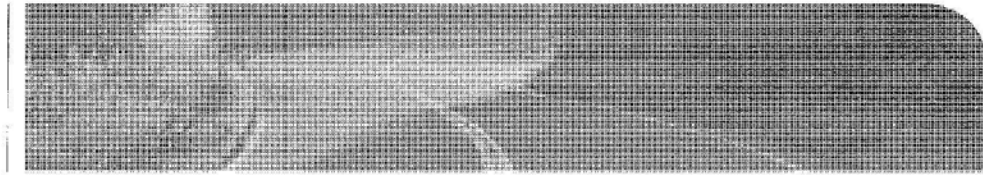
Design ADT: 4000

Design Speed: 100 km/h [60 mph]

Suggested clear-zone distance for 1V:5H foreslope: 10 to 12 m [32 to 40 ft] (from Table 3-1)



Discussion—The available recovery area of 8.4 m [28 ft] is 1.6 m to 3.6 m [4 to 12 ft] less than the suggested clear-zone distance. If the culvert headwall is greater than 100 mm [4 in.] in height and is the only obstruction on an otherwise traversable foreslope, it should be removed and the inlet modified to match the 1V:5H foreslope. If the foreslope contains rough outcroppings or boulders and the headwall does not significantly increase the obstruction to a motorist, the decision to do nothing may be appropriate. A review of the highway's crash history, if available, may be made to determine the nature and extent of vehicle encroachments and to identify any specific locations that may require special treatment.



Chapter 3

Roadside Topography and Drainage Features

3.0 OVERVIEW

This chapter discusses the development and evaluation of the forgiving roadside concept and its application to roadside design and clear zones. It also discusses embankment slopes and ditches and how these features influence roadside features such as curbs, culverts, and drop inlets, whose purpose is to provide adequate roadway drainage. The designer is presented with several options that enhance safety without affecting the capabilities of these elements to drain the highway.

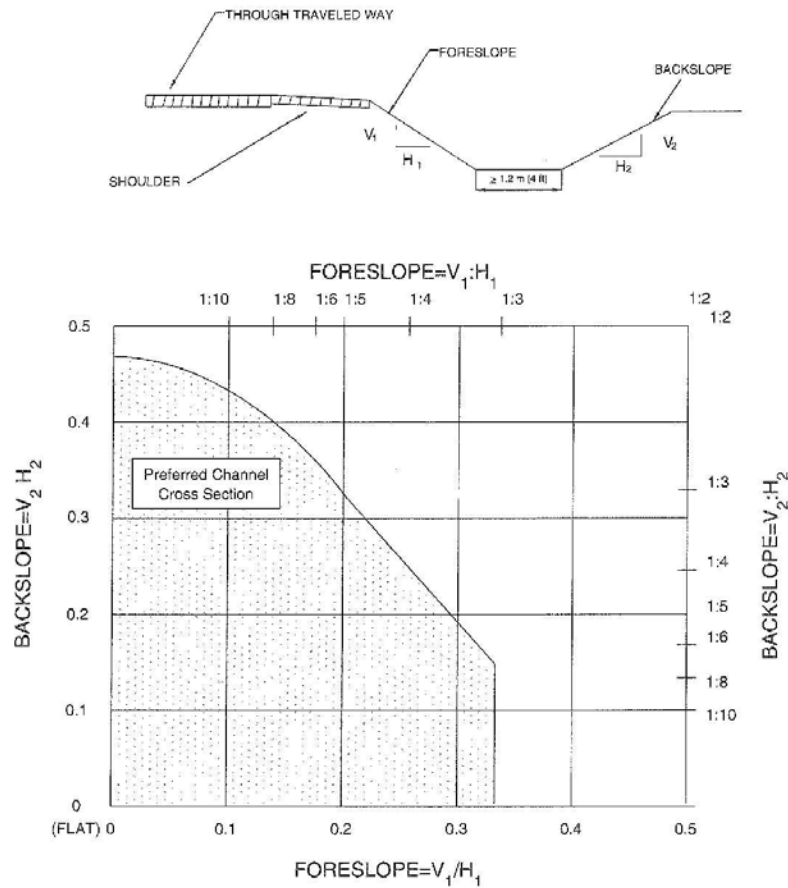
Most of the forgiving roadside design principles discussed in this chapter have been practiced to varying degrees for several years. This chapter attempts to reemphasize and collect the currently accepted design principles to provide guidance in the area of roadside design. However, to include every recommendation or design value in this chapter on every future highway project is neither feasible nor possible. Engineering judgment will have to play a part in determining the extent to which improvements reasonably can be made with the limited resources available.

As the designer studies the options available, some consideration should be given to the future maintenance of drainage facilities and roadside topography. Ongoing repair and upkeep will be necessary to ensure the continued function and safety of various roadside drainage features. Personnel, materials, equipment, and cost are some of the considerations in every maintenance program. The designer should take into account the exposure of crews to traffic conditions while completing repairs. Also, maintenance activities can cause various levels of disruption in the traffic flow, which may increase the potential for crashes.

3.1 THE CLEAR-ZONE CONCEPT

Beginning in the early 1960s, as more Interstate highways and other freeways were opened to traffic, the nature and characteristics of the typical rural highway crashes began to change. Instead of head-on crashes with other vehicles or crashes involving trees immediately adjacent to the roadway, many drivers were running off the new freeways and colliding with man-made objects, such as bridge piers, sign supports, culverts, ditches, and other design features of the roadside. In 1967, the American Association of State Highway Officials (AASHO) Traffic Safety Committee (currently the American Association of State Highway and Transportation Officials [AASHTO] Standing Committee on Highway Traffic Safety) issued a report entitled, *Highway Design and Operational Practices Related to Highway Safety* (2). This document became known as the "Yellow Book," and its principles were widely applied to highway construction projects, particularly high-speed, controlled-access facilities. A second edition of the Yellow Book, published by AASHTO in 1974, stated that "for adequate safety, it is desirable to provide an unencumbered roadside recovery area that is as wide as practical on a specific highway section. Studies have indicated that on high-speed highways, a width of 9 m [30 ft] or more from the edge of the through traveled way permits about 80 percent of the errant vehicles leaving the roadway to recover" (6).

Subsequently, most highway agencies began to try to provide a 9-m [30-ft] clear zone, particularly on high-volume, high-speed, rural roadways. A clear zone is the unobstructed, traversable area provided beyond the edge of the through traveled way for the recovery



*This chart is applicable to rounded channels with bottom widths of 2.4 m [8 ft] or more and to trapezoidal channels with bottom widths equal to or greater than 1.2 m [4 ft].

Figure 3-7. Preferred Cross Sections for Channels with Gradual Slope Changes

If practical, drainage channels with cross sections outside the shaded regions and located in vulnerable areas may be reshaped and converted to a closed system (culvert or pipe) or, in some cases, shielded by a traffic barrier. Information from various jurisdictions for the use of roadside barrier to shield non-traversable channels within the clear zone is included in Chapter 5.

3.3 APPLICATION OF THE CLEAR-ZONE CONCEPT

A basic understanding of the clear-zone concept is critical to its proper application. The suggested clear-zone distances in Table 3-1 are based on limited empirical data that then were extrapolated to provide data for a wide range of conditions. Thus, the distances

obtained from these tables represent a reasonable measure of the degree of safety suggested for a particular roadside, but they are neither absolute nor precise. In some cases, it is reasonable to leave a fixed object within the clear zone; in other instances, an object beyond the clear-zone distance may require removal or shielding. Use of an appropriate clear-zone distance amounts to a compromise between maximizing safety and minimizing construction costs. Appropriate application of the clear-zone concept often will result in more than one possible solution. The following sections intend to illustrate a process that may be used to determine if a fixed object or non-traversable terrain feature should be relocated, modified, removed, shielded, or remain in place.

The guidelines in this chapter may be most applicable to new construction or major reconstruction. On 3R projects, the primary emphasis is placed on the roadway itself. The actual performance of an existing facility may be evaluated through an analysis of crash records and on-site inspections as part of the design effort or in response to public input from road users and other stakeholders. It may not be cost-effective or practical to bring a 3R project into full compliance with all of the clear-zone width recommendations provided in this Guide because of environmental effects or limited right-of-way. Because of the scope of such projects and the limited funding available, emphasis should be placed on correcting or shielding areas in the project with identifiable safety problems related to clear-zone widths. Bodies of water and steep cliffs are the types of areas that may be considered for special emphasis.

3.3.1 Recoverable Foreslopes

The suggested clear-zone distance for recoverable foreslopes of 1V:4H or flatter may be obtained directly from Table 3-1. On new construction or major reconstruction, smooth slopes with no significant discontinuities and no protruding fixed objects are desirable from a safety standpoint. It also is desirable to have the top of the slope rounded so an encroaching vehicle remains in contact with the ground (14). It also is desirable for the toe of the slope to be rounded to improve traversability by an errant vehicle. The flatter the selected slope, the easier it is to mow or otherwise maintain and the safer it becomes to negotiate. Examples at the end of this chapter illustrate the application of the clear-zone concept to recoverable foreslopes.

3.3.2 Non-Recoverable Foreslopes

Foreslopes from 1V:3H up to 1V:4H are considered traversable if they are smooth and free of fixed objects (14). However, a clear runoff area beyond the toe of the non-recoverable foreslope is desirable because many vehicles on slopes this steep will continue on to the bottom. The extent of this clear runoff area could be determined by first finding the available distance between the edge of the through traveled way and the breakpoint of the recoverable foreslope to the non-recoverable foreslope, as previously shown in Figure 3-2. This distance then is subtracted from the suggested clear-zone distance based on the steepest recoverable foreslope before or after the non-recoverable foreslope and should be at least 3 m [10 ft] if practicable. The result is the desirable clear runoff area that should be provided beyond the non-recoverable foreslope if practical. Such a variable sloped typical section often is used as a compromise between roadside safety and economics. By providing a relatively flat recovery area immediately adjacent to the roadway, most errant motorists can recover before reaching the steeper foreslope beyond. The foreslope break may be liberally rounded so that an encroaching vehicle does not become airborne. The steeper slope also may be made as smooth as practical and rounded at the bottom. Figure 3-2 illustrates a recoverable foreslope followed by a non-recoverable foreslope. Example 3-C demonstrates the method for calculating the desirable runoff area.

3.3.3 Critical Foreslopes

Critical foreslopes are those steeper than 1V:3H (5). These slopes create a higher propensity for an errant vehicle to overturn and should be treated if they begin within the clear-zone distance of a particular highway and meet the suggested barrier recommendations for shielding contained in Chapter 5. Examples 3-C, 3-D, and 3-E illustrate the application of the clear-zone concept to critical foreslopes.

3.3.4 Examples of Clear-Zone Application on Variable Slopes

A variable foreslope often is specified on new construction to provide a relatively flat recovery area immediately adjacent to the roadway followed by a steeper foreslope. This design requires less right-of-way and embankment material than a continuous, relatively

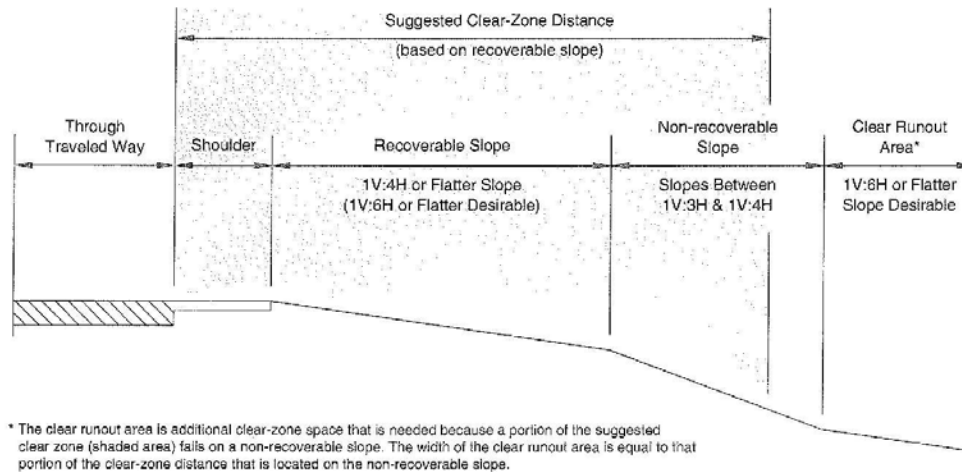


Figure 3-2. Clear Zone for Non-Recoverable Parallel Foreslope

3.2.2 Backslopes

When a highway is located in a cut section, the backslope may be traversable depending on its relative smoothness and the presence of fixed obstacles. If the foreslope between the roadway and the base of the backslope is traversable (1V:3H or flatter) and the backslope is obstacle-free, it may not be a significant obstacle, regardless of its distance from the roadway. On the other hand, a steep, rough-sided rock cut normally should begin outside the clear zone or be shielded. A rock cut normally is considered to be rough-sided when the face will cause excessive vehicle snagging rather than provide relatively smooth redirection.

3.2.3 Transverse Slopes

A common obstacle on roadsides are transverse slopes created by median crossovers, berms, driveways, or intersecting side roads. Although the exposure for transverse slopes is less than that for foreslopes or backslopes, they generally are more critical to errant motorists because run-off-the-road vehicles typically strike them head-on.

Transverse slopes of 1V:10H are desirable (7); however, their practicality may be limited by width restrictions and the maintenance problems associated with the long tapered ends of pipes or culverts. Transverse slopes of 1V:6H or flatter are suggested for high-speed roadways, particularly for the section of the transverse slope that is located immediately adjacent to traffic (3). This slope then can be transitioned to a steeper slope as the distance from the edge of the through traveled way increases. Transverse slopes steeper than 1V:6H may be considered for urban areas or for low-speed facilities. Figures 3-3 and 3-4 show suggested designs for these slopes, while Section 3.4.3 discusses safety treatments for parallel drainage structures.

Figure 3-5 shows some alternative designs for drains at median openings. The water flows into a grated drop inlet in the median to a cross-drainage structure or directly underneath the travel lanes to an outside channel. This eliminates the two pipe ends that would be exposed to traffic in the median. The transverse slopes of the median opening then would be desirably sloped at 1V:10H or flatter.

of errant vehicles. The clear zone includes shoulders, bike lanes, and auxiliary lanes, except those auxiliary lanes that function like through lanes. Many obstacles located within this clear-zone distance were removed, relocated, redesigned, or shielded by traffic barriers or crash cushions. It soon became apparent, however, that in some limited situations in which the embankment sloped significantly downward, a vehicle could encroach farther from the through traveled way and a 9-m [30-ft] clear zone might not be adequate. Conversely, on most low-volume, urban, or low-speed facilities, a 9-m [30-ft] clear-zone distance was considered excessive and seldom could be justified for engineering, environmental, or economic reasons.

The 1977 AASHTO *Guide for Selecting, Locating, and Designing Traffic Barriers (1)* modified the earlier clear-zone concept by introducing variable clear-zone distances based on traffic volumes, speeds, and roadside geometry. Table 3-1 can be used to determine the suggested clear-zone distance for selected traffic volumes and speeds. However, Table 3-1 provides only a general approximation of the needed clear-zone distance. These data are based on limited empirical data that were extrapolated to provide information for a wide range of conditions. The designer should keep in mind site-specific conditions, design speeds, rural versus urban locations, and practicality. The distances obtained from Table 3-1 should suggest only the approximate center of a range to be considered and not a precise distance to be held as absolute. For roadways with low traffic volumes, it may not be practical to apply even the minimum values found in Table 3-1. Refer to Chapter 12 for additional considerations for low-volume roadways and Chapter 10 for additional guidance for urban applications.

Table 3-1. Suggested Clear-Zone Distances in Meters (Feet) from Edge of Through Traveled Lane (6)

Design Speed (km/h)	Design ADT	Metric Units					
		Foreslopes			Backslopes		
		1V:6H or flatter	1V:5H to 1V:4H	1V:3H	1V:3H	1V:5H to 1V:4H	1V:6H or flatter
≤60	UNDER 750 ^a	2.0-3.0	2.0-3.0	^a	2.0-3.0	2.0-3.0	2.0-3.0
	750-1500	3.0-3.5	3.5-4.5	^a	3.0-3.5	3.0-3.5	3.0-3.5
	1500-6000	3.5-4.5	4.5-5.0	^a	3.5-4.5	3.5-4.5	3.5-4.5
	OVER 6000	4.5-5.0	5.0-5.5	^a	4.5-5.0	4.5-5.0	4.5-5.0
70-80	UNDER 750 ^a	3.0-3.5	3.5-4.5	^b	2.5-3.0	2.5-3.0	3.0-3.5
	750-1500	4.5-5.0	5.0-6.0	^b	3.0-3.5	3.5-4.5	4.5-5.0
	1500-6000	5.0-5.5	6.0-8.0	^b	3.5-4.5	4.5-5.0	5.0-5.5
	OVER 6000	6.0-6.5	7.5-8.5	^b	4.5-5.0	5.5-6.0	6.0-6.5
90	UNDER 750 ^a	3.5-4.5	4.5-5.5	^b	2.5-3.0	3.0-3.5	3.0-3.5
	750-1500	5.0-5.5	6.0-7.5	^b	3.0-3.5	4.5-5.0	5.0-5.5
	1500-6000	6.0-6.5	7.5-9.0	^b	4.5-5.0	5.0-5.5	6.0-6.5
	OVER 6000	6.5-7.5	8.0-10.0 ^a	^b	5.0-5.5	6.0-6.5	6.5-7.5
100	UNDER 750 ^a	5.0-6.5	6.0-7.5	^b	3.0-3.5	3.5-4.5	4.5-5.0
	750-1500	6.0-7.5	8.0-10.0 ^a	^b	3.5-4.5	5.0-5.5	6.0-6.5
	1500-6000	8.0-9.0	10.0-12.0 ^a	^b	4.5-5.5	5.5-6.5	7.5-8.0
	OVER 6000	9.0-10.0 ^a	11.0-13.5 ^a	^b	6.0-6.5	7.5-8.0	8.0-8.5
110 ^a	UNDER 750 ^a	5.5-6.0	6.0-8.0	^b	3.0-3.5	4.5-5.0	4.5-5.0
	750-1500	7.5-8.0	8.5-11.0 ^a	^b	3.5-5.0	5.5-6.0	6.0-6.5
	1500-6000	8.5-10.0 ^a	10.5-13.0 ^a	^b	5.0-6.0	6.5-7.5	8.0-8.5
	OVER 6000	9.0-10.5 ^a	11.5-14.0 ^a	^b	6.5-7.5	8.0-9.0	8.5-9.0

Notes:

- a) When a site-specific investigation indicates a high probability of continuing crashes or when such occurrences are indicated by crash history, the designer may provide clear-zone distances greater than the clear zone shown in Table 3-1. Clear zones may be limited to 9 m for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.
- b) Because recovery is less likely on the unshielded, traversable 1V:3H foreslope on a fill section, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should consider right-of-way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the through traveled lane and the beginning of the 1V:3H slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the foreslope parameters that may enter into determining a maximum desirable recovery area are illustrated in Figure 3-2. A 3-m recovery area at the toe of slope should be provided for all traversable, non-recoverable fill slopes.

July 2015 Errata

- c) For roadways with low volumes, it may not be practical to apply even the minimum values found in Table 3-1. Refer to Chapter 12 for additional considerations for low-volume roadways and Chapter 10 for additional guidance for urban applications.
- d) When design speeds are greater than the values provided, the designer may provide clear-zone distances greater than those shown in Table 3-1.

U.S. Customary Units

Design Speed (mph)	Design ADT	Foreslopes			Backslopes		
		1V:8H or flatter	1V:5H to 1V:4H	1V:3H	1V:3H	1V:5H to 1V:4H	1V:6H or flatter
≤40	UNDER 750 ^a	7-10	7-10	a	7-10	7-10	7-10
	750-1500	10-12	12-14	b	10-12	10-12	10-12
	1500-6000	12-14	14-16	b	12-14	12-14	12-14
	OVER 6000	14-16	16-18	b	14-16	14-16	14-16
45-50	UNDER 750 ^a	10-12	12-14	b	8-10	8-10	10-12
	750-1500	14-16	16-20	b	10-12	12-14	14-16
	1500-6000	16-18	20-26	b	12-14	14-16	16-18
	OVER 6000	20-22	24-28	b	14-16	18-20	20-22
55	UNDER 750 ^a	12-14	14-18	b	8-10	10-12	10-12
	750-1500	16-18	20-24	b	10-12	14-16	16-18
	1500-6000	20-22	24-30	b	14-16	16-18	20-22
	OVER 6000	22-24	26-32 ^c	b	16-18	20-22	22-24
60	UNDER 750 ^a	16-18	20-24	b	10-12	12-14	14-16
	750-1500	20-24	26-32 ^c	b	12-14	16-18	20-22
	1500-6000	26-30	32-40 ^c	b	14-18	18-22	24-26
	OVER 6000	30-32 ^c	36-44 ^c	b	20-22	24-26	26-28
65-70 ^d	UNDER 750 ^a	18-20	20-26	c	10-12	14-16	14-16
	750-1500	24-26	28-36 ^c	c	12-16	18-20	20-22
	1500-6000	28-32 ^c	34-42 ^c	b	16-20	22-24	26-28
	OVER 6000	30-34 ^c	38-46 ^c	d	22-24	26-30	28-30

Notes:

- a) When a site-specific investigation indicates a high probability of continuing crashes or when such occurrences are indicated by crash history, the designer may provide clear-zone distances greater than the clear zone shown in Table 3-1. Clear zones may be limited to 30 ft for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.
- b) Because recovery is less likely on the unshielded, traversable 1V:3H fill slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should consider right-of-way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the through traveled lane and the beginning of the 1V:3H slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the foreslope parameters that may enter into determining a maximum desirable recovery area are illustrated in Figure 3-2. A 10-ft recovery area at the toe of slope should be provided for all traversable, non recoverable fill slopes.
- c) For roadways with low volumes it may not be practical to apply even the minimum values found in Table 3-1. Refer to Chapter 12 for additional considerations for low-volume roadways and Chapter 10 for additional guidance for urban applications.
- d) When design speeds are greater than the values provided, the designer may provide clear-zone distances greater than those shown in Table 3-1.

The designer may choose to modify the clear-zone distances in Table 3-1 with adjustment factors to account for horizontal curvature, as shown in Table 3-2. These modifications normally are considered only when crash histories indicate such a need, when a specific site investigation shows a definitive crash potential that could be significantly lessened by increasing the clear zone width, and when such increases are cost-effective. Horizontal curves, particularly for high-speed facilities, are usually superelevated to increase safety and provide a more comfortable ride. Increased banking on curves where the superelevation is inadequate is an alternate method of increasing roadway safety within a horizontal curve, except where snow and ice conditions limit the use of increased superelevation.

Traffic signal supports present a special situation where a breakaway support may not be practical or desirable. As with luminaire supports, a fallen signal post support may become an obstruction. However, the potential risks associated with the temporary loss of full signalization at the intersection should be considered.

When traffic signals are installed on high-speed facilities (generally defined as those having speed limits of 80 km/h [50 mph] or greater), the signal supports and, if not mounted on one of the signal support poles, the signal support box, should be placed as far away from the roadway as practicable. Shielding these supports can be considered if they are within the clear zone for that particular roadway. Traffic signal supports with mast arms, or those that have a support on both sides of the roadway and a wire (span wire) or other components (overhead) that spans the facility, normally are not provided with a breakaway device. Post-mounted signals are commonly installed in close proximity to traffic lanes or in wide medians; therefore, consideration should be given to using breakaway devices for these supports.

4.7 SUPPORTS FOR MISCELLANEOUS DEVICES

Other relatively narrow objects that are usually located adjacent to the roadway include intelligent transportation systems, railroad warning devices, fire hydrants, and mailboxes. These devices are discussed in the following sections.

4.7.1 Railroad Crossing Warning Devices

Highway and railroad officials should cooperatively decide on the type of warning device needed at a particular crossing (e.g., crossbucks, flashing light signals, or gates). As a minimum, crossbucks are required and should be installed on an acceptable support. Other warning device supports, such as signals or gates, can cause an increase in the severity of injuries to vehicle occupants if struck at high speeds. In these cases, if the support is located in the clear zone, consideration should be given to shielding the support with a crash cushion. A longitudinal barrier often is not used because there is seldom sufficient space for a proper downstream end treatment, a longer obstacle is created by installing a guardrail, and a vehicle striking a longitudinal barrier when a train is occupying the crossing may be redirected into the train. The designer also should be aware of the immediate risk to other motorists just after the devices are knocked down by impacting vehicles.

4.7.2 Fire Hydrants

Fire hydrants are another type of roadside feature that may be an obstacle. While most fire hydrants are made of cast iron and could be expected to fracture upon impact, crash testing meeting current testing procedures has not been done to verify that designs meet breakaway criteria. However, at least one fire hydrant stem and coupling design that provides for immediate water shutoff if struck by a vehicle is available.

Whenever possible, fire hydrants should be located sufficiently far away from the roadway so that they do not become obstructions for the motorist, yet are still readily accessible to and usable by emergency personnel. Any portion of the hydrant not designed to break away should be within 100 mm [4 in.] of the ground.

4.7.3 Mailbox Supports

Mailbox supports are addressed in Chapter 11.

4.8 UTILITY POLES

Motor vehicle crashes with utility poles account for approximately 12 percent of all fixed-object fatal crashes annually. This degree of involvement is related to the number of poles in use, their proximity to the traveled way, and their unyielding nature.

As with sign and luminaire supports, the most desirable solution is to locate utility poles where they are least likely to be struck. One alternative unique to power and telephone lines is to bury them, thereby eliminating the obstacles. For poles that cannot be eliminated or relocated, breakaway designs have been developed and successfully crash tested. This alternative is briefly discussed in this section.

tion. Because utility poles are generally privately owned and installed devices permitted on publicly owned rights-of-way, they are not under the direct control of a highway agency. This dual responsibility sometimes complicates the implementation of effective countermeasures.

For new construction or major reconstruction, every effort should be made to install or relocate utility poles as far from the traveled way as practical. Two AASHTO publications—*A Policy on the Accommodation of Utilities within Freeway Right-of-Way (1)* and *A Guide for Accommodating Utilities within Highway Right-of-Way (2)*—provide more detailed information on locating utility facilities within highway rights-of-way.

For existing utility pole installations, a concentration of crashes at a site or a certain type of crash that seems to occur frequently in a given jurisdiction may indicate that the highway or utility system is contributing to the crash potential. Utility pole crashes are subject to the same patterns as other types of roadway crashes; thus, they are subject to traditional highway crash study procedures. A detailed study of crash records may identify high-frequency crash locations and point out improvements that will reduce the number and severity of future crashes. Road users (the public and utility firms) also can provide input into the nature and causes of highway and utility crashes. The steps that are normally included in a comprehensive crash-reduction program are the following:

- Setting up a traffic records system
- Identifying high-frequency crash locations
- Analyzing high-frequency crash locations
- Correcting the high-frequency crash locations
- Reviewing the results of the program

Identification and analysis programs of high-frequency crash locations can vary from simple to complex depending on the size and resources of the agency. The *NCHRP Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan (8)* includes Volume 8: *A Guide for Reducing Collisions Involving Utility Poles*. This report suggests objectives and strategies for reducing the consequences and frequency of utility pole crashes. Table 4-1 suggests strategies in response to specific objectives.

The use of breakaway poles is intended to reduce the severity of an accident rather than its frequency. The designs shown in Figure 4-14, consisting of ground-level slip base and upper hinge assembly, have been successfully crash tested. These designs may be considered for poles in vulnerable locations that cannot be economically removed or relocated, such as gore areas, the outside of sharp curves, and opposite the intersecting roadway at T-intersections. Several variations of the breakaway utility pole are available and have demonstrated satisfactory in-service performance in the limited field trials to date.

Table 4-1. Objectives and Strategies for Reducing Utility Pole Crashes

Objectives		Strategies
A	Treat specific utility poles in high-crash and high-risk spot locations.	A1 Remove poles in hazardous locations.
		A2 Relocate poles in hazardous locations further from the roadway or to a less vulnerable location.
		A3 Use breakaway poles.
		A4 Shield drivers from poles in a hazardous location.
		A5 Improve the drivers' ability to see poles in a hazardous location.
		A6 Apply traffic-calming measures to reduce speeds on high-risk sections.
B	Prevent placing utility poles in high-risk locations.	B1 Develop, revise, and implement policies to prevent placing or replacing poles within the recovery area.
C	Treat several utility poles along a corridor to minimize the likelihood of crashing into a utility pole if a vehicle runs off the road.	C1 Place utilities underground.
		C2 Relocate poles along the corridor farther from the roadway and/or to less vulnerable locations.
		C3 Decrease the number of poles along the corridor.

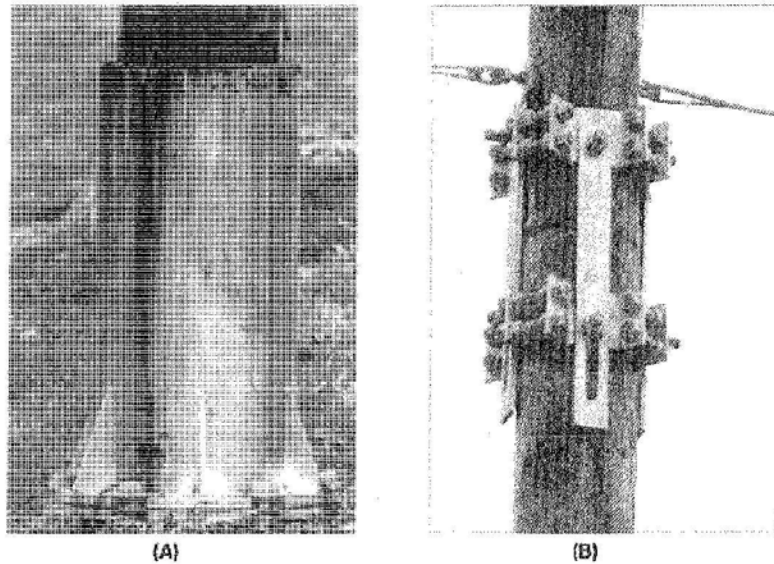


Figure 4-14. Prototype Breakaway Design for Utility Poles

4.9 TREES

Single vehicle crashes with trees account for more than 50 percent of all fixed-object fatal crashes annually and result in the deaths of approximately 4,550 persons each year. Unlike the roadside hardware previously addressed in this chapter, trees are not generally a design element over which highway designers have direct control. With the exception of landscaping projects in which the types and locations of trees and other vegetation can be carefully chosen, the problem most often faced by designers is the treatment of existing trees that are likely to be impacted by an errant vehicle. To promote consistency within a state, each highway agency should develop a formal policy to provide guidance to design, landscape, construction, and maintenance personnel for this situation. The concept of context-sensitive design has been embraced in much of the country and is endorsed by AASHTO. Policies that focus solely on the safety aspects of trees and promote tree removal over other measures may not be acceptable to all involved parties. This section is intended to provide general guidelines from which a specific policy on trees may be developed.

Trees are potential obstructions by virtue of their size and their location in relation to vehicular traffic. Generally, an existing tree with an expected mature size greater than 100 mm [4 in.] at stub height is considered a fixed object. When trees or shrubs with multiple trunks or groups of small trees are close together, they may be considered as having the effect of a single tree with their combined cross-sectional area. Maintenance forces can minimize future problems by mowing clear zones to prevent seedlings from becoming established. The location factor is more difficult to address than tree size. Typically, large trees should be removed from within the selected clear zone for new construction and for reconstruction. As noted in Chapter 3, the extent of the clear zone depends on several variables, including highway speeds, traffic volumes, and roadside slopes. Segments of a highway can be analyzed to identify individual trees or groups of trees that are candidates for corrective measures. County and township roads, which generally have restrictive geometric designs and narrow off-road recovery areas, account for a large percentage of the annual tree-related fatal crashes, followed by state and U.S. numbered highways on curved alignment. Fatal crashes involving trees along Interstate highways are relatively rare in most states.

The *NCHRP REPORT 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan (8)* includes *Volume 3: A Guide for Addressing Collisions with Trees in Hazardous Locations*. This guide provides objectives and strategies that can be employed to reduce the number and severity of run-off-the-road crashes with trees. Table 4-2 suggests strategies in response to specific objectives.

Table 4-2. Objectives and Strategies for Reducing Crashes with Trees

Objectives		Strategies
A	Prevent trees from growing in hazardous locations.	A1 Develop, revise, and implement planting guidelines to prevent placing trees in hazardous location.
		A2 Develop mowing and vegetation control guidelines.
B	Eliminate the hazardous condition and/or reduce the severity of the crash.	B1 Remove trees in hazardous locations.
		B2 Shield motorists from striking trees.
		B3 Modify roadside clear zone in the vicinity of trees.
		B4 Delineate trees in hazardous locations.

Following several years of research by the Michigan Department of Transportation, a *Guide to Management of Roadside Trees (5)* was distributed nationally by the Federal Highway Administration (FHWA) as Report No. FHWA-IP-86-17. This document contains detailed information on identifying and evaluating higher risk roadside environments and provides guidance for implementing roadside tree removal. It also addresses environmental issues, alternative treatments, mitigation efforts, and maintenance practices. The remainder of this section is basically a summary of the information and recommendations included in that report.

Essentially, there are two methods for addressing the issue of roadside trees. The first is to keep the motorist on the road whenever possible, while the second is to mitigate the danger inherent in leaving a roadway with trees along it.

On-roadway treatments include

- Pavement marking,
- Rumble strips,
- Signs,
- Delineators, and
- Roadway improvements.

Pavement markings are one of the most effective and least costly improvements that can be made to a roadway. Centerline and edge line markings are particularly effective for roads with heavy nighttime traffic, frequent fog, and narrow lanes. Shoulder rumble strips also can be used to warn motorists that their vehicles have crossed the edgeline and may run off the road.

The installation of advance warning signs and roadway delineators also can be used to notify motorists of sections of roadway where extra caution is advised. Typically, these will be used in advance of curves that are noticeably sharper than those immediately preceding it.

Roadway improvements such as curve reconstruction to provide increased superelevation, shoulder widening, and paving are relatively expensive countermeasures that may not be cost-effective in all cases.

Off-roadway treatments consist primarily of two options:

- Tree removal
- Shielding

The removal of individual trees should be considered when those trees are determined to be both obstructions and in a location where they are likely to be hit. Such trees often can be identified by past crash histories at similar sites, by scars indicating previous crashes, or by field reviews. Removal of individual trees will not reduce the probability that a vehicle will leave the roadway at that point, but it should reduce the severity of any resulting crash. For example, 1V:31H and flatter slopes may be traversable, but a vehicle on a 1V:3H slope usually will reach the bottom. If numerous trees are at the toe of the slope, removal of isolated trees on the slope will not significantly reduce the risk of a crash. Similarly, if the recommended clear zone for a particular roadway is 7 m [23 ft], including the shoulder, removal of trees 6 to 7 m [20 to 23 ft] from the road will not materially change the risk to motorists if an unbroken tree line remains at 8 m [26 ft] and beyond. However, isolated trees noticeably closer to the roadway may be candidates for removal. If a tree or group of trees is in a vulnerable location but cannot be removed, a properly designed and installed traffic barrier can be used to shield them. Roadside barriers should be used only when the severity of striking the tree is greater than striking the barrier. Specific information on the selection, location, and design of roadside barriers is in Chapter 5.

REFERENCES

1. AASHTO. *A Policy on the Accommodation of Utilities within Freeway Right-of-Way*. American Association of State Highway and Transportation Officials, Washington, DC, 2005.
2. AASHTO. *A Guide for Accommodating Utilities within Highway Right-of-Way*. American Association of State Highway and Transportation Officials, Washington, DC, 2005.
3. AASHTO. *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*. American Association of State Highway and Transportation Officials, Washington, DC, 2009.
4. AASHTO. *Manual for Assessing Safety Hardware (MASH)*. American Association of State Highway and Transportation Officials, Washington DC, 2009.
5. FHWA. *Guide to Management of Roadside Trees*. Report No. FHWA-IP-86-17. Federal Highway Administration, Washington, DC, December 1986.
6. FHWA. *Manual on Uniform Traffic Control Devices (MUTCD)*. Federal Highway Administration, Washington, DC, 2009.
7. IIHS and HLDI. *Fatality Facts 2006: Fixed Object Crashes*. Insurance Institute for Highway Safety and Highway Loss Data Institute, Washington, DC, 2007 [cited December 21, 2010]. Available from http://www.iihs.org/research/fatality_facts_2006/roadsidehazards.html.
8. NCHRP. *National Cooperative Highway Research Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan*. NCHRP, Transportation Research Board, Washington, DC, 2003.
9. Ross, H. E., Jr., D. L. Sicking, and R. A. Zimmer. *National Cooperative Highway Research Program Report 350: Recommended Procedures for the Safety Evaluation of Highway Features*. NCHRP, Transportation Research Board, Washington, DC, 1993.
10. TRB. *Safety Appurtenances and Utility Accommodation*. In *Transportation Research Record 970*. Transportation Research Board, National Research Council, Washington, DC, 1984.

10.2.2.3.1 Utility Poles

Utility poles are prevalent in urban environments and can pose a substantial hazard to errant vehicles and motorists. The frequency of utility pole crashes increases with daily traffic volume and the number of poles adjacent to the traveled way (17). Utility poles are adjacent to urban roadways more than rural highways, and demands for operational improvements coupled with limited street right-of-ways often lead to the placement of these poles proximate to the roadway edge. In fact, utility poles are second only to trees as the object associated with the greatest number of fixed-object fatalities (15). Though utility poles often are impacted directly, guy wires that stabilize the pole also can pose a hazard because vehicles can impact them directly as well.

In general, utility pole-related crashes are considered to be principally an urban hazard, with urban areas experiencing 36.9 pole crashes per 100 miles of roadway, while rural areas experience 5.2 pole crashes per 100 miles (11). One study determined that the variable with the greatest ability to explain utility pole-related crashes was the average daily traffic (ADT) along the roadway (17). ADT as the critical variable explains the importance of vehicle exposure in understanding run-off-the-road crashes with utility poles.

A common recommendation for addressing the utility pole safety issue is to place utilities underground and thereby remove the hazardous poles. The removal of all poles in the urban roadside environment is not practical; these poles often function as the supports for street lights and other shared utilities. However, several known utility pole hazardous locations should be avoided when feasible. Generally, utility poles should be located (6, 10)

- As far as possible from the active travel lanes,
- Away from access points where the pole may restrict sight distance,
- Inside a sharp horizontal curve (because errant vehicles tend to continue straight towards the outside of curves), and
- On only one side of the road.

10.2.2.3.2 Lighting and Visibility

An important issue in addressing roadside safety is the role of lighting in making potentially hazardous roadside environments visible to the road users (i.e. motor vehicle drivers, bicyclists, and pedestrians), particularly during night-time hours.

The North Carolina Department of Transportation's *Traditional Neighborhood Development (TND) Guidelines* (12) recommends that for a TND designed to accommodate "a human scale, walkable community with moderate to high residential densities and a mixed use core," more and shorter lights should be used rather than less frequent, tall, high-intensity street lights. This closer light spacing will provide adequate coverage for both pedestrian and vehicular activity. Chapter 4 briefly describes the various recommended luminaire supports.


10.2.2.3.3 Sign Posts and Roadside Hardware

The design of crashworthy sign posts is directed by AASHTO's *Manual for Assessing Safety Hardware* (MASH) (3) and *NCHRP Report 350: Recommended Procedures for the Safety Performance Evaluation of Highway Features* (14), and substantial research has been devoted to designing these features to be crashworthy. Multiple designs for these features are included in this edition of the *Roadside Design Guide*, and specifications for evaluating these features are contained in AASHTO's *Standard Specification and Structural Supports for Highway Signs, Luminaires, and Traffic Signals* (2). Table 10-10 describes roadside safety strategies for utility poles, light poles, and street sign posts.

6480 Zeeb Road, Dexter, MI 48130

Exhibit C


Mobilitie, LLC Site Plans and Details




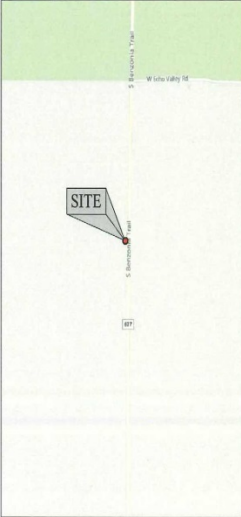

9MIX000372A

44.821109, -85.998909

S Benzonia Trl & W Echo Valley Rd
Empire, MI 49630



Know what's below.
Call before you dig.

<p>GENERAL NOTES</p> <p>THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.</p> <p>SITE INFORMATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>POLE ID:</td><td>9MIX000372A</td></tr> <tr><td>LATITUDE:</td><td>44.821109</td></tr> <tr><td>LONGITUDE:</td><td>-85.998909</td></tr> <tr><td>ADDRESS/CROSS STREET:</td><td>S Benzonia Trl & W Echo Valley Rd</td></tr> <tr><td>CITY, STATE ZIP:</td><td>Empire, MI 49630</td></tr> <tr><td>PROPERTY OWNER:</td><td>PUBLIC RIGHT-OF-WAY</td></tr> <tr><td>APPLICANT:</td><td>MOBILITE, LLC</td></tr> <tr><td>APPLICANT ADDRESS:</td><td>120 S RIVERSIDE PLAZA SUITE 1800 CHICAGO, IL 60606</td></tr> </table> <p>DO NOT SCALE DRAWINGS</p> <p>CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.</p>	POLE ID:	9MIX000372A	LATITUDE:	44.821109	LONGITUDE:	-85.998909	ADDRESS/CROSS STREET:	S Benzonia Trl & W Echo Valley Rd	CITY, STATE ZIP:	Empire, MI 49630	PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY	APPLICANT:	MOBILITE, LLC	APPLICANT ADDRESS:	120 S RIVERSIDE PLAZA SUITE 1800 CHICAGO, IL 60606	<p style="text-align: center;">LOCATION MAPS NORTH </p> <div style="display: flex;"> <div style="flex: 1;"> <p style="text-align: center;">VICINITY MAP</p>  </div> <div style="flex: 1;"> <p style="text-align: center;">REGIONAL MAP</p>  </div> </div>	<p style="text-align: center;">PROJECT DESCRIPTION</p> <p>END USER PROPOSES TO INSTALL A NEW 120'-0" UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:</p> <ol style="list-style-type: none"> 1. INSTALL PROPOSED 120'-0" UTILITY POLE <p style="text-align: center;">CODES</p> <p>BUILDING CODES: 2012 MICHIGAN BUILDING CODE USE GROUP U CONSTRUCTION TYPE 1B 2014 NEC CODE & PART 8 RULES</p> <p style="text-align: center;">SHEET INDEX</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>SHEET #</th> <th>SHEET DESCRIPTION</th> </tr> <tr><td>0.0</td><td>TITLE SHEET</td></tr> <tr><td>1.0</td><td>EXHIBIT PHOTO & SITE PLAN</td></tr> <tr><td>2.0</td><td>UTILITY POLE ELEVATIONS</td></tr> <tr><td>3.0</td><td>EROSION CONTROL PLAN</td></tr> <tr><td>4.0</td><td>ELECTRICAL</td></tr> <tr><td>TR-1</td><td>TRAFFIC CONTROL PLANS</td></tr> <tr><td>TR-2</td><td>TRAFFIC PLAN AND DETAILS</td></tr> <tr><td>TR-3</td><td>TRAFFIC PLAN NOTES</td></tr> </table> <p style="text-align: center;">ARCHITECT / ENGINEER</p> <p>PETER LICHOMSKI ARCHITECT, INC. 6720 LEYTONSTONE BLVD. WEST BLOOMFIELD, MI 48322 248-105-2212 PETER.LICHOMSKI@LABARCHITECTSLLC.COM</p>	SHEET #	SHEET DESCRIPTION	0.0	TITLE SHEET	1.0	EXHIBIT PHOTO & SITE PLAN	2.0	UTILITY POLE ELEVATIONS	3.0	EROSION CONTROL PLAN	4.0	ELECTRICAL	TR-1	TRAFFIC CONTROL PLANS	TR-2	TRAFFIC PLAN AND DETAILS	TR-3	TRAFFIC PLAN NOTES
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LATITUDE:	44.821109																																			
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ADDRESS/CROSS STREET:	S Benzonia Trl & W Echo Valley Rd																																			
CITY, STATE ZIP:	Empire, MI 49630																																			
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2.0	UTILITY POLE ELEVATIONS																																			
3.0	EROSION CONTROL PLAN																																			
4.0	ELECTRICAL																																			
TR-1	TRAFFIC CONTROL PLANS																																			
TR-2	TRAFFIC PLAN AND DETAILS																																			
TR-3	TRAFFIC PLAN NOTES																																			

PROJECT NUMBER: 9MIX000372A


DRAWN BY: JES

CHECKED BY: JES

DATE: 10.05.18

REVIEW: JES

SCALE: 0.0



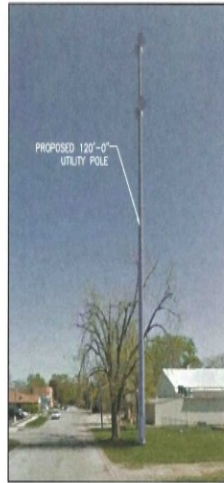
IT IS A VIOLATION OF THE LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

9MIX000372A
44.821109, -85.998909
S Benzonia Trl & W Echo Valley Rd
Empire, MI 49630
UTILITY POLE

TITLE SHEET

SHEET NUMBER

0.0



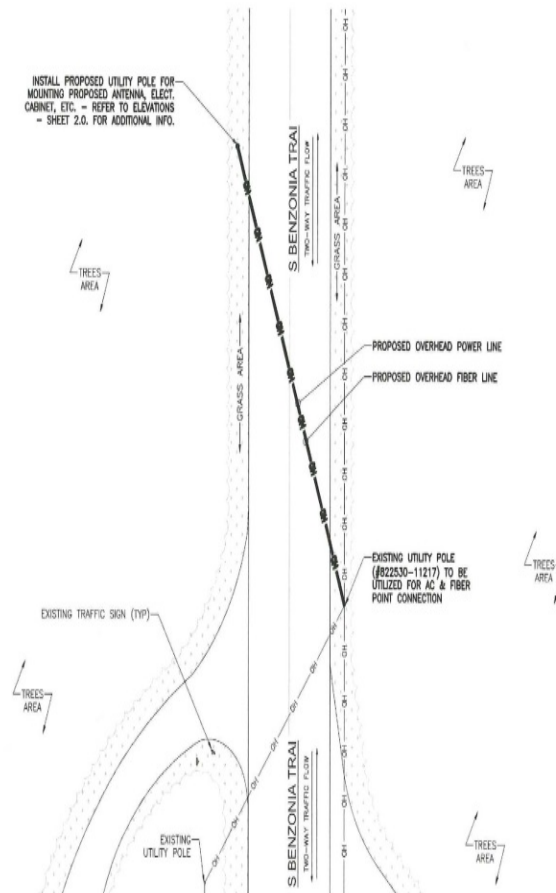
① EXHIBIT PHOTO - GENERIC (NOT SITE SPECIFIC)
SCALE: N.T.S.



② AERIAL SITE LOCATION
SCALE: N.T.S.



INSTALL PROPOSED UTILITY POLE FOR
MOUNTING PROPOSED ANTENNA, ELECT.
CABINET, ETC. - REFER TO ELEVATIONS
- SHEET 2.0. FOR ADDITIONAL INFO.



③ ENLARGED SITE PLAN
SCALE: 1" = 20'-0" 11"x17" PLOT WILL BE HALF SCALE



PROJECT NUMBER: 2020000000
DRAWN BY: JS
CHECKED BY: JS

NO.	REVISION	DATE
1	ISSUED FOR PERMIT	10/25/18

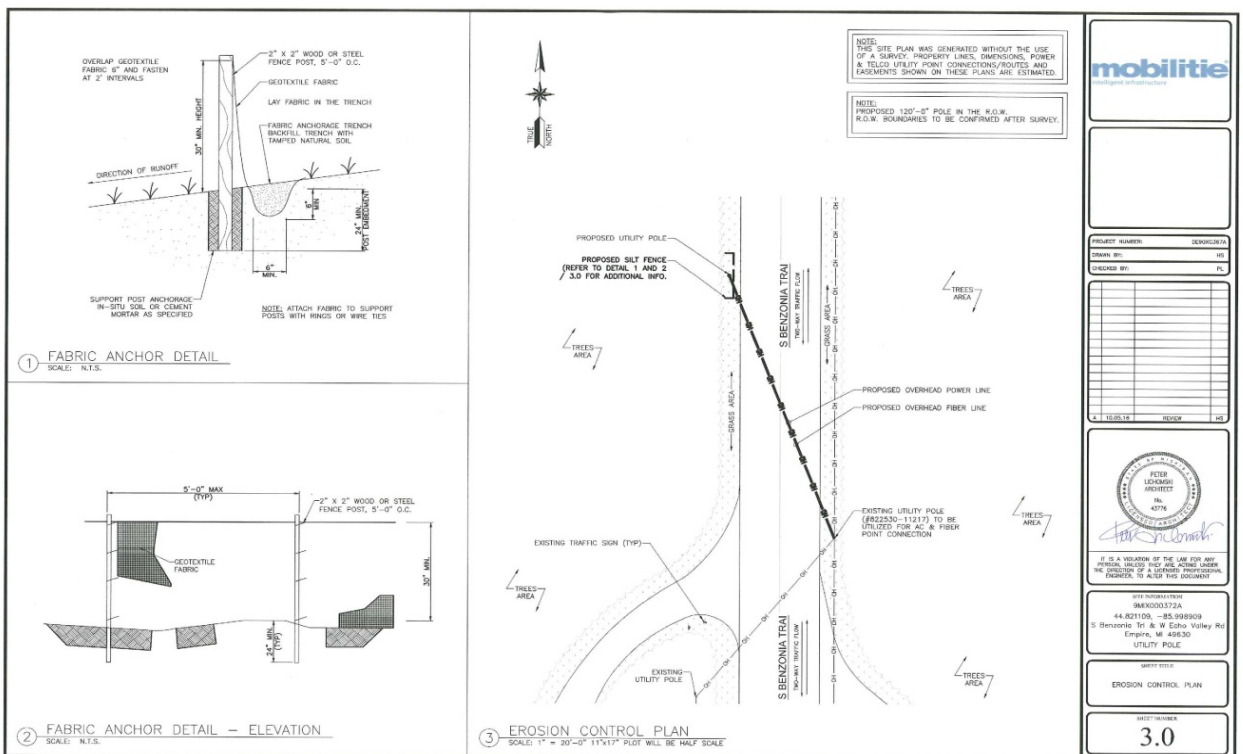


IT IS A VIOLATION OF THE LAW FOR ANY
PERSON, UNLESS THEY ARE ACTING UNDER
THE DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER, TO ALTER THIS DOCUMENT

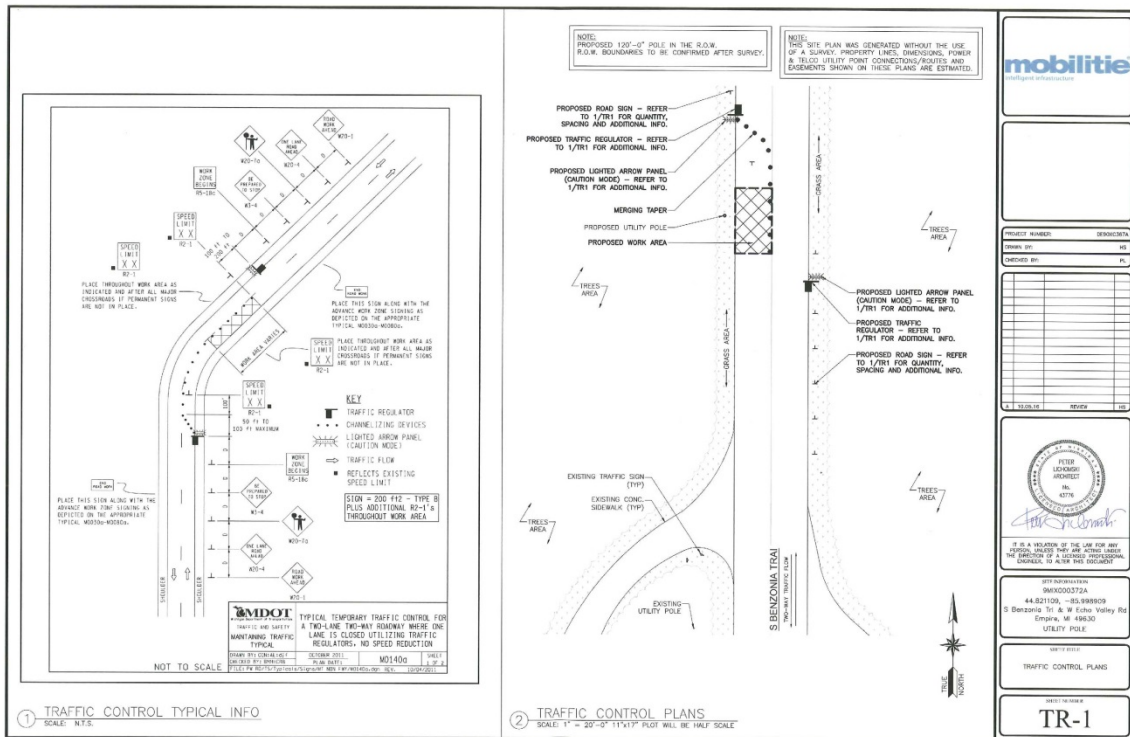
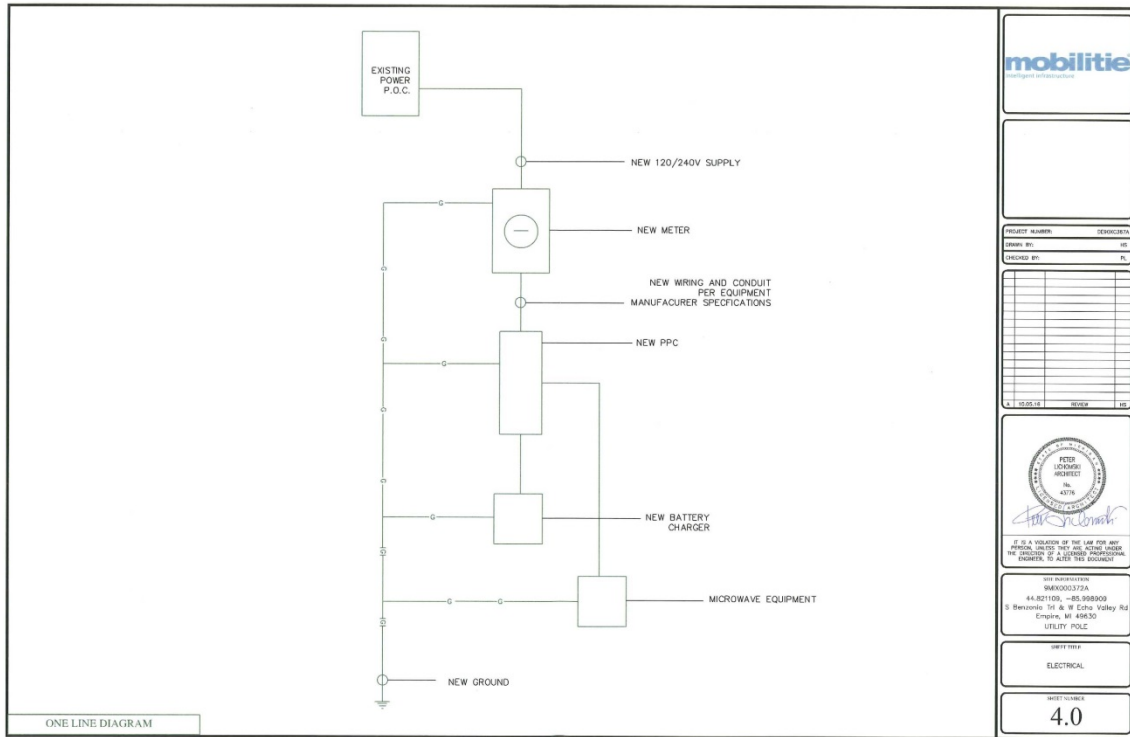
SITE INFORMATION
96X0000372A
44.821109, -85.908909
S Benzonia Trl & W Echo Valley Rd
Empire, MI 49630
UTILITY POLE

SHEET TITLE
EXHIBIT PHOTO &
ENLARGED SITE PLAN

SHEET NUMBER
1.0



6480 Zeeb Road, Dexter, MI 48130



NOTES	
1. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES AND LENGTH OF LONGITUDINAL BUFFER SPACE. SEE MDOT FOR "D" VALUES.	
2. ALL NON-APPLICABLE SIZING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, CORRECTED OR REMOVED.	
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.	
4. THE "WORK ZONE BEGINS" (WS-190) SIGN SHALL BE USED ONLY IN THE INITIAL SIZING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.	
5. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREAS SHOULD BE 15 FEET AND SHOULD BE EQUAL IN FEET TO TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREAS(S).	
6. FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.	
7. WHEN CALLED FOR IN THE FINAL ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLAGGER, SHOWN ON THE WARNING SIGN, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.	
8. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MDOT MANUAL ON TEMPORARY TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE SIGNING SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.	
9. ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.	
10. IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHOULD BE DESIGNATED AS HEAD TRAFFIC REGULATOR.	
11. ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MDOT MANUAL ON TEMPORARY TRAFFIC CONTROL DEVICES (EMPHASIS) AND THE CURRENT EDITION OF THE MDOT HANDBOOK ENTITLED "TRAFFIC REGULATORS' INSTRUCTION MANUAL."	
12. WHEN TRAFFIC REGULATORS IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATORS' STATIONS.	
13. THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS REQUESTED OTHERWISE IN THE SPECIAL PROVISIONS FOR MAINTENANCE TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.	
14. WHEN INTERSECTING ROADS OR SIGNIFICANT TRAFFIC GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIZING SHALL BE PLACED AT THESE LOCATIONS.	
15. ADDITIONAL SIZING AND/OR ELONGATED SIZING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE WS-4 SIGNS.	
16. THE HAND HELD (PANDOL) SIGNS REQUIRED BY THE MANUAL TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.	
17. THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THAT THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LINE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.	

SIGN SIZES	
DIAMOND WARNING - 48" x 48"	
WS-4 REGULATORY - 48" x 60"	
WS-190 REGULATORY - 48" x 48"	

NOT TO SCALE	
MDOT	TRAFFIC AND SAFETY MAINTENANCE TRAFFIC TYPICAL
DATE: 06/01/2011	SHEET: 1 OF 4
PROJECT: 44-02(100) - 44-02(100) - 44-02(100)	DATE: 06/01/2011
PROJECT: 44-02(100) - 44-02(100) - 44-02(100)	DATE: 06/01/2011

mobilitie	
PROJECT NUMBER: 44-02(100) - 44-02(100) - 44-02(100)	DESIGNED BY: PL
DATE: 06/01/2011	REVIEW: PL
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, OTHER THAN THE ENGINEER, TO ALTER THIS DOCUMENT.	
44-02(100) - 44-02(100) - 44-02(100)	
S. Berzonsky 1st & W. Echo Valley Rd	
Smyrna, MI 48150	
UTILITY POLE	
TRAFFIC PLAN NOTES	
TR-3	

DISTANCE BETWEEN TRAFFIC CONTROL DEVICES "D" AND LENGTH OF LONGITUDINAL BUFFER SPACE ON "WHERE WORKERS PRESENT" SEQUENCES	
POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)	
25 30 35 40 45 50 55 60 65 70	
D (FEET)	250 300 350 400 450 500 550 600 650 700

GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE "B"	
SPEED, MPH	LENGTH, FEET
20	33
25	50
30	83
35	122
40	161
45	200
50	239
55	279
60	318
65	357
70	396

MINIMUM MERGING TAPER LENGTH "L" (FEET)	
POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)	
25 30 35 40 45 50 55 60 65 70	
L (FEET)	250 300 350 400 450 500 550 600 650 700

TYPES OF TAPERS	
UPSTREAM TAPERS	L - MINIMUM
SHIFTER TAPER	1/2 L - MINIMUM
SHOULDER TAPER	1/3 L - MINIMUM
TWO-WAY TRAFFIC TAPER	100' - MAXIMUM
DOWNSIDE TAPERS	100' - MINIMUM
(USE IS OPTIONAL)	(PER LANE)

TABLES FOR "L", "D" AND "B" VALUES	
MDOT	TRAFFIC AND SAFETY MAINTENANCE TRAFFIC TYPICAL
DATE: 06/01/2011	SHEET: 1 OF 4
PROJECT: 44-02(100) - 44-02(100) - 44-02(100)	DATE: 06/01/2011
PROJECT: 44-02(100) - 44-02(100) - 44-02(100)	DATE: 06/01/2011

mobilitie	
PROJECT NUMBER: 44-02(100) - 44-02(100) - 44-02(100)	DESIGNED BY: PL
DATE: 06/01/2011	REVIEW: PL
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, OTHER THAN THE ENGINEER, TO ALTER THIS DOCUMENT.	
44-02(100) - 44-02(100) - 44-02(100)	
S. Berzonsky 1st & W. Echo Valley Rd	
Smyrna, MI 48150	
UTILITY POLE	
TRAFFIC PLAN AND DETAILS	
TR-2	

The Mobilitie, LLC proposal is to place a rigid steel pole, 120' in height, 5-6 foot in diameter with a concrete foundation extending approximately 20 feet below the surface (Mobilitie, LLC Utility Pole Elevation, plans sheets 1 - 8).

6480 Zeeb Road, Dexter, MI 48130

Exhibit D

Genesee County Crash with ACD.Net Pole Photographs

These design criteria are important because in real world experience, we know that accidents do happen which involve collisions with these roadside obstacles. Many produce fatal results, particularly with unguarded or improperly guarded obstacles in the right of way. Below are photographs and the accident report of just such an accident involving a communication pole placed in violation of the specific permit siting authorization granted by the Genesee County Road Commission and, subsequently revoked as a result of such violations.



6480 Zeeb Road, Dexter, MI 48130

Authority: 1949 PA 300, Sec.257.622 Compliance: Required MSP UD-10E Penalty: \$100 and/or 90 days (Rev. 01/2016)		External # 75663		Crash ID		Page 1 File Class : 93601 Incident # 1685203218 Reviewer Sgt. Scott Theede (197)	
STATE OF MICHIGAN TRAFFIC CRASH REPORT							
ORI: M12585200		Department Name Grand Blanc Township Police Department				Special Checks <input type="checkbox"/> Fatal <input type="checkbox"/> Non-Traffic Area <input type="checkbox"/> ORV/Snowmobile	
Crash Date 07/31/2016	Crash Time 00:25	No. of Units 01	Crash Type Single	Special Circumstances <input checked="" type="checkbox"/> None <input type="checkbox"/> Police <input type="checkbox"/> Hit and Run <input type="checkbox"/> Unknown <input type="checkbox"/> School Bus <input type="checkbox"/> Animal	Area Within Intersection		
County 25 - GENESEE	Traffic Control Signal	Relation to Roadway Outside of Shoulder/Curb		Weather Cloudy	Total Lanes 05		
City/Twp 12 - GRAND BLANC TWP	Contributing Circumstances 1st Other 2nd	Light Dark-Unlighted	Road Surface Condition Wet	Speed Limit 45	Posted Yes		
Work Zone (if applicable) Type No Workers Present No Activity Location							
LOCALIZATION	Prefix HOLLY		Road Type RD		Suffix		
	Distance/Direction 45.0 Feet N		Trafficway Not Physically Divided				
	Prefix E		Road Type RD		Suffix		
Unit Number Unit Known State Driver License Number Date of Birth (Age) License Type Endorsements Sex Total Occupants Hazardous Action							
01 Yes MI [REDACTED] 04/16/1999 (17) Operator Cycle Farm Registration M 01 None							
Unit Type Drive Information Driver is Owner Injury Position Restraint							
MV GRAND BLANC MI 48439 No O Front - Left Shoulder & Lap Belt							
Driver Condition at Time of Crash Driver Distracted By Ejected Trapped Airbag Deployed							
Fatigued or Asleep Not Distracted No No Deployed-Front							
Hospital Ambulance							
None None							
Alcohol Suspected Contributing Factor Alcohol Test Type Alcohol Test Results Test Results: Interlock Device							
No No No Breath Blood PBT Not Offered Pending Pending No							
Drug Suspected Contributing Factor Drug Test Type Drug Test Results Test Results: Citation Issued							
No No No Blood Urine Refused Pending Pending No							
Vehicle Registration State Vehicle Year Make Model Color							
DJS2353 MI 2001 FORD ESCAPE BLK							
VIN Vehicle Type Special Vehicles Private Trailer Type Vehicle Defect							
1FMYU01101KB14001 Passenger Car, SUV, Van None							
Insurance Company Insurance Policy # Towed By Towed To							
MEEMIC PAP0791250 CJ'S TOWING US-23 TOWING							
Location of Greatest Damage First Impact Extent of Damage (Power Unit and/or Trailers) Vehicle Direction Vehicle Use Action Prior							
02 02 Disabling Damage S Private Going Straight Ahead							
Sequence of Events (• Indicates MOST harmful event)							
02 - Ran Off Roadway-Left 03 - Utility Pole/Light Support 05 - Overturn 45 - Other Fixed Object							
PASSENGERS	Passenger Information		Date of Birth (Age) Sex Position Restraint		Injury Ejected Trapped Airbag Deployed		
	Hospital Ambulance		Injury Ejected Trapped Airbag Deployed				
	Passenger Information		Date of Birth (Age) Sex Position Restraint		Injury Ejected Trapped Airbag Deployed		
	Hospital Ambulance		Injury Ejected Trapped Airbag Deployed				
	Passenger Information		Date of Birth (Age) Sex Position Restraint		Injury Ejected Trapped Airbag Deployed		
Hospital Ambulance		Injury Ejected Trapped Airbag Deployed					
OWNERS	Carrier Information		USDOT MC MPSC		Driver's CDL Type Endorsements CDL Exempt		
	GVWR/GCWR <input type="checkbox"/> 10,000 lbs. or Less <input type="checkbox"/> 10,001 - 26,000 lbs. <input type="checkbox"/> Greater than 26,000 lbs.		Vehicle Configuration		Cargo Body Type Medical Card Hazardous Material ID # Class #		
	Owner Information		Owner Information				
Damaged Property ADVERTISEMENT SIGN		Public No		Owner & Phone DOCTOR SWAMY Phone: (810)771-7754			

6480 Zeeb Road, Dexter, MI 48130

Unit Number	Unit Known	State	Driver License Number	Date of Birth (Age)	License Type <input type="checkbox"/> Operator <input type="checkbox"/> Cycle <input type="checkbox"/> Chaser <input type="checkbox"/> Other	Endorsements <input type="checkbox"/> Farm <input type="checkbox"/> Other	Sex	Total Occupants	Hazardous Action	
Unit Type	Driver Information				Driver Is Owner	Injury	Position	Restraint		
Driver Condition at Time of Crash				Driver Distracted By		Ejected	Trapped	Airbag Deployed		
Hospital				Ambulance						
Alcohol Suspected	Contributing Factor	Alcohol Test Type Breath Blood Field	Urine Refused Not Offered	Alcohol Test Results Pending	Test Results:	Interlock Device				
Drug Suspected	Contributing Factor	Drug Test Type Blood Field	Urine Refused Not Offered	Drug Test Results Pending	Test Results:	Citation Issued Hazardous Other				
Vehicle Registration	State	Vehicle Description	Year	Make	Model	Color				
VIN	Vehicle Type	Special Vehicles	Private Trailer Type	Vehicle Defect						
Insurance Company	Insurance Policy #	Towed By		Towed To						
Location of Greatest Damage	First Impact	Extent of Damage (Power Unit and/or Trailers)		Vehicle Direction	Vehicle Use	Action Prior				
Sequence of Events		First	Second	Third	Fourth					
(* indicates MOST harmful event)										
PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Position	Restraint		
					Injury	Ejected	Trapped	Airbag Deployed		
	Hospital				Ambulance					
	Passenger Information				Date of Birth (Age)	Sex	Position	Restraint		
					Injury	Ejected	Trapped	Airbag Deployed		
	Hospital				Ambulance					
	Passenger Information				Date of Birth (Age)	Sex	Position	Restraint		
					Injury	Ejected	Trapped	Airbag Deployed		
	Hospital				Ambulance					
	Passenger Information				Date of Birth (Age)	Sex	Position	Restraint		
				Injury	Ejected	Trapped	Airbag Deployed			
Hospital				Ambulance						
OWNERS	Carrier Information				USDOT	MC	MPSC			
					Driver's CDL Type	Endorsements OH OP OT ON OS OX	CDL Exempt OFarm OOther			
	GVAR/GCWR	Vehicle Configuration		Cargo Body Type	Medical Card	Hazardous Material	ID #	Class #		
	<input type="checkbox"/> 10,000 lbs. or Less		<input type="checkbox"/> 10,001 - 26,000 lbs.		<input type="checkbox"/> Greater than 26,000 lbs.					
	Owner Information				Owner Information					
	Witness Information				Witness Information					
	Investigated at Scene: Yes				Reported Date (Time)	1st Investigator Name (Badge)	2nd Investigator Name (Badge)	Photos		
					07/31/2016 (00:28)	Off. Bill Kilbourn (204)		No		
Narrative					Diagram					
<p>VEH #1 WAS TRAVELING S/B ON HOLLY RD NEAR COOK RD. DRIVER #1 SAID THAT HE FELL ASLEEP AND THE NEXT THING HE KNEW, HE WAS OFF THE ROAD FLIPPING OVER. VEH #1 LEFT THE ROADWAY TO THE LEFT HIT A UTILITY POLE, FLIPPED OVER AND HIT AN ADVERTISEMENT SIGN.</p> <p>OFFICER NOTE: I WAS UNABLE TO IDENTIFY THE OWNER OF UTILITY POLE. CONSUMERS WAS CALLED TO SCENE AND WAS ALSO UNABLE TO ID UTILITY POLE.</p>										

6480 Zeeb Road, Dexter, MI 48130

Exhibit E

Costs of Providing and Maintaining a Safe Roadside with CSP Tower

Estimated Installation and Maintenance Costs
To Provide a safe Roadside with a CSP Tower

Estimated Cost of Providing a Safe Roadside with a CSP Tower

Work Item	Estimated Quantity	Units	Cost
Storm Sewer Elliptical	80	feet	\$1,200
Manhole	1	each	\$2,000
Manhole Cover & Frame	1	each	\$1,000
Culvert End Protection	2	each	\$4,000
Rock Riprap w/Fabric	60	sq. yds.	\$3,600
Edge Drain	200	feet	\$2,000
Sand Backfill, CIP	30	cu. yds.	\$600
Embankment, CIP	200	cu.yds.	\$4,000
Guardrail	200	feet	\$5,000
Guardrail Endings	2	each	\$6,000
Topsoil	400	sq. yds.	\$4,000
Seeding	40	lbs.	\$200
Fertilizer	400	lbs.	\$400
Mulch	2000	lbs.	\$400
Traffic Control	1	Lump Sum	\$5,000
Project Cleanup	1	Lump Sum	\$2,000
Total			\$41,400

Estimated Increased Annual Maintenance Cost (20% of Installation)

Work Item	Estimated Quantity	Units
Guardrail Repairs	1	once per year
Guardrail weed spraying	1	once per year
Storm Sewer Cleanout	1	once per year
Manhole Cleanout	1	once per year
Boom Arm Mowing	1	twice per year
Total		\$8,280.0

S. Puuri
3/6/2017

NOTES

- All of these costs **should** be borne by the applicant including the maintenance costs.
- These costs do not reflect the inspection costs during and post **construction or the annual** inspection costs to assure that the drainage and guardrail systems are performing as planned. These costs reflect only the average bid prices based on MDOT average unit prices during 2015, these would be typical small project unit prices for materials and installation of the work listed.
- The maintenance costs are a rough approximation of typical extra **repair and maintenance** work that a road agency would anticipate to assure that these additional structures (not including the tower) in the ROW are performing as planned. No cost has been included for use of the road right of way. Also every guardrail crash would need to be repaired, I estimate one/year just to show this should be an anticipated regular cost.

Exhibit F

Rural Road Cross Section



RURAL ROAD TYPICAL CROSS SECTION

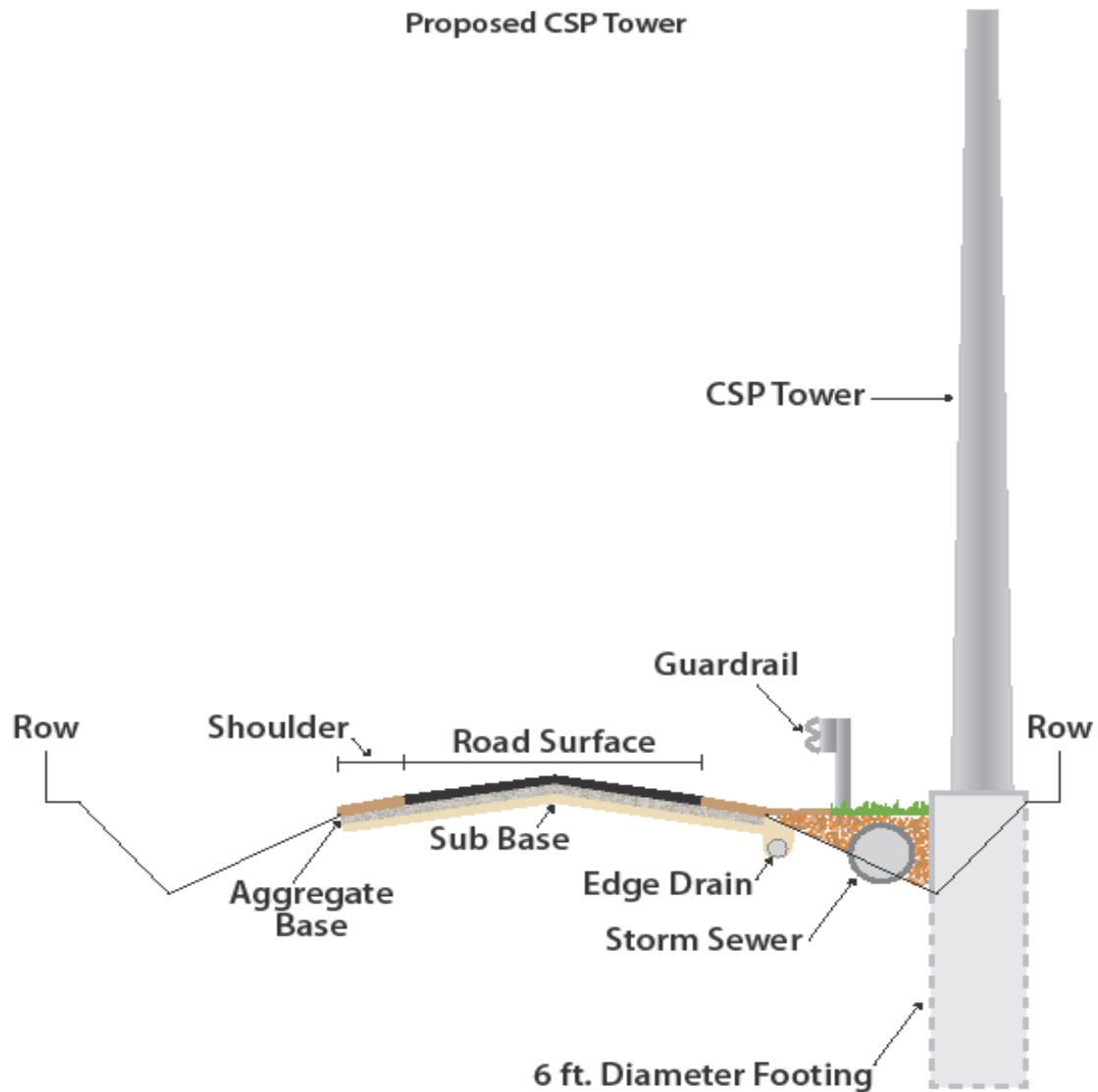
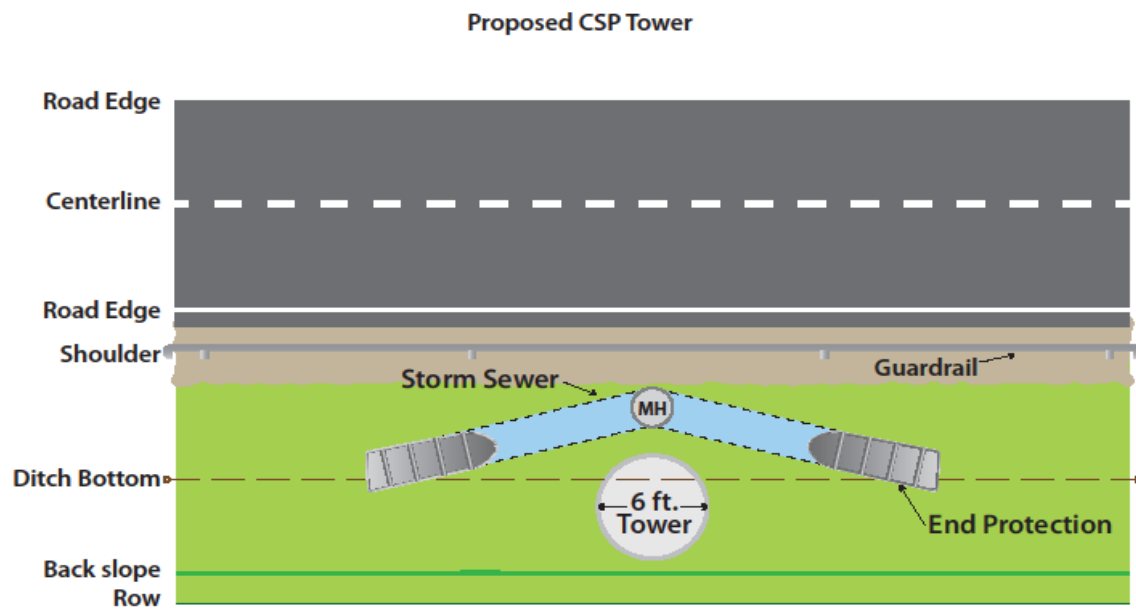


Exhibit G

Rural Road Plan View



RURAL ROAD TYPICAL PLAN VIEW



3-1-17

EXHIBIT Q

Effect on Broadband Deployment of Local Government Right of Way Fees and Practices

By,
Bryce Ward

July 18, 2011



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ECONorthwest specializes in economics, planning, and finance. Founded in 1974, we're one of the oldest independent economic consulting firms in the Pacific Northwest. ECONorthwest has extensive experience applying rigorous analytical methods to examine the benefits, costs, and other economic effects of environmental and natural resource topics for a diverse array of public and private clients throughout the United States and across the globe.

For more information about ECONorthwest, visit our website at <http://www.econw.com>.

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I. PURPOSE

In this report, we¹ comment on economic issues of right-of-way (ROW) use raised by the Federal Communications Commission's (FCC) *Notice of Inquiry* (NOI) in the matter of, "Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting." Specifically, we consider whether (a) there is evidence that ROW fees charged by local governments are affecting broadband (BB) adoption or deployment; (b) whether there is reason to believe that fees charged in some locations are likely to impact deployment or adoption in other locations; (c) whether there are bases for setting reasonable market-based fees; and (d) whether there is a reason to be concerned that the fees may reflect monopoly power. These issues are raised by several of the information requests in the NOI²:

To what extent and in what circumstances are rights of way or wireless facilities siting charges reasonable?

What are appropriate criteria for determining the reasonableness of such charges?

Are permitting or application fees unreasonable to the extent they exceed amounts that would recover administrative and other specifically identifiable costs?

Are "market based" rates for use of public rights of way or publicly-owned wireless facilities sites reasonable?

Are market-based rates substantially higher than cost-based rates?

¹ Bryce Ward Ph.D., directed this analysis. See Appendix A for his vita. ECONorthwest staff, Ed MacMullan, Paul Thoma, and Philip Taylor, worked under Dr. Ward's direction.

² FCC. 2011. Notice of Inquiry In the Matter of Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting. WC Docket No. 11-59. April 7. Page 8.

II. SUMMARY OF CONCLUSIONS

Our analysis of the available data on ROW fees and BB deployment found that ROW fees have no measurable effect on deployment. Areas where local governments' authority to levy fees is strictly limited have the same levels of BB deployment and adoption as areas where local governments have relatively wider latitude to recover fair rents for use of the ROW.

Other factors likely explain the differences in deployment and adoption observed across the country. For instance, the relatively small percentage of communities un-served by BB account for a small percentage of the U.S. population. These communities lack BB services because of their isolated location, far from centers of population and commerce. These communities typically have few residences and businesses dispersed across large geographic areas. The costs of installing BB infrastructure and providing service greatly exceed the revenues that providers can earn on these services. The FCC calculates this gap at over \$23 billion. Our analysis shows that limiting or abolishing ROW fees and subsidizing BB in currently un-served areas would likely have no measurable effect on BB penetration into most of these areas. The ROW-savings would be, at most, a small fraction of the required investment.

The literature on BB adoption identifies cost of service as one of the many factors that can influence adoption. The relationship between cost and adoption, however, is complex because of the many factors included in the cost of using or accessing BB service. Even if lower ROW fees were passed onto consumers as lower prices, this would not address many of the relevant costs factors that inhibit BB adoption – such as requiring deposits or long-term contracts, costs of computers and software, price increases after introductory offers expire, and the cost of purchasing BB bundled with other, unwanted services. A large gap exists between what current non-users say they would be willing to pay for BB services, and the maximum cost savings they could expect if providers passed on ROW-fee savings. Limiting or abolishing ROW fees would likely have little effect on BB adoption.

It is even more unlikely that limiting or abolishing ROW fees would have an impact on adoption given that BB providers advertise their, often national, prices excluding taxes, fees, installation costs and other costs. Unless lowering ROW fees in the places they are currently allowed led to changes in the nationally advertised prices, potential new customers would be unlikely to know the extent to which ROW-fee savings would impact the price they pay for BB services.

One argument by private BB providers for limiting or abolishing the ROW fees that they pay local jurisdictions is that the providers would use some of the savings to subsidize BB services in currently un-served or under-served higher cost areas. Even if one assumed that ROW fees drove BB deployment, such voluntary cross subsidization makes no economic sense for profit making firms. Firms allocate capital to investment that will generate the highest returns. It makes no business sense for private communications companies to take savings from not paying ROW fees and using that savings to fund less-profitable operations. More likely the firms would pocket the

savings and increase their profits. But, because fees are unlikely to drive deployment, even if we assume that BB providers did distribute ROW-fee savings from one market to another, it would likely have no measurable effect on BB penetration or adoption.

Allowing state and local governments to charge market value for use of public ROW is consistent with the economic principle of using prices to allocate scarce resources. From an economic perspective, a locality's ROW is a scarce resource just as lands – public or private – outside a ROW are scarce. Charging a fee for ROW access helps ensure that the ROW will be used efficiently, that is, that the ROW will not be misused or wasted. Furthermore, the closer the fee approximates the relevant market price, the more likely the ROW will be used in an economically efficient manner, a fundamental criterion by which economists evaluate the performance of a market and overall social welfare.

Reasonable charges for ROW can be established through any number of well-recognized mechanisms, including but not limited to contract negotiations. Local jurisdictions have little incentive to act as monopolists when negotiating or setting ROW fees. Local governments have different goals, responsibilities, and functions than do corporate entities. Localities hold resources – including ROW resources – in trust for their citizens and businesses. The local interest in promoting economic growth and development for residents and businesses disciplines ROW pricing. Also, local governments compete vigorously with one another to attract and encourage deployment of advanced and reliable utilities. Thus, local jurisdictions have a strong incentive not to overprice ROW access: a community that discouraged ROW deployment runs the risk of losing businesses and residents to neighboring communities.

While we find no evidence that a public policy that actually limited existing ROW fees would produce meaningful benefits in increased BB deployment or adoption, such a policy would reduce local revenues. Jurisdictions may be required to recover the lost revenues by raising taxes or fees charged to others. Another response could be to cut services. A locality may be forced to reduce the planning and management actions that help maintain efficient ROW uses. This would allow ROW users to externalize their own costs onto other ROW users. Also, the lack of efficient allocation of ROW resources could drive additional ROW costs onto taxpayers, and adversely affect residents, businesses, and ROW users. In addition, there would be a cost to regulation and compliance that could itself be substantial, and that would add to the negative impact of reducing ROW fees.

Given the absence of obvious, measurable benefits to BB deployment or adoption from regulating ROW fees, together with the prospect of harm to BB consumers, residents, businesses, telecom providers and other ROW users, and additional direct and indirect regulatory costs, it is difficult to find an economic justification for regulating local rights of way charges or practices.

III. NO EVIDENCE THAT ROW FEES AFFECT BB DEPLOYMENT OR ADOPTION

Underlying the premise behind FCC's inquiry into ROW fees is the assumption that reducing ROW fees will reduce the operating expenses of BB providers, which will ultimately yield increased BB deployment and adoption. This assumption may have a facial appeal to some. The available facts, however, describe a much more complex relationship between ROW fees and BB deployment and adoption. Our review of the available data does not find evidence to support the hypothesis that abolishing ROW fees would increase BB deployment or adoption. Such an action, however, would likely generate significant costs for a jurisdiction's residents, businesses, telecoms and other ROW users.

A. Do ROW Fees Affect BB Deployment?

Based on our analysis of the available data, we do not find evidence that ROW fees have a measurable impact on BB deployment. If ROW charges reduce BB deployment, areas with ROW charges should have less BB than areas without ROW charges. Our analysis does not find such a relationship. Areas with ROW charges have the same BB deployment rates as areas without ROW charges.

Our results agree with results from the only previous empirical study we found of ROW fees, ROW practices and BB deployment, a study prepared by Dr. Alan Pearce. Dr. Pearce compared competition in communities that charged fees for use of ROW by telecommunications companies, and that regulated use of the rights of way, and those that charged no fees, and had fewer right of way regulations. Dr. Pearce found that charges and regulatory practices did not deter competition, which necessarily means that the practices did not deter deployment of telecommunications facilities. Indeed, he concluded that by adopting a sound approach to pricing public property (charging market value for its use) and by regulating the use of that property to ensure that it functioned properly, localities created an environment which made the market more attractive to providers. This study was submitted to the FCC in response to the National Broadband Plan.³

Following Pearce, we conduct an analysis that compares BB deployment in areas with ROW charges to similar areas without ROW charges. To complete this analysis, we use data on BB deployment from the National Broadband Map,⁴ data on ROW charges collected from a variety of sources, and data on other local characteristics (mostly from the Census). Specifically, we conducted a regression analysis that regressed the share of state population with access to various measures of broadband⁵ on a categorical variable

³ <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020247000>

⁴ US Dept of Commerce, National Telecommunication and Information Administration, State Broadband Initiative (June 30, 2010)

⁵ We focus on the share with access to BB providers who offer download speeds greater than 3Mbps and upload speeds greater than 0.768Mbps, download speeds greater than 50Mbps, upload speeds greater than 10Mbps, and the share who have access to 3 or more BB providers. The data for the share with access to

that describes allowed ROW charges,⁶ and local characteristics that might affect BB deployment or adoption (e.g., population, population density, share living in urban areas, median household income, share with a college degree, etc.).⁷

In this report, we focus on state-level differences in allowed ROW charges; however, we also conducted analyses that examined differences in actual fees and taxes across municipalities using data on 119 Oregon municipalities and the 59 cities examined in Tuerck et al (2007) that yield results similar to what we found in our state level analysis.⁸

ROW fees vary widely across both states and BB platforms. The Communications Act allows state and local governments to charge cable providers 5% of gross revenues in return for the grant of a cable franchise, which authorizes the holder to provide cable service via facilities in the rights of way.⁹ Many local jurisdictions charge cable providers a franchise fee equal to 5% of gross revenues. However, some states limit franchise fees to amounts less than 5% (e.g., Rhode Island limits cable fees to 3% and Kentucky provides for a 2.4% tax on video services and localities must forego cable franchise fees to obtain the tax collection¹⁰).

Section 253(a) of the Communications Act provides that “no State or local statute or regulation...may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service,” but it goes on to state that “[n]othing in this section affects the authority of a State or local government to... require fair and reasonable compensation from telecommunications providers, on a

>3Mbps down and >0.768up and 3 or more providers were obtained from <http://www.broadbandmap.gov/analyze>. To analyze the data for higher speeds, we downloaded the raw data files for each state and calculate our own shares. We did not have access to the 2009 Geolytics population estimates for the 2000 census blocks used to create the estimates on the website. Instead, we used population estimates from the 2000 census to calculate our estimates. We assume that if any part of the block has access to a certain provider, then the entire population in the block has access.

⁶ Obtaining data on the variation in ROW fees was difficult. Ideally, we would obtain a complete description of ROW charges (and other telecommunications taxes) for a large sample of jurisdictions. In the absence of that data we relied on (a) description of allowed state ROW charges from the “50-State Survey of Rights-of-Way Statutes” completed by NTIA (www.ntia.doc.gov/ntiahome/staterow/rowtable.pdf), (b) description of each state’s average state and local telecommunications taxes assembled by the Council on State Taxation (Telecommunications Tax Task Force of the Council on State Taxation (2005) “2004 State Study and Report on Telecommunications Taxation,” Washington, DC.), (c) surveys or studies of municipal taxes or fees produced by various state governments or municipal organizations⁶, and (d) local ordinances; and (e) information collected through various studies (like the Pearce study) and studies by utility commissions. Given our imperfect ability to classify states into ROW fee categories, we conducted a number of analyses that assigned states’ with ambiguous ROW statutes to different categories. None of these alternative classifications affect our conclusions.

⁷ Studies that describe similar analyses include: Kolko, J. (2010) “Does Broadband Boost Local Economic Development,” Public Policy Institute of California., Burton, M.L. and M.J. Hicks (2005) “The Residential and Commercial Benefits on Rural Broadband: Evidence from Central Appalachia,” Hu, W. and J.E. Prieger (2007) “The Timing of Broadband Provision: The Role of Competition and Demographics,” AEI-Brookings Joint Center for Regulatory Studies *Working Paper 07-06*.

⁸ League of Oregon Cities (2008) “Franchise Fee Survey,” Summer 2008; Tuerck, D., P. Bachman, S. Titch, and J. Rutledge (2007) “Taxes and Fees on Telecommunication Services” The Heartland Institute, May 2007.

⁹ 47 U.S.C. Sec. 542

¹⁰ 47 U.S.C. Sec. 542, R.I. Gen. Laws § 39-19, KY. Rev. Stat. Ann. § 136.616(2)(a)

competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis...” Relative to fees on cable services, fees vary more widely across states. Some states do not limit municipal fees as long as they meet the “fair and reasonable” criteria (e.g., Maryland and New York). Other states provide for gross-revenues based fees (e.g., Rhode Island law permits fees up to 3% and Oregon law permits fees of up to 7% of gross revenues on incumbent local exchange revenues¹¹). Still other states do not allow a rental fee at all, but allow local governments to charge fees to recover specified costs (e.g., Alaska, California¹²) or costs of providing services. (e.g., New Jersey¹³).

To investigate the potential effects of ROW fees on BB deployment, we first compared BB deployment in states that allow telecommunications ROW charges that are not tied to a cost calculation (the “Fair and Reasonable Charge” states) to deployment in states that limit ROW charges to telecommunications companies to some defined portion of costs, (the “Cost” states) for four categories of BB deployment. Specifically, we examined the share of each state’s population that lived in an area with more than three BB providers, the share that lived in an area with greater than 3Mbps download speeds and greater than 0.768Mbps upload speeds, the share living in areas with greater than 50Mbps download speed, and the share living in areas with greater than 10Mbps upload speeds. We observe no statistically significant difference in deployment between the “Fair and Reasonable Charge” states and the “cost” states, and the largest differences we do observe (for more advanced speeds) suggest greater deployment in ROW fee states. We summarize these results in Table 1.

¹¹ Idaho Code § 50-329A, Or. Rev. Stat. § 221.515

¹² Alaska Stat. § 42.05.251, California Government Code § 50030

¹³ N.J.S.A. §54:30A-124

Table 1. Differences in broadband deployment for states that allow ROW rent and states that limit ROW fees to costs

	Share with download speed >3Mbps and upload speed >0.7Mbps	Share with 3+ providers (any technology)	Share with max download speed >50 Mbps	Share with max upload speed >10 Mbps
“Fair and Reasonable” states	0.96 (0.01)	0.93 (0.02)	0.35 (0.08)	0.39 (0.09)
“Cost” states	0.94 (0.02)	0.94 (0.03)	0.21 (0.07)	0.28 (0.07)
Difference	0.02 (0.03)	-0.02 (0.03)	0.14 (0.11)	0.11 (0.12)
Difference, controlling for state characteristics	0.01 (0.03)	-0.02 (0.03)	0.22 (0.11)	0.14 (0.13)

Source: ECONorthwest

It is possible that the states that allow larger ROW fees differ from those that limit fees to costs, and that these differences obscure the relationship between ROW fees and BB deployment. To address this possibility, we compared BB deployment in states with ROW fees to otherwise similar states without them. For instance, we compared a state like Oregon, where many localities charge gross-revenues based fees to both cable and telecommunications companies, to a similar state like Colorado, which limits localities to charging telecommunications companies a fee to recover costs incurred in processing ROW permits.¹⁴ Comparing these two states, we found the same results. Ninety-eight percent of Oregonians have access to broadband with greater than 3 Mbps down and 0.768 Mbps up, and ninety-nine percent of Coloradans do. One-hundred percent of Oregonians have access to greater than 3 providers, and ninety-eight percent of Coloradans do. However, with respect to advanced metrics, Oregon outpaces Colorado by a wide margin. Sixty-eight percent of Oregonians have access to BB with download speeds greater than 50Mbps, but less than 2 percent of Coloradans do.

In the final row of Table 1, we present the results of a statistical analysis that controlled for factors other than ROW charges that could affect BB deployment. Specifically, we controlled for factors that may affect supply of (e.g., population density or the share of the population living in rural areas) and demand for (e.g., median household income, share of population with a college degree, share non-white, share older than 60, etc.) BB

¹⁴ Colorado and Oregon have relatively similar demographics. If anything, based on demographic characteristics, we expect Colorado to have greater levels of BB deployment and adoption. Colorado has higher median income, greater population density, a higher share of its population with college degrees (which all typically correlate with greater BB deployment and adoption).

services.¹⁵ Even after controlling for these other factors, we observe no difference in BB deployment between areas with more liberal ROW charges and areas where charges to telecommunications companies are limited to actual costs, and more liberal states appear to have higher shares of their state's population living in areas with access to higher speed BB service (although these differences are not statistically significant).

We are aware that some states, (e.g., Florida) have replaced franchise fees with a statewide tax and that other states allow localities to level other local taxes on telecommunications revenues (e.g., utility taxes). As such, the share of telecom revenue collected by localities via taxes or fees may not differ across states. This is one potential reason why we did not observe a relationship between ROW fees and deployment. We conducted additional analyses that used differences in tax rates across places and found results similar to those described above – states with higher effective state and local taxes on telecommunication have access to BB at least as good (and in some cases better) than states with lower effective taxes on telecommunication.

While there are some weaknesses in the underlying data on which the analysis relies, at the very least one would have expected to see some consistent indication of a relationship between ROW charges and deployment or adoption if there was one.¹⁶ Based on our analysis, however, we find no support for the conclusion that reductions in ROW fees will meaningfully increase BB deployment. Before the FCC takes any action based on the presumption that reducing ROW fees will increase BB deployment, they should attempt more rigorous study of this issue.

The finding that ROW fees do not depress BB deployment may surprise some. Adopting simple economic intuition, some expect that reducing ROW charges will make BB deployment cheaper (or more profitable) and therefore encourage BB deployment. The actual economics, though, are more complicated. It is not difficult to imagine a number of plausible explanations for why ROW fees do not adversely affect BB deployment. For instance, it is possible that providers pass most of the cost of the fee onto consumers in the form of higher prices (and thus fees only marginally affect provider profits).¹⁷

¹⁵ Specifically we control for $\ln(\text{population density})$, $\ln(\text{population})$, $\ln(\text{median HH income})$, share of population with college degrees, share older than age 60, share white, and share living in urban areas. We include all 50 states (and DC). States we cannot classify as "fair and reasonable" or "cost" states, we include as "other." To correct for potentially heteroskedastic errors, we use robust standard errors.

¹⁶ Our analysis is an initial analysis and not a definitive analysis in light of the absence of ideal, exogenous data on ROW charges (as described in footnote six), and better data on BB deployment and adoption.

¹⁷ We do not know the extent to which this occurs. Assessing the incidence of ROW charges in current telecommunications markets is difficult. In general, how much of a tax/fee is paid by different groups depends on their relative responsiveness to price changes – with the general rule that the most price insensitive groups pay most of the tax. For instance, 20 years ago, Hausman (2000) pointed out demand for basic wireline telephone service was not very sensitive to price (i.e., demand was inelastic), thus consumers paid nearly all of the taxes and fees imposed on wireline telephone service. A little over 10 years ago, demand for BB was fairly sensitive to price, as such, Goolsbee (2006) found that consumers likely paid between 50-60% of any tax on BB (with producers paying the rest). Dutz et al (2009), though, argue that in recent years demand for BB has become less sensitive. As such, simple economic theory would argue that consumers now pay an even greater share of ROW fees (and other telecommunications taxes); however, Christensen et al (2001) point out this potential increase in the share paid by consumers may be muted by

It is also possible that the gap between profitable and unprofitable investments dwarfs any change in profits from lower ROW fees. For instance, many analysts have concluded that communities that currently lack access to BB services lack those services because the costs of installing and providing services in these locations significantly exceed the revenues providers can earn on the services.¹⁸ This has little to do with the ROW fees that local jurisdictions charge in areas where providers supply BB services.

Recent FCC analyses, which rely on improved data collection efforts, describe in detail the locations and characteristics of communities that do not have BB services, and the barriers to BB penetration into these communities.¹⁹ The common characteristics among these communities include:

- Rural, isolated locations, far from centers of population and commerce.
- Relatively few residents, households, and businesses disbursed across large geographic areas.
- Mostly low-income, low-education households.
- A large percentage of residents uninterested in using the internet.

States with low shares of their populations who can access higher speed technologies tend to have similar characteristics.

The un-served communities account for a small percentage of the total U.S. population. FCC's *National Broadband Plan*, released in March 2010, reports an un-served population of approximately 14 million residents, or 4.5 percent of the U.S. population.²⁰ FCC's

changing technology and the ability to switch among cable, wireline, and wireless services. Hausman, J. (2000) "Efficiency effects on the US economy from wireless taxation." *National Tax Journal* 53(2):733-742.; Goolsbee, A. (2006) "The Value of Broadband and the Deadweight Loss of Taxing New Technology," *The B.E. Journal of Economic Analysis & Policy* 0(1).; Dutz, M., J.Orzag, and R. Willig (2009) "The Substantial Consumer Benefits of Broadband Connectivity for US Households" CompassLexicon, July 2009.; Christensen, K., R.J. Cline, and T.S.Neubig (2001) "Total Corporate Taxation: Hidden, Above-the-Line, Non-Income Taxes" *State Tax Notes* (November 12, 2001), p.529-30.

¹⁸ FCC. 2011. *Seventh BB Progress Report and Order on Reconsideration*. In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion. GN Docket No. 10-159. May 20; FCC. *The Broadband Availability Gap OBI Technical Paper No. 1*. April; FCC. 2010. *Connecting America: The National Broadband Plan*. March; FCC. 2011. *Bringing Broadband to Rural America: Update To Report On A Rural Broadband Strategy*. GN Docket No. 11-16. June 17; Schadelbauer, R. 2011. *The BB Adoption Summit All Aboard? Tackling Broadband Adoption*. National Telecommunications Cooperative Association. April 6; Rosen, J. 2011. "Universal Service Fund Reform: Expanding Broadband Internet Access in the United States," *Issues In Technology Innovation*. No. 8, April. Center for Technology Innovation at Brookings; Carlson, E. No date. *Broadband Adoption Barriers and Impacts*. A literature review; Smith, A. 2010. *Home Broadband 2010*. Pew Internet & American Life Project. August 11.

¹⁹ FCC 2010, *Seventh BB Progress Report*; FCC 2010, *The Broadband Availability Gap*; FCC 2011, *The National BB Plan*; FCC 2011, *Bringing Broadband to Rural America*.

²⁰ FCC 2010, *The National Broadband Plan*, p. 136.

more recent *Seventh Broadband Progress* report from May 2011, puts the figure at 26.2 million, or 8.4 percent of U.S. population.²¹

The FCC report, *The Broadband Availability Gap*, describes the details of these financial barriers and the amounts of subsidy necessary for private provider to serve these communities.²²

- The total economic subsidy to connect and supply BB services is \$23.5 billion.
- Subsidizing all or part of the initial connection – the capital expenditures for the infrastructure – would allow private BB providers to serve approximately 46 percent of the un-served households. These providers would earn enough revenue to cover their costs so long as they do not pay the capital costs of installation.
- Servicing the remaining 54 percent of un-served households will require a one-time subsidy to install the infrastructure, and ongoing subsidies to cover the service costs.
- Serving the 250,000 households that require the greatest subsidy would cost approximately \$14 billion of the total \$23.5 billion to connect all 14 million un-served households. That \$14 billion would be spent on just two-tenths of one percent of all U.S. households. *The average cost per household is approximately \$56,000.*

The financial barriers limiting BB penetration into currently un-served areas are unrelated to ROW fees charged by local jurisdiction. Limiting or abolishing these fees will likely have no impact on increasing BB supply in these areas.

To further illustrate how unlikely ROW fees are to explain the lack of BB penetration in areas that currently lack it, consider the following back-of-the-envelope calculation based on the investment gap values mentioned above.

For an area to lack BB, the expected profits from serving an area must fall short of the amount needed to justify the investments required to serve it. For ROW fees to cause BB to not be available in an area, the expected change in profits from eliminating the ROW fee must be sufficient to change the necessary investments from unprofitable to profitable.

Consider, for instance, Josephine County in Oregon. According to the Investment Gap study, this county faces an investment gap of \$28.8 million (or \$7,106 per household). This is roughly the average per household gap for all counties.

If we assume that the average household pays \$50 per month for BB, including a 5% franchise fee, then eliminating the franchise fee, at most, can increase provider profits by

²¹ FCC 2011, *Seventh Broadband Progress Report*, p. 15.

²² FCC 2010, *The National Broadband Plan*, p. 136-138.

\$30 per household per year.²³ Thus, to assume that ROW fees prevent BB investments in Josephine County, we must believe that \$30 per household per year – or \$120,300 if every un-served household were expected to adopt BB if it were available – is the difference between a profitable and unprofitable \$28.8 million investment. This is highly unlikely given the size of the required investment.

The FCC has better ways of increasing BB deployment in currently un-served areas – proven, effective public policies that work. The Universal Service Fund (USF) successfully extended and supports phone service throughout the U.S., including to the most remote and expensive service areas. The FCC originally designed and implemented the USF for the dominant technology at the time, landline phone service. The FCC proposes modifying and updating the USF to address barriers to BB penetration. The Connect America Fund (CAF) would modify the USF to include one-time and reoccurring subsidies that extend BB infrastructure and services to un-served areas. The Mobility Fund (MF) would provide one-time subsidies to extend wireless infrastructure.

Obvious parallels exist between the USF that subsidizes phone services in uneconomical markets and supplying BB and wireless services to many of these same communities. The point is not that the programs are perfect.²⁴ It is that from an economic standpoint these programs could be effective in encouraging BB deployment and adoption if properly adjusted and combined.²⁵

B. Do ROW Fees Affect BB Adoption?

The literature on BB adoption identifies cost of service as one of the many factors that can influence adoption. The relationship between cost and adoption, however, is complex because of the many factors included in the cost of using or accessing BB service. Our own research, and results reported in the literature, indicates that to have more than a negligible impact on BB adoption, the total cost of BB services would have to drop by an amount much larger than could be achieved by limiting or abolishing ROW fees. A related point is that, to the extent that consumers purchase BB based on advertised monthly prices, which do not include taxes and fees, reducing ROW fees will have no impact on purchase decisions (unless the reduction in fees reduces the list price). For these and other reasons described below, limiting or abolishing ROW fees would likely have no impact, or at most a negligible effect on BB adoption.

A calculation of the difference between what non-adopters say they would be willing to pay for BB services, and the costs of BB services, shows just how far BB costs would have to drop to have any impact on increasing adoption. This drop is significantly more than could be achieved by passing on any ROW-fee saving.

²³ This assumes that providers pay the entire ROW fee, consumers pay nothing. As we note above, consumers likely pay part – perhaps a large part – of telecom ROW fees.

²⁴ Rosen 2011.

²⁵ FCC. 2011. *Fifteenth Report in the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*. WT Docket No. 10-133.

Research on non-adopters conducted for the FCC indicates that the average monthly cost of BB service is \$41. Yet, the most that non-adopters say they would be willing to pay for BB is \$25 per month.²⁶ This \$16 per month gap is many times the likely savings that telecoms could realize by not paying ROW fees. Assuming not paying ROW fees reduces the total cost of providing BB services by 5%, the telecom would save \$2.05 per customer. Assuming the telecom passes the full amount of that savings on to their customers – which is unlikely for reasons mentioned elsewhere in this report – this still leaves a gap of \$13.95 per month.

Our analysis of the statistical relationship between ROW fees and BB adoption found that adoption in states that allow ROW fees does not differ from adoption in states that limit ROW charges. Using a statistical analysis similar to the one we used to examine the relationship between ROW fees and deployment, described in Section III.A. above, we found a tiny negative relationship between ROW fees and adoption (states that limit ROW fees to actual costs have adoption rates that average 0.1 percentage point higher than states that do not limit ROW fees).²⁷ This relationship, however, was not statistically significant, which as we described above means the data indicate no relationship between state and local ROW fees and BB adoption.

The literature on the factors that influence or hinder BB adoption support our results. Cost of BB services was more of a factor inhibiting BB adoption years ago than it is today. Now, barriers other than cost are more important.²⁸ Recent research conducted for the FCC on BB use and adoption found that 35 percent of the U.S. population do not use BB at home.²⁹ The main reasons given for not adopting are as follows:

- 15 percent cite monthly bill
- 19 percent cite hardware costs, installation fees, or aversion to required long-term contracts
- 41 percent cite lack of digital literacy or lack of interest in using the Internet

Other researchers found a lack of interest in the internet as a significant barrier to adoption. A recent survey conducted by the Pew Internet & American Life Project found that approximately 21 percent of Americans do not use the Internet at all – at home or elsewhere. Of this population, only 10 percent said they would like to start using the Internet in the future. Thus, 90 percent of current non-users have no interest in using the

²⁶ Horrigan 2010.

²⁷ Our data on adoption rates come from: Section 8.3 of Exploring the Digital Nation: Home Broadband Internet Adoption in the United States, Prepared by Economics and Statistics Administration and National Telecommunications and Information Administration in the U.S. Department of Commerce, November 2010.

²⁸ Hauge, J. and J. Prieger. 2009. *Demand-Side Programs to Stimulate Adoption of Broadband: What Works?* October 14.

²⁹ Horrigan, J. 2010. *Broadband Adoption and Use in America OBI Working Paper Series No. 1*. Federal Communications Commission. February.

Internet even if they could. At the moment, this population appears content to remain non-users.³⁰

Other cost-related barriers to BB adoption reported in the literature include:³¹

- requiring a deposit for new or low-income customers
- software costs, especially virus-protection programs
- computer maintenance costs
- price increases after introductory offers expire
- bundling of BB with other, unwanted services

Studies of BB adoption by residents of low-income households found that the decision to purchase BB services is a marginal decision. This population considers expenses for rent, food, utilities, and cell phone service necessities and more important than BB services. BB services are dropped or “unadopted” when the purchaser’s available resources drop (because of job loss, health care costs and so on) or when prices increase unexpectedly so the service costs more than can be afforded (when introductory rates expire, for example).³² For this reason, researchers concluded that BB assistance programs should take the long view.

“It is important to keep in mind that the [BB] adoption decision is not a one-time act of a customer choosing to purchase broadband Internet access, but rather an ongoing choice to keep using broadband month after month. It is therefore imperative that any support programs designed to make broadband affordable to those of limited means living in areas where the cost to serve is particularly high be both ongoing and sustainable.”³³

According to recent reports, consumers are adopting Internet-capable smartphones at a rate faster than almost any high-tech product in history. Most users who access the Internet exclusively using their smartphone are young minorities from low-income households. This group finds accessing the internet via smartphones a preferred alternative to purchasing more expensive computers and paying monthly DSL or cable bills.³⁴

³⁰ PEW Internet. 2010. *Home Broadband 2010*. PEW Internet & American Life Project. August 11; Schadelbauer, R. 2011. “All Aboard? Tackling Broadband Adoption,” *The Broadband Adoption Summit*. National Telecommunications Cooperative Association. Washington, D.C. April 6. Page 14.

³¹ Horrigan 2010; Dailey, D. et al. 2010. *Broadband Adoption in Low-Income Communities*. A Social Science Research Council Report. March; Schadelbauer, R. 2011. *The Broadband Summit, All Aboard? Tackling Broadband Adoption*. National Telecommunications Cooperative Association. April 6.

³² Dailey et al. 2010.

³³ Schadelbauer 2011, p. 22.

³⁴ Kang, C. 2011. “As smartphones proliferate, some users are cutting the computer cord,” *The Washington Post and Bloomberg Business*. July 11. http://www.washingtonpost.com/business/economy/a-smartphones-proliferate-some-users-are-cutting-the-computer-cord/2011/07/11/gIQA6ASi9H_story.html

The proceeding discussion described the complex relationship between BB cost and adoption. Of those who do not use BB at home, only 15 percent cite cost of monthly service as the reason. Cost, however, includes many factors that telecoms could not influence even if they paid lower ROW, and other factors (like deposits) that they could influence even without regulation of local fees and charges. Regulating ROW fees would do nothing to address the major barriers to BB adoption of lack of interest and low levels of digital literacy.

Another important reason why passing ROW-fee savings on to customers would likely have no measurable effect on BB adoption is the fact that BB providers do not include tax and fee information when quoting the price of their services. Our review of web sites of major BB providers³⁵ found that all of the providers list the monthly price of BB service *excluding taxes, fees, installation costs and other charges*. Thus, current non-adopters searching provider web sites would have no way taking ROW charges into account in deciding whether to purchase services. After initial adoption, the literature suggest that factors other than ROW fees – including the expiration of low introductory prices and the subscriber’s financial situation – affect “un-adoption.”

³⁵ Quest, www.qwest.com/residential/internet/broadbandlanding/; Verizon, www22.verizon.com/Residential/HighSpeedInternet/Plans/Plans.htm; Time Warner Cable, order.timewarnercable.com/OfferList.aspx; AT&T, www.att.com/dsl/shop/plansShared.jsp?WT.SRCH=1; Comcast, www.comcast.com/shop/buyflow2/products.csp?inflow=1.

IV. ROW FEES CHARGED IN ONE AREA DO NOT AFFECT BB DEPLOYMENT OR ADOPTION IN OTHER AREAS

One argument by private BB providers for limiting or abolishing the ROW fees that they pay local jurisdictions is that the providers would use some of the savings to subsidize BB services in currently un-served or under-served higher cost areas. Such voluntary cross subsidization makes no economic sense for profit making firms. The prime directive for all private firms, including telecommunication firms, is generating the greatest returns to shareholders. Taking revenues earned on high-profit services – services provided in urban and suburban areas where they pay ROW fees – and voluntarily investing these revenues in low- or no-profit services cannot be justified from a profit or return-on-investment grounds. This is the financial equivalent of throwing money away.

Private telecommunications firms do have a history of voluntarily cross subsidizing among markets, but only to *increase* profits, not decrease them. For example, a firm operating in both a regulated and unregulated market has an incentive to shift costs from the unregulated to the regulated market. A related example is using the best and most advanced technology in the competitive market with a large user base, and using older, less efficient technology in the regulated, smaller market, for the same profit-maximizing reason.

The analytical assumptions underlying FCC's analysis of the BB availability gap describe the expected, profit-maximizing behavior of a telecommunication firm entering a BB market. The major analytical assumptions include:³⁶

- Only profitable business cases will induce investments. Private capital will only fund investments in BB systems that return a profit.
- Investment decisions are made on the incremental value they generate. While firms strive to maximize the return on all their operations, investment decisions are evaluated based on the incremental value they provide.
- Markets currently un-served have their own unique or specific diseconomies of scale that affect the profitability – or lack thereof – of entering these markets. Entering these markets requires careful analysis of market details. A one-size-fits-all subsidy program will not work in these markets.

Previous Sections of this report summarize the mammoth financial challenges of bridging the BB gap for communities currently un-served or under-served. Researchers report that surmounting the barriers that limit BB penetration in these communities – including the costs of supplying these communities with BB services and the socioeconomic constraints of lower income, lower educational attainment and little interest in using BB services – requires more than a simplistic subsidy program. In an analogous study of cross-subsidies for telephone service, one researcher concluded,

³⁶ FCC 2010, *The Broadband Availability Gap*, p. 1-2.

“Reducing, or increasing, local telephone rates by a few dollars per month will do little to address fundamental problems of inequitable income distribution.”

...

“Sector-specific regulators have no expertise at running poverty alleviation schemes and should not be doing so under the guise of setting rates.”³⁷

We have not seen any information that supports the notion of voluntary cross subsidization by private telecom firms from a profitable to less or unprofitable market, and the consensus economic literature refutes the assumption that a rational firm would ever do so. Firms allocate capital to investments that will generate the highest returns. It makes no business sense for private telecoms to take savings from not paying ROW fees and to use this savings to fund less-profitable operations.

The FCC can look to the experience of local jurisdictions that include build-out requirements as a provision for ROW access for evidence that BB providers are unlikely to voluntarily cross subsidize from profitable to unprofitable markets. Jurisdictions include build-out provisions to ensure that BB providers provide access to *all* neighborhoods in a community as a requirement to connect any. This ensures complete coverage for the community. Without this provision, BB providers would limit services to the most profitable areas.

To the extent that regulating ROW fees increases provider profits, they may return these profits to shareholders, invest in profitable BB markets, invest in other markets, or some combination of these three.³⁸ It is highly unlikely, however, that they would voluntarily invest in currently un-served or underserved areas because to do so would be unprofitable.

As our analysis described in Section III shows, passing on any ROW-fee savings to potential customers would likely have no measurable impact on BB deployment or adoption. These results also apply when considering the impact of regulating the fees and right-of-way practices in a one market on services in other markets. Even assuming ROW-fee savings were shifted from one market to another, there would be no measurable impact on BB deployment or adoption for the reasons mentioned in the preceding Sections.

³⁷ Levin, S. and S. Schmidt. No Date. *Telecommunications After Competition: Challenges, Institutions, Regulation*. Pages 22-23.

³⁸ To argue that any investments would be made with any increased profits from reduced ROW fees, one must also assume that providers would not have found some other way to finance these investments. That is, one must assume that these investments would not have been made but for a change in profits from reduced ROW fees.

V. SETTING REASONABLE, MARKET-BASED ROW FEES

The FCC's NOI asks several questions that suggest economically sound pricing mechanisms are inappropriate for pricing access for ROW use. In particular, the NOI asks:

Are "market based" rates for use of public rights of way or publicly-owned wireless facilities sites reasonable?

In this section we describe fundamental economic concepts regarding using price signals and methods for setting prices that result in economically efficient and reasonable ROW fees, and conclude that "market-based" rates – by which we mean rates that property reflect the value of the asset – are reasonable.

A. Compensation for Use of Public Resources

Allowing state and local governments to charge for use of public ROW and other public property is consistent with the economic principle of using prices to allocate scarce resources. From an economic perspective, a locality's ROW is a scarce resource just as lands – public or private – outside a ROW are scarce. In contrast to "free resources," scarce resources do not "exist in such large quantities that they need not be rationed among those wishing to use them."³⁹

Economic scarcity, though, encompasses more than a constraint on physical capacity. A resource can be scarce in an economic sense even if it can accommodate all users at a given moment in an engineering sense. For example, if the use of a resource by one party imposes costs on other parties, then it is scarce in an economic sense. This conclusion holds whether the affected party is a local government, another user of the ROW (a utility, a commuter, a truck driver, or anyone else) or a resident (a home owner whose property is affected by utility facilities in or under the street).

It is because a locality's ROW is scarce that charging for its use makes good economic sense. Economic texts describe a relationship between economic scarcity and economic cost, or opportunity cost:

"Just as scarcity implies the need for choice, so choice implies the existence of cost. ... A decision to have more of one thing requires a decision to have less of something else. It is this fact that makes the first decision costly."⁴⁰

³⁹ Samuelson, Paul A. and William D. Nordhaus. 2001. *Economics*, 17th Edition. New York: McGraw-Hill. Page 765. For other authors expressing the same concept, see Hall, Robert E. and Marc Lieberman. 1998. *Microeconomics: Principles and Applications*. Cincinnati, OH: South-Western College Publishing. Page 483; O'Sullivan, Arthur and Steven M. Sheffrin. 2001. *Microeconomics: Principles and Tools*, 2nd Edition. Upper Saddle River, N.J.: Prentice Hall. Page 2; Parkin, Michael. 1998. *Microeconomics*, 4th Edition. Reading, MA: Addison-Wesley. Page 42; Tregarthen, Timothy and Libby Rittenberg. 2000. *Microeconomics*, 2nd Edition. New York: Worth Publishers. Pages 3-4.

⁴⁰ Lipsey, R., et al. 1990. *Microeconomics*, 9th Edition. New York: Harper & Row. Page 4. For other authors expressing the same concept, see Nicholson, Walter. 2000. *Intermediate Microeconomics*, 8th Edition. Fort Worth, TX: The Dryden Press. Page 17; O'Sullivan, Arthur and Steven M. Sheffrin. 2001. Cited previously.

“It [opportunity cost] concerns the true economic costs or consequence of making decisions in a world where goods are scarce.”⁴¹

The history of cities throughout the world offers compelling illustrations of economic scarcity, opportunity costs, and efficiency in the development of ROW.⁴² Examples of cities in which we have observed such scarcity and opportunity costs first hand include New York, Chicago, San Francisco, Portland (Oregon), Tucson, Huntsville, New Orleans, and Seattle. This nearly universal pattern of municipal management of ROW has not arisen by chance or whim. It reflects real and substantial economic forces that create the so-called “joint-allocation problem,” namely, allocating a single, scarce and therefore valuable resource among a number of competing demands.

Occupying space in the above- or below-ground portions of the ROW precludes a local government or others from using that same space now and in the future. That is, the three-dimensional space occupied by a given conduit or wire obviously cannot be occupied by another. Besides the physical space occupied by a conduit or pipe, many cities require minimum setbacks or clearances around utilities placed in the ROW. Also, depending on the specifics of the use, the installation, the maintenance, and the replacement of any given facility in the ROW may create problems for and impose costs on the locality and on other users of the ROW.

As applied to a locality’s ROW, today’s scarcity and the resulting opportunity costs will persist tomorrow. That is, today’s scarcity manifests itself in those many locations in which the use of the ROW for one service inhibits the use of the ROW or other properties for other services by the same or other users. That scarcity and the associated negative spillover effects will persist into the future. Such negative effects may include increased excavation or construction costs, increased costs associated with design and planning, costs associated with loss-of-service attributed to construction accidents or

Page 24; Parkin, Michael. 1993. *Macroeconomics*, 2nd Edition. Reading, MA; Addison-Wesley, Page 10; Tregarthen, Timothy and Libby Rittenberg. 2000. Cited previously. Page 5

⁴¹ Samuelson, Paul A. and William D. Nordhaus. 1992. *Economics*, 14th Edition. New York: McGraw-Hill. Page 131. For other authors expressing the same concept, see Hall, Robert E. and Marc Lieberman. 1998. Cited previously. Page 18; McConnell, Campbell R. and Stanley L. Brue. 1996. *Economics*, 13th Edition. New York: McGraw-Hill, Inc. Page 26; Parkin, Michael. 1998. Cited previously. Page 42; Tregarthen, Timothy and Libby Rittenberg. 2000. Cited previously. Page 5.

⁴² For various historical descriptions of the development of streets and rights of way, see Abbott, Carl. 1983. *Portland: Planning, Politics, and Growth in a Twentieth-Century City*. Lincoln, NE: University of Nebraska Press; Baldwin, Peter C. 1999. *Domesticating the Street: The Reform of Public Space in Hartford, 1850-1930*. Columbus, OH: Ohio State University Press. Pages 201-203, 207-208; Barrett, Paul. 1983. *The Automobile and Urban Transit: The Formation of Public Policy in Chicago, 1900-1930*. Philadelphia, PA: Temple University Press. Pages 13-14, 49-50; Bridenbaugh, Carl. 1938. *Cities in the Wilderness: The First Century of Urban Life in America 1625-1742*. New York: Alfred A Knopf. Pages 153-154, 159, 317; Hood, Clifton. 1993. *722 Miles: The Building of the Subways and How They Transformed New York*. New York: Simon & Schuster. Page 84; Pierce, Bessie Louise. 1937. *A History of Chicago: Volume I*. New York: University of Chicago Press. Pages 96, 336; Pierce, Bessie Louise. 1937. *A History of Chicago: Volume II*. New York: University of Chicago Press. Page 325; Quaife, Milo M. 1923. *Chicago’s Highways Old and New: From Indian Trail to Motor Road*. Chicago, IL: D.F. Keller & Co. Pages 53-54, 60; Thwing, Anne Haven. 1920. *The Crooked and Narrow Streets of Boston: 1630-1822*. Boston: New England Historic Genealogical Society. Electronic Version; Whitehill, Walter Muir. 1968. *Boston: A Topographical History*, 2nd Edition. Cambridge, MA: The Belknap Press of Harvard University Press. Page 8.

other damage to services in the ROW, increased travel time for vehicular traffic on the ROW, and lost revenues for businesses whose customers are inconvenienced by ROW construction.

Expressed on a cost basis, ROW fees should compensate a local government not only for the opportunity costs of occupying space in the ROW, but also for the other costs the locality incurs related to the ROW. To the extent that a ROW fee does not capture the full range of costs that the locality incurs related to the ROW, the resulting cost will subsidize the ROW user. That is, the user will not pay the full cost of establishing, occupying and managing the ROW. A subsidy to the ROW user also results in uncompensated costs to the locality.

These costs include, at a minimum: the fixed costs of establishing and developing the ROW, the costs over the long term of managing the community-wide ROW, the daily or periodic short-term O&M costs, and related administrative costs. Measuring each of these costs for a given ROW transactions would be complex, time consuming and inefficient. There are other, less expensive ways to determine a fair and reasonable price, and those methods, which we describe in the next section, are commonly used by private entities and by federal, state, and local governments.

Like other real-estate assets within a local government's boundary, a locality's ROW yields value to the users of the ROW. In an economy based on competition, producers and owners of goods and services with economic value typically do not give them away free. In economic markets, prices serve as signals that help society put its resources to efficient use.⁴³ Not charging for use of the local government's ROW would treat it as if it were a free good with no economic value. "A true 'free good' is one which is not scarce ... Examples of free goods are rare and perhaps becoming rarer still – sunshine in the Sahara Desert provides one example."⁴⁴

Charging fees less than the value granted to the user for ROW access sends the signal that the resource is worth less than its true value. This will lead both to inefficient use of the ROW and to a subsidy to the user.

Allocating the ROW by first-come, first-serve or on some other non-market price makes no economic sense, especially given the external costs imposed on third parties if a ROW is over-consumed by any individual enterprise. The same result follows if one artificially limits a community to charging fees without regard to value. This is easily prevented by charging a ROW fee that reflects the ROW as a valuable asset or resource for which there are important and competing uses. Free and unrestricted—or underpriced – access to a locality's ROW allows a provider to avoid making choices that are important to make. For example, if a provider has a choice of proceeding down Route A and Route B, and

⁴³ See, for example, Byrns, Ralph T. and Gerald W. Stone, Jr. 1992. *Economics*, 5th Edition. New York: HarperCollins. Page 71; Nicholson, Walter. 1998. *Microeconomic Theory*, 7th Edition. Fort Worth, TX: Dryden Press. Pages 514-515; Pindyck, Robert S. and Daniel L. Rubinfeld. 2000. *Microeconomics*, 5th Edition. Upper Saddle River, N.J.: Prentice Hall. Page 590; Samuelson, Paul A. and William D. Nordhaus. 2001. Cited previously. Pages 27, 291.

⁴⁴ Pearce, David W. (ed). 1997. *The MIT Dictionary of Modern Economics*, 4th Edition. Cambridge: The MIT Press, Page 163.

Route A passes through environmentally sensitive areas, one would want the provider to pay the cost of the environmental review and to pay all mitigation costs. This encourages a rational choice as to whether to proceed down one route or the other. Without proper price signals, providers can be expected to engage in behavior that will shift or increase costs to others and interfere with a balanced and economically use of this valuable and scarce asset.

Charging a fee helps ensure that the ROW will be used efficiently, that is, that the ROW will not be misused or wasted. Furthermore, the closer the fee approximates the relevant market price, the more likely the ROW will be used in an economically efficient manner, a fundamental criterion by which economists evaluate the performance of a market and overall social welfare.

B. Calculating a Reasonable Price for Occupying Space in a Jurisdiction's ROW

Appraisal literature describes a number of methods for calculating the value of ROW access, and setting fair prices for its use. We describe four methods.⁴⁵ The central point here is not that these methods are the only methods, or that a price is unreasonable unless it passes muster under one of these four tests. Rather, it is that there are a number of well-recognized ways of efficiently pricing ROW use that do not require significant regulatory intervention or require one to conduct a detailed cost/allocation analysis.

1. Land-based appraisals: Analysts calculate the value of a ROW based on the value of land adjacent to the ROW. This is sometimes referred to as the “across-the-fence” (ATF) method. A variation on the ATF method acknowledges that because a ROW provides a continuous corridor, a ROW has a higher value to users than the disparate, unassembled adjacent parcels. This corridor value can exceed the ATF value by a factor of six or more.
2. The willing-buyer-and-willing-seller method: Analysts seek to replicate market negotiations over the value of the use of the ROW. The seller considers his or her costs, including the value he or she could earn from other uses of the land. The buyer considers the income-generating potential of the ROW and the costs of alternative routes.
3. Income-based methods of valuation: Analysts take as given that a variety of assets contribute to a firm’s income or value. A ROW may be one of many income-generating assets from which a firm would expect to earn a reasonable return. The analysts base the market value of the use of the ROW on the return the asset generates for the firm.
4. The comparable-transactions method: Analysts base the value users of ROW attach to the transaction by looking at sales or rental agreements for similar ROW.

⁴⁵ National Oceanic and Atmospheric Administration (NOAA). 2002. *Final Report: Fair Market Value Analysis for A Fiber Optic Cable Permit in National Marine Sanctuaries*. NOAA, National Ocean Service, National Marine Sanctuary Program. August. Pages 7-13.

Information on most ROW transactions between private entities remains confidential. More publicly available information exists on ROW agreements between municipalities and private firms that want access to municipal ROW. The study of comparable transactions is an established practice for valuing ROW.⁴⁶ The degree of similarity between the comparable transactions and the ROW at issue helps specify the high and low measures of value.⁴⁷ While there are certainly not the same numbers of ROW comparables as for home sales, there are a significant number of comparables.

One of the problems with regulating ROW prices is that the regulation may foreclose innovative approaches to pricing ROW access that benefits both parties. For example, a BB provider who is installing fiber may be willing to trade fiber for access to the ROW in cases where the land owners value use of fiber greater than the revenue earned on the ROW fee, and the costs to the BB provider of the fiber are less than the ROW fee. Similarly, a BB provider may prefer a gross-revenues based fee because the fees by definition become due as the provider generates cash flow. The ability of localities to negotiate and develop different approaches to pricing over time can be important in ensuring that the ROW is efficiently and effectively used.

Regarding the FCC's question, "Are 'market based' rates for use of public rights of way or publicly-owned wireless facilities sites reasonable?", yes they are. Charging such rates does not create a barriers to deployment, but do encourage efficient use of the ROW.

⁴⁶ See, for example, Fitzgerald, Shawana. 2005. *Review of Fiber Optic Right of Way Pricing*. Prepared for the City of Portland. August 31. Page 6; NOAA. 2002. Cited previously; U.S. Department of Justice. 2001. *Uniform Appraisal Standards for Federal Land Acquisitions*. <http://www.usdoj.gov/enrd/land-ack/yb2001.pdf>

⁴⁷ Ring, A. 1970. *The Valuation of Real Estate*. Prentice Hall. In, Quan, D. and J. Quigley. 1989. "Inferring an Investment Return Series for Real Estate from Observations on Sales." *Journal of the American Real Estate and Urban Economics Association*, 17(2); and U.S. Department of Justice. 2001. Cited previously.

VI. NO EVIDENCE THAT ROW FEES REFLECT MARKET POWER

The FCC seeks information on the likelihood that local jurisdictions will exercise monopoly power and overcharge ROW users. Municipalities have strong incentives not to behave in such a manner.

Municipal entities have different goals, responsibilities, and functions than do corporate entities. Municipalities hold resources—including ROW resources—in trust for its citizens and businesses. For example, municipalities manage ROWs not to maximize profits or fiscal surpluses, but to promote economic development. The locality's interest in promoting economic development for residents and businesses disciplines its pricing of ROW access. To the extent that the electorate feels that elected officials have mismanaged the ROW access or other resources, or placed unreasonable restrictions on the use of private land, it can recall or not reelect these officials.

Moreover, the proposition that a local government would exercise monopoly power and charge supra-competitive rates to access its ROWs—even if it had such monopoly power—is a flawed economic-development strategy. Municipalities compete vigorously with one another to attract and encourage deployment of advanced and reliable utilities, that will in turn, attract and support new industrial, commercial and residential development. This is a strong incentive not to overprice access ROWs.

The fact that BB providers have incurred “sunk cost,” as described by the FCC in the NOI, does not give local jurisdictions incentives to behave as a private firm might when it comes time to reauthorize a ROW agreement with the provider. In contract negotiations between two private, for-profit entities, each party has strong incentives to get the best deal they can. This includes using leverage one party may have over the other. The FCC's “sunk cost” argument assumes that because the BB provider incurred expenses installing infrastructure in the ROW, the local jurisdiction can use this as leverage against the provider during reauthorizing discussions. Localities have no such leverage, and the provider is not a helpless victim of sunk costs. In response to a demand for unreasonable ROW fees, a provider can state and publicize its position, that any increase in ROW fees will be passed through to subscribers. If the BB provider had to increase its prices to a level that disadvantaged the community in BB prices as compared to its competing localities, the local officials would disadvantage themselves in attracting businesses and jobs.

For these reasons and others, local jurisdictions have incentives to charge fair and reasonable ROW fees, even assuming that they have substantial market power as compared to providers.

VII. RESPONSES BY LOCAL JURISDICTIONS TO REDUCING OR ABOLISHING ROW FEES

In Sections III and IV we describe the likely outcomes of public policies that limit or abolish the ROW fees that local jurisdictions currently charge. We do not observe evidence that such an action would likely produce meaningful benefits in the form of increased BB penetration or adoption. Such a policy would, moreover, generate costs. There is, first, the cost of regulation itself. As suggested above, allowing for flexibility in price-setting allows communities and providers to agree on fees that can be easily calculated and enforced, and that can respond to market changes. Second, there is the cost caused if the federal government requires localities to provide access to property at less than market value – that is, if a subsidy is required. These costs – lost revenues to the local government and increased costs associated with responding to the federal regulation – could negatively affect telecom firms and consumers, residents and businesses, and the flow of services provided by jurisdictions.

There are only a few ways a locality can respond to increased costs and reduced revenues.

Jurisdictions could replace the lost revenue through new fees or taxes. Such a response could ultimately harm BB users. For example, if telecoms do not pass the savings from not paying ROW fees on to consumers, the consumers will see no change in their direct BB costs. If, however, the population of payees of the new replacement fee include BB customers, their total costs will increase by an amount in proportion to their portion of the new fee. Thus, BB consumers are worse off under this scenario.

If jurisdictions cannot replace the lost revenue or cover the increased costs through new fees or taxes, then the locality must cut services. For example, based on our experience we know that some jurisdictions use ROW fees to support efficient planning for and management of activities in the ROW. These efforts by the jurisdiction help avoid traffic and pedestrian disruption from construction activities in the ROW, or damaging infrastructure that occupies the ROW. ROW funds also support mapping the ROW that identifies congested areas. Reducing ROW revenues or adding regulatory costs could force jurisdictions to abandon ROW planning and management activities. Results could be business disruptions due to uncoordinated or mismanaged construction in the ROW. The resulting unnecessary or extended traffic delays could affect traffic-related costs for residents and businesses. Accidents in the ROW that interrupt infrastructure services could also negatively affect companies that occupy space in the ROW.

From an economic standpoint, the question is really not whether someone will pay for the rights-of-way, but who will pay: the providers who are using the asset, or the taxpayers. The latter will occur if the FCC takes any action which prevents localities from recovering less than the value of the right-of-way.

Given the prospect of no measurable benefits to BB penetration or adoption from limiting or abolishing ROW fees, but the prospect of harm to BB consumers, residents, businesses, telecom providers and other users of the ROW, it is difficult to find an economic justification for regulating local rights of way charges or practices.

APPENDIX A: VITAE

Bryce Ward, Senior Economist

Years of Experience: 10 years

Firm: ECONorthwest

Education: Ph.D Economics, Harvard University
B.A. Economics and History, University of Oregon

Bryce Ward joined ECONorthwest in 2005. His areas of expertise include econometric analysis and applied microeconomics -- including urban and regional economics, labor economics, public finance, and environmental and natural resource economics. Dr. Ward has applied his expertise to a variety of projects involving litigation support and policy analysis. He has provided oral and written testimony in over a dozen court, legislative, or administrative proceedings.

Right-of-Way

- Provided oral and written testimony regarding economic issues related to municipal right-of-way fees in New Orleans.
- Provided written testimony to the FCC regarding the economic aspects of allowing local governments to charge telecommunications providers for access to government-owned or managed property
- Addressed the economic issues of telecommunications firms' challenge, under the Telecommunications Act of 1996, to the City of Portland's franchise-fee agreements for use of the municipal right-of-way

Anti-Trust/Competition

- Testified regarding the economic aspects of alleged anticompetitive behavior in a market for outpatient diagnostic imaging services
- Analyzed the economic issues of class certification and damage calculations related to alleged antitrust violations in the market for residential lots
- Analyzed the market for MRI services in the Boise and Portland and assessed alleged anticompetitive behavior in this market
- Provided written testimony regarding the presence of competition in a market for private prisons and the likelihood of substantial competitive harm to private prison operators from a Freedom of Information Act (FOIA) request

Real Estate

- For attorneys representing the proposed class of plaintiffs, provided oral and written testimony on the economic aspects and harm, if any, to plaintiffs, from an alleged scheme that inflated the appraised market value of real estate

- For attorneys representing the proposed class of plaintiffs, provided written testimony on the economic aspects and harm, if any, to plaintiffs, from an alleged scheme that inflated mortgage costs without proper disclosure
- Described the impact of a pipeline rupture and related oil spill on residential property values
- Analyzed the effect of Portland's Intertwine (a network of open spaces) on property values in the Portland, OR Metro area using a hedonic regression analysis and data from county assessors' records
- Analyzed the effect of Seattle's Natural Drainage (low impact development) Projects on neighboring property values (4505) using a hedonic regression analysis and data from county assessors' records
- Analysis of the Effect of Regulations on Housing Prices in Greater Boston
- Assisted Harvard Professor Edward L. Glaeser in preparing a report for Harvard's Rappaport Institute for Greater Boston and the Pioneer Public Policy Institute that estimated the effect of local regulations on housing supply and housing prices
- Analysis of Neighborhood Price Dynamics
- Assisted Harvard Professor Edward L. Glaeser on a paper detailing the sources of housing-price cycles at the neighborhood level

Labor

- Organized data and conducted statistical analysis to evaluate claims of discrimination in employer discrimination lawsuits
- Calculated economic damages and testified in wrongful termination lawsuits
- Developed an analytical framework, gathered data, and conducted analyses of current market conditions for workers in comparable jobs and comparable communities as precursor to public-interest arbitrations involving transit districts
- Described the potential impact of the financial crisis, recession, and potential deflation on public interest arbitration
- Testified about the reasons and methods for adjusting wages for changes in the cost of living based on the Consumer Price Index (CPI) and the long-term consequences of not adjusting wages during periods of deflation
- Developed a short-term economic outlook for a regional economy in preparation to labor bargaining
- Analyzed historical wage and benefit growth for sheriff deputies relative to other public and private sector employees in preparation for labor bargaining

- Provided written testimony on the economic effects associated with increasing fees for Columbia River Bar Pilots
- Analyzed firm losses resulting from former employees' breaches of restrictive employment-contract covenants regarding future employment with a competitor
- Analysis of the Long-Term Labor Market and Family Outcomes of Harvard Undergraduates
- Calculated potential economic costs associated with proposed change in Oregon's meal and rest break rule

Environment/Natural Resources

- Described the impact of a change in harvest allocations on the economic health and stability of the commercial Dungeness crab industry in Puget Sound (WA)
- Calculated natural resource damages associated with a Superfund site using a Habitat Equivalency Analysis (HEA)
- Calculated lost profits to an oyster farm from chemical contamination
- Described potential economic damages suffered by municipalities as a result of oil spills
- Evaluated the potential economic effects of the U.S. Department of Agriculture and California Department of Food and Agriculture's proposed eradication of the Light Brown Apple Moth
- Calculated profit disgorgement based on emission violations
- Evaluated a contingent valuation study of a proposed wind farm
- Reviewed and evaluated the economic components of a feasibility study and preferred clean-up remedy for a contaminated site
- Evaluated the U.S. Environmental Protection Agency's draft report on groundwater and soil remediation scenarios for a creosote-contaminated Superfund site
- Assisted in an analysis that compared and contrasted benefits and costs, stemming from the use in California of MTBE-oxygenated gasoline with those stemming from the use of ethanol-oxygenated gasoline to determine if refiners could have used ethanol to meet federal reformulated gasoline mandates instead of MTBE during the 1990s

Personal Injury/Wrongful Death

- Calculated economic damages in wrongful death lawsuits
- Calculated lost wages and presented expert testimony in personal injury cases

Public Policy

- Evaluated the effects of tax differences between Oregon and Washington on migration patterns in the Portland metro area
- Described the likely impact of a proposed tax increase on state taxable income and economic growth
- Evaluated the effect of enterprise zone tax incentives on economic development using a regression analysis of longitudinal establishment-level data
- Developed a model and analyzed data to estimate gross revenues for video, voice, and data services at the city level for the League of Oregon Cities
- Described the growth in the market for third-party certified forest products and discussed the reasons why firms choose to pursue certification.
- Reviewed and evaluated current research on the impact of increased hospital supply on local health care markets
- Provided data collection services to determine garbage and yard debris can weights and set-out rates for Eugene residents

Education

- Designed and implemented a randomized evaluation that employed longitudinal student and school data to demonstrate the effects of Safe and Civil Schools' positive behavior support programs on elementary schools in the Fresno Unified School District
- Developed a method for using longitudinal student data to calculate and report student achievement growth (aka a school value-added-model (VAM)) as part of a school accountability program in Seattle, Washington
- Evaluated the effectiveness of the South Shore School (a public-private partnership school in Seattle, Washington) using a quasi-experimental regression analysis and longitudinal student data
- Evaluated the effectiveness of ASPIRE (a program to increased college enrollment among Oregon high school students) using a regression analysis and longitudinal student data that matched student K-12 records with college enrollment data
- Developed a district report card system for several Oregon school districts
- Evaluated the effectiveness of Pre-K and K programs in Bremerton, Washington using a regression analysis on longitudinal student data
- Testified before Oregon legislature regarding methods for funding school transportation systems

- Developed regression models to calculate funding levels for student transportation in Washington school districts and developed linear programming tools to evaluate the efficiency of district transportation spending
- Analyzed and presented results of a survey regarding methods for improving efficiency in Oregon schools
- Reviewed literature on motivations for and effects of mergers between institutions of higher education
- Reviewed and evaluated current research on using student test scores to assess school performance for Seattle Public Schools
- Described the Hispanic-White and Black-White achievement gaps in Oregon schools
- Estimated the economic effects of achievement gaps on Oregon's economy
- Reviewed and evaluated current research on the effectiveness of the Safe and Civil Schools program, and worked with clients to develop and implement additional program evaluation

Other

- Testified before the Oregon legislature regarding proposed legislation before the Oregon House that amends ORCP 32 by repealing subsection K and, therefore allowing recovery of UTPA statutory damages (currently \$200) in class actions
- Calculated non-economic damages to a father denied access to his child for 17 years
- Calculated reimbursements to families who adopted foster children as part of a class action settlement
- Calculated damages suffered by an auto dealership and service department stemming from the violation of non-solicitation and non-compete clauses in an asset purchase agreement
- Reviewed and conducted analyses in order to determine specialty forest product harvesters are compelled to sell to a shed the brush they picked under the permit that shed issued them
- Analyzed the impacts of Measure 37 (property rights limitation) on the State of Oregon
- Provided testimony on the consequences to the healthcare markets in Portland of allowing a new hospital
- Estimated share of LCD TVs, LCD computer monitors, and notebook computer monitors were purchased by Oregon consumers and state and local governments as part of a price fixing lawsuit

Publications

- "The Causes and Consequences of Land Use Regulation: Evidence from Greater Boston" *Journal of Urban Economics* 65(3): 265-278 Glaeser, E., and B Ward.
- "The Effect of Low Impact Development on Property Values" *Proceedings of the Water Environment Federation, Sustainability 2008* , pp. 318-323 Ward, B., E. MacMullan, and S. Reich.
- "Myths and Realities of American Political Geography." *Journal of Economic Perspectives*. Glaeser, E., and B. Ward. Spring 2006.
- Regulation and the Rise of Housing Prices in Greater Boston. Glaeser, E., J. Schuetz, and B. Ward. Cambridge, MA: Rappaport Institute for Greater Boston, Harvard University, and Pioneer Institute for Public Policy Research. 2006.
- "Distance and Social Capital: Can Isolation Be Good?," in *Social Interactions and Economics*, Ph.D Dissertation, Harvard University, March 2006.
- "Does Reunion Attendance Affect Alumni Contributions?: Evidence from the Harvard College Classes of 1990-1999," in *Social Interactions and Economics*, Ph.D Dissertation, Harvard University, March 2006.
- "Economic Bridges Falling Down." *Eugene Weekly*. Ward, B. and E. Whitelaw. October 8, 2008.
- "The Economy: Now What? The Economists: Ward and Whitelaw" *Oregonian*, Ward B. and E. Whitelaw. September 20, 2008.
- "Dream On." *Oregon Quarterly*. Ward, B. and E. Whitelaw. Winter 2007.
- "Still the Land of Opportunity?" *Oregonian*. Tapogna, T., B. Ward, and E. Whitelaw. March 2006.
- "The Price Is (Not) Right." *Commonwealth: Growth and Development Extra*. Glaeser, E., J. Schuetz, and B. Ward. January 2006.

Recent Speeches and Presentations

- "Benefits and Costs of Seismic Mitigation" CREW Benefit-Cost Analysis Forum, January 2011.
- "Does Low-Impact Development Affect Property Values?: Evidence from Seattle's Natural Drainage System Projects." Water Environment Foundation Sustainability 2008 Conference., June 2008.
- "Compensation for ROW Access Under the Telecommunications Act of 1996: Fiscal Issues Related to Communications Services." NATOA 27th Annual Conference. Sponsored by the National Association of Telecommunications Officers and Advisors. Portland, Oregon. October 2007.
- "Outside the Light: The real factors driving Eugene/Springfield's Economy." Eugene-Springfield Leadership Program. Sponsored by the Eugene Area Chamber of Commerce. Eugene, Oregon. October 2006.
- "Deregulating the Housing Market." Preserving the American Dream Conference. Sponsored by the American Dream Coalition. Atlanta, Georgia. September 2006.

Teaching

Visiting Adjunct Instructor, Portland State University; Courses: Global Environmental Economics, Spring 2010.

Visiting Assistant Professor, Lewis and Clark College; Courses: Intermediate Microeconomic Theory, Econometrics, Public Economics, Environmental and Natural Resource Economics, Spring 2008 & Fall 2009.

Visiting Adjunct Instructor, University of Oregon; Courses: Labor Economics, Spring 2009.

Tutorial Leader, Harvard College; Courses: Everybody's Doin' It: Social Interactions and Economics, 2002-2006, Senior Thesis Tutorial: Labor, 2004-05.

Teaching Fellow, Harvard University; Courses: Intermediate Microeconomic Theory, Intermediate Macroeconomic Theory, Microeconomics: A Policy Tool for Educators, 2001-2003.

Teaching Assistant, University of Oregon; Courses: Principals of Microeconomics, Urban Economics, Economy of the Pacific Northwest, 1998-1999.

Edward MacMullan, Senior Economist

Years of Experience: 22 years

Firm: ECONorthwest

Education: M.S. Agricultural Economics and International Agricultural Development,
University of California at Davis
B.S. Soil Science, Oregon State University

Edward MacMullan has been a senior economist with ECONorthwest since 1990. His areas of experience include assessing the economic effects of public policies, especially those that affect natural-resource management, and economic aspects of antitrust, intellectual property, right-of-way, telecommunication and healthcare topics. Before joining ECONorthwest he studied as a Fulbright Scholar at the Energy Studies Unit of the University of Strathclyde where he assessed the socioeconomic impacts of energy development projects in the highlands and islands of Scotland.

Right-of-Way Studies

- Conducted a valuation of a right-of-way occupied by a discharge pipeline from the Georgia Pacific facility in Toledo for the City of Newport.
- Submitted an affidavit in support of the fee that the City charges to access the municipal right-of-way.
- Analyzed the economic issues of telecommunications firms' challenge, under the Telecommunications Act of 1996, regarding Portland's franchise-fee agreements for right-of-way use, City of Portland.
- Evaluated the fees that a city in California charged a telecommunications company to access the city-owned right-of-way, private client.
- Reviewed economic issues specific to the Telecommunications Act of 1996 regarding the fees charged to telecommunications firms for right-of-way, City of Huntsville, Alabama.
- Evaluated right-of-way fees that were challenged by a telecommunications company under the Telecommunications Act of 1996, City of Tucson, Arizona.
- Provided economic analysis regarding the economic value of municipal rights-of-way and use of the rights-of-way by a telecommunications company, City of Portland, Oregon.
- Analyzed the economic damages from trespass outside a right-of-way in a New Mexico Pueblo during the construction of a petroleum production pipeline, Kelly, Haglund, Garnsey & Kahn.

Antitrust Economics

- Assessed potential anti-trust behavior in the market for acute care and tertiary medical services.
- Assessed economic aspects of alleged patent infringement of computer toolbar technology.

- For the plaintiffs, assessed economic damages to patent holders of alleged patent infringement in the power equipment market.
- Addressed the economic issues of class certification and damage calculations related to alleged antitrust violations in the market for residential lots.
- Studied the market for MRI services in the Boise area and assessed alleged anticompetitive behavior in this market.
- Analyzed claims of misappropriation of trade secrets, intentional interference with economic relations, and breach of contract, Schwabe, Williamson & Wyatt.
- Analyzed the market for diagnostic-imaging services in the Portland metropolitan area, Haglund, Kirtley, Kelley & Horngren.
- Calculated the economic impacts of alleged price fixing in the market for agricultural commodities, Tonkon, Torp, Galen, Marmaduke & Booth.
- Provided economic consultation in preparation for litigation regarding workers' compensation insurance, private client.
- Assessed the economic consequences of price discrimination and other antitrust behavior in the wholesale market for petroleum products in Cordova, Alaska, Condon Shoup.

Microeconomic Analysis

- For attorneys representing plaintiffs in a class action lawsuit, performed an analysis of the economic aspects of alleged violations by mortgage brokers of consumer truth-in-lending practices.
- For attorneys representing plaintiffs in a class action lawsuit, assessed the economic aspects of alleged inflated home appraisals.
- Determined the appropriate sample size required to confirm key characteristics about a phone pole population.
- Conducted an economic evaluation of a property at issue in a claim against a state.
- Provided economic analysis regarding litigation over a city's method of collecting user fees for stormwater services.
- Evaluated the financial feasibility of a proposed destination resort in Central Oregon on the Gould and Cline Buttes.
- Calculated the plaintiff's lost profits and reasonable royalty in a patent infringement case, Schwabe, Williamson & Wyatt.
- Studied the factors that determine the market price for grass seed grown in Oregon, private client.
- Determined a royalty rate as compensation for economic damages in a breach of contract lawsuit, Schwabe, Williamson & Wyatt.
- Provided economic analysis of a patent infringement claim regarding suspension systems for bicycles, Schwabe, Williamson & Wyatt.
- Analyzed the national market for cookware items and the financial performance of firms that participate in the market, Schwabe, Williamson & Wyatt.

- Evaluated the market for professional manuals used by attorneys and legal assistants in Oregon, private client.
- Calculated the economic impacts associated with a proposed petroleum-products pipeline across Texas, George & Donaldson.
- Assessed the economic effects associated with a proposed petroleum-products pipeline in Washington state, Schwabe, Williamson & Wyatt.
- Determined the economic consequences of a breach of contract associated with a computer software program, Moore & Orr.
- Calculated uncompensated expenses and lost profits associated with a contract dispute between a manufacturer of video lottery terminals and the Oregon State Lottery, Davis Wright Tremaine.
- Analyzed lost profits from various patent infringement cases, Kolisch, Hartwell, Dickinson, McCormack, & Heuser.

Economic and Socioeconomic Impact Analysis

- Reviewed the market for workers' compensation insurance in Oregon.
- Assessed the financial implications of switching from franchise fees to a gross-revenue tax on telecom services provided in the municipalities.
- Conducted an economic benefit-cost comparison of a conventional roof and a greenroof on a commercial building, for the City of Portland.
- Assessed the impacts of greenstreets in the Puget Sound on property values for adjacent properties.
- Analyzed the operations and financial performance of a timber company's cogeneration facilities and determined the profits earned by the company as a result of unfair competition stemming from violations of air-quality regulations.
- Described the economic aspects of zoning incentives to protect natural resources, City of Corvallis, Oregon.
- Conducted a market analysis for industrial products in regional and world markets, private client.
- Evaluated the socioeconomic impacts of hospitals on rural economies, Mercy Medical Center.
- Conducted a cost-benefit analysis of energy efficiency and renewable energy resources, Alaska Coalition.
- Calculated the economic impacts of restricting snowmobiles from several national parks, The Wilderness Society.
- Analyzed the potential economic impacts of designating a national monument on land currently managed by the Siskiyou National Forest and Bureau of Land Management, Siskiyou Educational Project.
- Reviewed an economic impact assessment of a submarine cable and terminus at San Luis Obispo, California, North State Resources.

- Assessed the socioeconomic impacts of the proposed Pelican Butte ski area, Winema National Forest.
- Evaluated the economic consequences of new restrictions on Alaska's fishing industry, Earth Justice.
- Analyzed the Interior Columbia River Basin Ecosystem Management Project to ensure it internalized the externalities of resource-extraction industries on federal lands in eastern Washington, eastern Oregon, and Idaho, W. Alton Jones Foundation.

Economics of Health Care

- Evaluated how the approval of a hospital's Certificate-of-Need application would influence market concentration, Thorp Purdy Jewett Urness & Wilkinson.
- Studied economic aspects of defining a hospital's service area as it applied to Oregon's Certificate-of-Need requirement for new or relocated hospitals, Thorp Purdy Jewett Urness & Wilkinson.
- Identified the relevant markets for hospital services and evaluated the extent to which hospitals exercised market power over insurance firms and competing hospitals, Schwabe, Williamson & Wyatt.
- Studied the market for home intravenous care in preparation for a possible antitrust lawsuit, Watkinson Laird Rubenstein Lashway & Baldwin.
- Provided economic consultation on the market for healthcare services in Southern Oregon, Schwabe, Williamson & Wyatt.
- Evaluated damage claims, researched prices for hospital services, and provided advice on the distinction between fixed and variable costs, Schwabe, Williamson & Wyatt.
- Calculated lifetime medical expenses and lost wages as part of various personal injury and wrongful death lawsuits, private clients.
- Assessed the economic impacts of a breach of contract associated with a medical diagnostic technique, Stoel Rives.
- Quantified the net present value of lifetime medical services associated with a medical malpractice suit, private client.
- Evaluated the growth and discount rates of life care plans, Calkins & Calkins.

Public Policy and Government Regulations

- Calculated the economic damages to a seafood-related business as a result of a license dispute with the State of Washington, private client.
- Studied the economic performance of the ski industry in the Lake Tahoe area, the market conditions that affect this sector of the region's economy, and the economic factors associated with avoiding and complying with regional water quality regulations and county permitting processes, California Attorney General's Office.
- Provided economic analysis regarding a contract dispute between the City of Eugene, Oregon and a tenant leasing city-owned property, Harrang Long.

- Calculated tobacco company profits associated with the consumption of cigarettes by under-age smokers, Attorneys General of Washington, Arizona, and Connecticut.

Labor and Welfare Economics

- Calculated the economic loss resulting from the employment termination of a 56-year-old male, private client.
- Quantified the economic loss to a regional bank associated with breach of contract by former employees, Arnold Gallagher Saydack Percell.
- Provided economic analysis for wage arbitration with municipal employees, City of Coos Bay, Oregon.

Analysis of Economic Damages to Natural Resources

- Assessed a construction company's ability to pay civil penalties associated with alleged violations of air-quality regulations.
- Described the economic value of water resources in California.
- Assessed the economic impacts on an oyster grower of the oil spilled from the grounding of the New Carissa, Davis Wright Tremaine.
- Conducted an economic analysis of the damages stemming from the Wheeler Point fire in central Oregon, Kafoury & McDougal.
- Calculated the economic impacts of the Exxon Valdez oil spill on Alaskan salmon fishermen, municipal governments, area businesses, and cannery workers, Stoll, Stoll, Berne, Lokting, Shlachter.
- Evaluated damage claims by area businesses and property owners affected by a pesticide spill in the Sacramento River, Lieff, Cabraser & Heimann.
- Assessed the economic consequences of a chemical spill on the municipality of Superior, Wisconsin, private client.
- Determined the economic impacts on area businesses of an oil spill off Huntington Beach, California, Law Offices of Gretchen Nelson.
- Evaluated the demand for recreational fishing in the Flathead Lake area of Montana, Montana Attorney General's Office.

Water Resources

- Developed an economic model to determine the economic benefits of riparian-restoration projects for Clean Water Services.
- Co-instructed a seminar at Portland State, "USP 505 Evaluating Low Impact Development (LID)," that focuses in part on the economic costs and benefits of managing stormwater by LID and conventional controls.
- Calculated the value of ecosystem services that could be degraded by stormwater runoff from expanded urban and commercial developments in the East Butte area of Portland for the City of Portland.

- Assisted the City of Portland staff in developing an approach to study the economic benefits and costs of alternative stormwater-management techniques in support of the City's Watershed Plan.
- Conducted a review of the literature on the economics of Low Impact Development for Waterkeeper Alliance.
- Analyzed the range of economic costs and benefits of projects and policy options affecting water quality and quantity in a Portland, Oregon watershed that drains to the Willamette River, City of Portland.
- Described the economic tradeoffs of allowing, limiting, or prohibiting development in significant riparian areas and wildlife habitat in the Portland metropolitan area, Metro.
- Developed a handbook on the economic factors associated with relicensing a hydroelectric dam, Hydropower Reform Coalition.
- Developed an economic model to determine the net economic benefits of riparian-restoration projects in Oregon, Clean Water Services.
- Reviewed the U.S. Army Corps of Engineers' Final Environmental Impact Statement on deepening the shipping channel in the Columbia and Willamette Rivers, private client.
- Studied the economic issues associated with water management services and the economic implications associated with the federal Endangered Species Act and Clean Water Act, Clean Water Services.
- Evaluated the economic impacts of bypassing four federal dams on the Lower Snake River and developed a plan to mitigate the negative consequences of the bypass, Trout Unlimited and Earthjustice.
- Determined the direct and indirect economic impacts of economic development projects in the Columbia River Gorge funded by the National Scenic Area Act, Columbia River Gorge Commission.
- Evaluated the potential impacts of a proposed gold mine in Montana's Blackfoot River watershed on employment and quality of life, Blackfoot Legacy.
- Assessed the economic consequences of modifying hydroelectric dams to protect and enhance riparian habitat, private client.
- Prepared a response to the Draft Environmental Impact Statement for the Columbia River System Operation Review, Confederated Tribes of the Umatilla Indian Reservation.
- Assessed the economic consequences of alternative strategies for managing the Columbia River and its tributaries, Northwest Water Law and Policy Project.

Endangered Fish and Wildlife

- Described the economic effects of designating critical habitat for two endangered species of fish in the Klamath Basin of Oregon and California, U.S. Fish and Wildlife Service.
- Critiqued a draft report on the potential economic consequences of designating critical habitat for the Steller's and spectacled eiders, private client.
- Evaluated the potential economic impacts of restricting Alaska's groundfishery in critical habitat for the endangered Steller sea lion, private client.

- Analyzed the economic consequences of designating critical habitat in California, Oregon, and Washington for the marbled murrelet, U.S. Fish and Wildlife Service.
- Assessed the economic effects of an injunction to protect salmon habitat on the Wallowa-Whitman and Umatilla National Forests, private client.

Forest Resources

- Prepared a critique of the U.S. Forest Service's estimated demand for timber from the Tongass National Forest, Alaska Rainforest Campaign.
- Analyzed the economic consequences on southeast Alaska's economy of reduced timber harvest in the Tongass National Forest, Sierra Club Legal Defense Fund and the Alaska Rainforest Campaign.
- Studied the relationships between forested ecosystems and regional economies in Oregon, Alaska, North Carolina, New Hampshire, New Mexico, and Wisconsin, National Science Foundation.
- Evaluated the opportunities and threats facing timber-dependent communities affected by logging restrictions on federal land in Washington state, Washington Community Development Department.

Recent Presentations

- "Low-Impact Development Economics." October 22, 2008. NEMO University-6.
- "The Economics of Low-Impact Development." NY/NJ Baykeeper 2008 Low Impact Development Conference. January 23, 2008. New York City, New York.
- "Assessing Low-Impact Development Using a Benefit-Cost Approach." California Stormwater Quality Association (CASQA) 3rd Annual Stormwater Conference. September 11, 2007. Costa Mesa, California.
- "Valuing Ecosystem Services in Portland, Oregon: A Case Study." Emerging Issues Along Urban/Rural Interfaces II Conference. April 9-12, 2007. Atlanta, Georgia.
- "Assessing Low Impact Developments Using a Benefit-Cost Approach." 2nd National Low Impact Development Conference. March 12-14, 2007. Wilmington, North Carolina.

Publications

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EXHIBIT R

An Engineering Analysis of Public Rights-of-Way Processes in the Context of Wireline Network Design and Construction

July 13, 2011

Prepared by Columbia Telecommunications Corporation

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1 Introduction: Public rights-of-way processes represent a minor matter relative to the full effort required for broadband deployment

This report describes, from an engineering standpoint, the permitting process in the context of wireline broadband outside plant design and construction process. The observations in this report are based on Columbia Telecommunications Corporation (CTC) staff-members' decades of expert work building out and overseeing build-out of communications infrastructure across the United States.¹

The report concludes that accommodating permitting and other local government requirements in public rights-of-way is a relatively small part of the cost and time required for design and construction of outside plant for a communications network. The National Broadband Plan asserts that "[t]he cost of deploying a broadband network depends significantly on the costs that service providers incur to access conduits, ducts, poles and rights-of-way on public and private lands. Collectively, the expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20 percent of the cost of fiber optic deployment..." This statement – assuming it is accurate - conflates permitting and very different activities associated with obtaining access to utility poles and conduit. Fees charged by local governments in connection with the *deployment* of broadband are a very small portion of the cost of fiber deployment, and certainly nothing close to 20 percent of deployment costs.

As discussed in this paper, the outside plant design and construction process, broadly speaking, involves the work from the time a network engineer receives instructions to construct a particular type of line in a particular community through the time the line is actually built. This is, of course, only a part of the work involved in the overall design of a network. Generally speaking, outside plant design and construction occurs at a point when overall network design and marketing principles are already in place. The decision as to *what* and *whether* to build involves additional time and cost. And of course, with broadband systems, the physical plant "design and construction" are only part of effort required to provide services. The design, installation, and integration of electronics and software add significantly to cost, and affect whether, when and where a company will build a system, and how it will stage construction. In our experience, it is other factors, rather than details within the outside plant and construction process, that drive deployment, and the time required for deployment.

¹ CTC provides technology engineering and business planning consulting services for public sector and non-profit clients nationwide and abroad. Since 1983, CTC has assisted hundreds of public and nonprofit entities to analyze technology needs and strategies, plan and design broadband systems, and work with the private sector to meet local broadband and technology needs. This report was prepared by CTC's Director of Engineering, Andrew Afflerbach, Ph.D., P.E., who has 15 years of experience designing and evaluating fiber network design, with the support of CTC's outside plant engineers, who, among them, hold more than 100 years of experience designing and building outside plant for both telephone and cable companies.

In our experience with the communications industry and engineering broadband networks, public rights-of-way acquisition costs represent – in those communities that assess them – a remarkably minor factor in the larger analysis of outside plant design and construction processes and expenses—a cost of a few percent of construction (and thus an even smaller percentage of the total cost associated with planning and implementing a communications network).

Labor and material capital costs for outside plant and construction range from \$25,000 to \$250,000 per mile, depending on the service area and the type of construction used. In our experience, build-out costs are primarily a function of local labor rates, materials pricing as of the date of construction/integration, the complexity of the terrain, real estate acquisition, whether the construction will be aerial or underground, and the make ready process. By comparison, local permitting fees are a small amount of these costs. Operational costs (depending on the nature of the services provided by the broadband facility) are dominated by programming, Internet backhaul, outside plant maintenance, customer service, and billing.

Nor does the permitting process significantly delay deployment. While every project is different, for aerial construction, it is almost always the case that the majority of time in outside plant design and construction is in fact the make-ready process--coordinating with the pole owner and existing utilities to prepare utility poles for attachment, as described in Section 2.

Where local government rights-of-way permitting time is a significant part of the overall outside plant design and construction process in a typical mixed aerial/underground construction project, it will typically be where special reports, inspections, or approvals are required before a permit may issue—and most of these additional reports, inspections, or approvals are based on state and federal requirements. Special permits or other authorizations are required for crossing railroads, waterways or environmentally sensitive areas, or where federal funding mandates environmental assessments, for example. The time required to obtain the necessary approvals from federal environmental officials that are conditions to the issuance of a permit can double or triple total construction time for a particular project. However, it is very difficult to eliminate the requirement for additional time without harming property, creating significant risks to public safety, to the environment, or to other utilities and critical transportation systems.

To some degree, the impact on construction projects can be mitigated by proper planning, routing, and staging by the owner of the communications network. For example, in our experience, if the network deployers (or their contractors) make an effort to stage the filing of permit applications rather than filing hundreds at one time, the processing burden on the locality is spread over a reasonable period of time. In our experience, localities are very willing

to work with deployers to establish timetables and processes for reasonable submission – and reasonable review – of permit applications.

In many localities, local permitting processes and fees do not exist. Either as a matter of local or state policy, many localities—particularly those in rural areas—impose little or no process or fee on use of the public rights-of-way. In addition, in some areas, localities are not engaged in rights-of-way permitting.²

In our experience, it is in the most unserved and underserved rural areas where local fees are most minimal or non-existent; for example, traffic control in these areas requires less coordination. Thus, the absence of a process or fees does not, in our experience, encourage the deployment of services—providing further support for our conclusion that the consideration is simply not a relevant factor.

However, we have found that a well-managed process of local oversight of network construction often adds value and plays an essential, enabling role in key processes related to construction of broadband networks, including:

1. Reducing hits and cuts to other utilities located in the rights-of-way—for example, in Anne Arundel County and Howard County Maryland, the local governments intervened to improve quality control and remove contractors when Verizon Communications’ construction of FiOS caused massive rights-of-way disruption and damage to existing cable and telecommunications utilities and made the project owners accountable for improving their practices and paying for their damages.
2. Enforcing codes which in turn make the finished construction safer and reduce its aesthetic impact—for example, many local governments monitor electrical and safety code in the rights-of-way and require entities in the rights-of-way to fix safety violations such as improper clearances, relocate enclosures in dangerous locations, and repairing damaged infrastructure.
3. Reducing disruption to roadways and economic activity through coordination of joint builds and enforcement of restoration requirements—for example, notifying service providers and coordinating the “open trench” installation of communications conduit in rights-of-way when road or utility construction is taking place.
4. Providing Geographic Information System (GIS) mapping. One of the significant contributions of many local jurisdictions is the availability of GIS base maps. If these are

² For example, in many parts of Virginia, rights-of-way including neighborhood streets are managed by the Virginia Department of Transportation; permitting is all done by the state. However, this is simply a consolidation of major and minor rights-of-way under one roof; a full permitting process still exists.

not available from the jurisdictions they must be purchased commercially or generated by the communications provider itself.

2 Understanding broadband network design processes and costs

Outside plant design and construction includes a number of elements. To illustrate the point, consider a five-mile extension of an existing network. For outside construction to proceed, there should be a project plan that encompasses:

- Field surveys
- Route design
- Make-ready
- Construction drawings
- Permitting and licensing (state and local, as well as special permits for river or rail crossing or environmentally sensitive areas)
- Plans for necessarily equipment, materials and labor, and for integrating the extension with the existing network.

To determine the appropriate routing for a project, engineers obtain GIS information from the relevant jurisdictions, if available and study the maps, including details of roadways, railroads, major highways, street centerlines, “hydro lines” (i.e., creeks, streams, rivers), and “hydro areas” (i.e., wetlands, bodies of water). GIS maps must also be developed, overlaying these features with proposed fiber routes, future fiber routes, future locations, and current locations.

The engineers then conduct a full walk-out of the route and complete site surveys of all proposed customer fiber locations. This is needed to complete the design and preliminarily assess permit needs and initiate the permitting process.

A significant portion of the time expended on a fiber design project must be dedicated to the measuring and drawing of aerial and underground routes and facilities (i.e., the creation of field notes) and the conversion of those field notes to a widely-used format such as AutoCAD or MicroStation.

During the route survey, the engineers must note existing pole lines and potential construction barriers, including obstructions, permitting concerns, and possible improvements. For aerial portions of the route, for example, this would include measurement of span distances and the aerial clearances of electric facilities, and recording details including:

- Pole numbers
- Electrical facilities
- Clearance over roads and bridges
- Span distances
- Guys and anchors

For underground portions of the route, engineers must measure the green space available within the rights-of-way for placement of conduit, and record details including:

- Storm drains
- Edge of pavement
- Water and sewer lines
- Street lights
- Required test pits
- Slack storage
- Splice cases
- Pedestals
- Vaults
- Required hardware

Project drawings would include additional details such as:

- Running line of fiber
- Road names
- Railroads and crossings
- Bridges
- Fixed markers/significant landmarks (e.g., fire hydrants, valves, poles)
- Environmental protected areas (e.g. wetlands, bodies of water)
- Flood plains
- Easements
- Rights-of-way
- Any applicable public utilities or assets
- Any applicable private utilities or assets
- Termination points
- Fiber entry and installation, as applicable

Engineers would then complete a base map, a strand map (for aerial portions, based on make-ready or “stick” drawings), and a design drawing with construction detail.

First, however, pole attachment licenses are needed for aerial routes from the pole owners. Make-ready work, the tasks associated with preparing utility poles for attachment, constitutes the single largest portion of the design effort. The pole attachment must be coordinated with all utilities and communications infrastructure owners that are attached to the existing poles. To secure these licenses, engineers will submit the appropriate pole attachment permits to the pole owners, typically commercial power and/or telecommunications companies. Engineers will determine who owns the pole, whether there is joint ownership, and what work the utility or communications company needs to complete to attach fiber to the poles. A single pole application can include from one to 200 poles. Engineers from all utility companies on the poles conduct a joint walkout and identify how to relocate utilities to accommodate the applicant.

The applicant company typically pays for the relocation. In addition to the cost, there is often considerable delay in this process, both in scheduling the walkout and in performing the relocation.

“Engineering work documents” (EWDs) are produced in the final stage of the design process. These documents include a bill of materials, proof of permit issuance, and all required engineered drawings and design specifications. Such EWDs are typically overseen by a licensed Professional Engineer. If the construction vendor were to subsequently create a redline (i.e., deviation from the original design and the “as built” design), the EWDs would have to be updated to reflect those changes. In the event obstructions are discovered during project implementation, additional changes must be made and drawn in CAD or MicroStation.

Rights-of-way and encroachment permits (issued by the county/city and/or the state authorities) are standard and are required for every route. Once the make-ready and EWDs are complete, the route is finalized and the permitting package is submitted. Again, a typical five-mile segment will require one additional day for preparation of the permitting package (beyond the work required for preparation of the EWDs). If the issuing entity identifies any concerns or mistakes in its initial review of a permit application, the reviewer will typically return the plans, send an e-mail about the issue, or call the engineer or project coordinator of the constructing applicant entity to discuss the concern. If an application or portion of an application is returned, the applicant entity must review any potential changes and then make corrections and send a revised application (if necessary), or simply e-mail or call the permit reviewer to provide the requested information.

In our experience, the total outside plant design and construction process for a five-mile segment, if properly staged and planned, can be completed in approximately 100 days.³ This includes 65 days for make-ready activities with the pole owners and other utilities.

³ Since design and construction of the various portions will take place in parallel, a large-scale project need not require many multiples of 100 days; this is simply the amount of time it takes a particular portion to go from beginning to end.

3 Understanding broadband network construction processes and costs

Outside plant design and construction is an expensive and multi-faceted process, of which obtaining rights-of-way permits is one relatively modest component. While actual costs may vary by project and geography, it is possible to make rough estimates for a “typical” project. A brief summary of these varied costs and some of the variables that determine their magnitude follows:

Labor

Labor represents the largest share of construction costs—approximately 50 to 80 percent. Materials costs (like the quantity of fiber strands and cables) are a secondary consideration.

All other expenses are dwarfed by labor costs. It is widely recognized that “[l]abor is the biggest expenditure in a FTTH network build-out”⁴ or any wireline network build-out.

Of course, labor costs are highly variable. These costs tend to be highest in urban/suburban and affluent areas. Significantly, labor costs (and, therefore, broadband construction costs) are almost universally far lower in rural areas where broadband deployment is least robust.

Labor costs are frequently the single largest line item in a broadband construction project, and the scale of the costs – though always high – will vary geographically depending on local wage structures and union requirements, if any.

For instance, contract labor costs for a recent fiber deployment in rural Tennessee were priced at nearly \$20,000 a mile. In our recent experience, in a major metropolitan area, the cost of labor would be far higher, closer to \$100,000 per mile, depending on the type of construction (aerial/underground) and the amount of restoration required. This is due to the higher hourly cost of labor, the greater need for make-ready (in the case of aerial construction), the expertise needed for directional boring in heavily congested environments (in the case of underground construction), and the effort needed to restore paved and built-up areas.

Materials

The cost of materials at any one time can greatly influence deployment patterns as well as investment timing. Materials, both for outside plant and for network electronics, represent an enormous part of any build-out budget. With respect to outside plant, materials range from optical fiber to conduits to outside enclosures; on the electronics side, the materials will include the electronics to “light” and operate the fiber and provision services.

⁴ Ashley Phillips, Nov. 2006, Broadband Properties, “Best Practices: Building a Fiber Network in a Rural Community,” at 23 (http://www.broadbandproperties.com/2006issues/nov06issues/eatel_nov.pdf).

Material costs can dramatically impact investment decisions because they represent a constantly changing variable. Network electronics, like IT hardware, constantly decrease in price as the technologies are adopted and age—and simultaneously increase in capacity. They also require refreshment and replacement over time. Cable plant represents a somewhat more stable item with respect to price, though costs in this area also change over time and are subject to fluctuation; the recent earthquake in Japan, for example, took offline a number of fiber manufacturers, leading to a global shortage of fiber at a time of break-neck build-out in Asia (and BTOP/BIP-related build-out in the US), and thus driving up prices for the fiber still available.

Using the same rural Tennessee community described above, the outside plant material cost for a fiber-to-the-home deployment was priced at over \$10,000 per mile. In metropolitan areas, the cost is similar.

Real estate acquisition

In some circumstances, construction must take place on private property. When this occurs, the broadband operator is forced either to purchase the property outright or obtain an easement from the property owner.

Mobilization of contractors

Considerable time and expense is required to initiate construction. Even with a completed design, the network builder must develop detailed specifications, find and maintain a pool of contractors, issue bid documents, review bids, select contractors, order materials, and oversee the contractors. The added expense of contractor management is usually borne by the entity managing the network build—and indirectly through costs reflected in the rates of the building contractor.

Aerial versus underground

A large-scale fiber network will typically include a mixture of aerial and underground construction, generally based on the prevailing type of utilities in the build area. While aerial construction may be cheaper, it is also more vulnerable to extreme weather, particularly in wooded areas and areas with frequent ice and high winds. These factors can increase long-term maintenance costs for aerial construction and may make underground construction a more attractive option in some areas.

Aerial construction is typically cheaper than underground. This is particularly true when existing utility poles are not crowded, and when the network builder has ownership of the utility poles (e.g., in the case of construction by power and utility companies). Actual costs vary dependent

upon equipment, the particular contractor, and design specifications. In the best case, aerial construction can be completed for \$25,000 per mile including labor and materials. This cost will increase, however, when poles are crowded or when a third-party utility pole owner charges high rates for access. Under such scenarios, costs for aerial construction can reach \$100,000 or more per mile (which might prompt consideration of alternative routes or underground construction).

As in all broadband projects, labor represents the largest component of aerial-construction expenses (up to 80 percent). Labor is needed to install the supporting strand, lash fiber optic cable to the strand, splice the fiber optic cable, place the distribution center, and activate testing of the plant. These costs may increase to reflect additional make-ready work, which must be performed to relocate existing aerial attachments (i.e., other fiber, telephone, and cable) or to extend or replace utility poles to ensure compliance with code requirements for minimum clearance. Incremental aerial construction material costs include the fiber cable, splice enclosures, fiber taps for individual subscriber drop connections, strand, and attachment hardware.

Underground construction costs likewise vary significantly depending upon the construction methodology and ground surface. While material costs for underground construction are comparable or only marginally more expensive than aerial construction, labor costs are significantly higher with this approach. In areas where restoration is not important and long continuous runs are possible (e.g., unimproved rural areas on the side of interstate roads), “plowing” the fiber into the ground is a relatively inexpensive option. This approach can cost as little as \$70,000 per mile. In more developed areas, however, directional boring is likely necessary. This approach is less destructive to the rights-of-way and requires less restoration, but is substantially more expensive. In fact, costs for boring range from \$90,000 to \$400,000 per mile. Boring also limits the amount of cable and conduit that can be built.

Terrain and topography

The U.S. Government Accountability Office’s (GAO) seminal paper on broadband deployment identifies a correlation between terrain and broadband deployment decisions. Constructing infrastructure is more expensive in mountainous and forested areas, owing to the difficulty in placing poles or underground utilities in rocky areas and the difficulty in accessing the areas. Broadband is relatively easier and thus more economical in flat, open terrain. Mountainous or rolling terrain and forests can also present a deployment obstacle for broadband technologies that require an unobstructed pathway to transmit radio signals from towers or antennas.⁵ Geography and terrain “are almost certainly working through service provision cost,” reporting

⁵US GAO-06-426 at 19.

that “an increase in vertical rise or ruggedness is associated with a decline in broadband deployment.”⁶

Make ready

As discussed above, before aerial pole construction can begin, the existing utilities frequently must be moved on the poles, and poles may need to be modified. The utility make-ready may be performed by the existing utilities, by the pole owner, or by the jurisdiction’s construction contractor, as decided by all parties as part of a walk-out survey. The make-ready work to be performed by the utilities includes raising, lowering, guying, and re-tensioning of existing aerial cables.

In the event that network construction is aerial, there is an absolute requirement to prepare the poles for new facilities, a multi-party process that may require extensive reengineering of pole facilities and pole replacement. In urban and suburban areas in particular, crowded poles turn make ready into a time-consuming and costly matter for an entity seeking to attach for the first time.

Ability to use existing infrastructure

Costs may be reduced where existing cable infrastructure and pathways are available. Some communications providers have excess fiber strands. Fiber count in cables ranges from 6 to 24 near residences and individual businesses, to more than 1,000 on backbone routes. The cost of a 6-count fiber cable is \$2,000 per mile, while an 864-count cable is \$50,000 per mile, implying a marginal cost of approximately \$50 per fiber per mile. Actual costs for fiber purchase or lease are typically far higher, however, as prices reflect market costs and depend on fiber availability in the project corridor.

Utility pole attachments can be loaded with multiple fiber cables in a process called overlash. Overlashing enables a network provider to attach to utility poles without taking up more space. Overlashing requires the permission of the entity being attached and is limited to the loading capacity of the attachment. Where overlash is available, make-ready costs can be eliminated and construction costs can be reduced to approximately \$13,000 to \$20,000 per mile.

⁶ Kenneth Flamm, “Diagnosing the Disconnected: Where and Why Is Broadband Unavailable in the U.S.?” preliminary paper presented to the 2006 Telecommunications Policy Research Conference, August 2006, at 19 (“MODIS land cover types 3 and 6 seem to encourage broadband availability relative to a built-up urban land cover baseline. MODIS land cover type 15 seems to reduce broadband deployment”). Dr. Flamm found that hilliness might be “more advantageous than flat or smoothly rising or falling terrain.”

Some entities (utilities, service providers, governments) have conduit available for purchase, lease, or trade. Pulling cables through available conduit costs \$20,000 to \$50,000 per mile, instead of \$90,000 to \$400,000 for new construction.

Redundancy and survivability

The specific requirements of the network (e.g., public safety grade, mission criticality, cost of outages) will determine the physical and electronic architecture of the network. For availability above 99 percent (i.e., fewer than eight hours of downtime per year), a building will generally need two redundant physical paths from the network to its location, along with an electronic infrastructure to accommodate failure of a fiber route or an electronic component, and backup power of sufficient duration. The network will also need to provide a 24-hour network operations center, a fiber repair crew, intrusion detection, and backup management and recovery facilities. Of course, there is a cost associated with these reliability features.

Ideally, physical redundancy needs will be reflected in the initial project design. In a network designed with redundancy in mind, each portion of the network is constructed as part of a ring, allowing for economical yet reliable construction. Conversely, construction costs are dramatically increased (typically doubling), when redundancy is prioritized after initial construction. In such cases, a custom cable pathway is often required.

State and Local Government Rights-of-Way Permitting

The costs and techniques used to perform and charge for rights-of-way permitting vary but the fees almost always make up a very small part of the project budget-- at most a few percentage points on the projects on which we've worked.⁷ And, as discussed earlier, some authorities do not charge fees, waive fees under certain circumstances, or assess a bulk fee for a project.

⁷ Fees may be higher or lower as a percentage of total costs depending in part on the nature of the work that is performed and its impact, and the manner in which particular local fee structures operate. To illustrate one example, one suburban Maryland community charges permitting fees to cover its costs for oversight and coordination of the rights-of-way. The fees are \$0.50 per foot for underground directional boring construction, \$2.00 for street crossings, and \$0.20 per foot for aerial pole attachment, and \$300 per application. The point here is that the fees are generally a small part of total outside plant and construction cost.

4 The National Broadband Plan overstates the expense of public rights-of-way access by conflating it with processes for accessing private property

The National Broadband Plan asserts that “[t]he cost of deploying a broadband network depends significantly on the costs that service providers incur to access conduits, ducts, poles and rights-of-way on public and private lands. Collectively, the expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20% of the cost of fiber optic deployment.”⁸ This statement’s imprecision creates misleading impressions by combining several different processes and expenses and providing the “collective” 20 percent figure. It is essential to differentiate local government rights-of-way processes and costs from the other efforts and costs that are incurred in securing access to facilities in the rights-of-way—and that are entirely unrelated to the cost of securing access to public property and entirely outside the control of local authorities.

In fact, as shown above, rights-of-way processes and fees associated with deployment – outside plant and construction - represent a relatively small component of this suite of expenses.

Indeed, the National Broadband Plan itself acknowledges the relatively large effort and costs associated with pole attachments and make ready. The Plan notes that rental rates for pole attachments are large and variable, ranging from \$4.54 per month per household passed to \$12.96 in rural areas. This expense is substantially larger in rural areas “where there often are more poles per mile than households.”⁹ The Plan likewise notes that make ready represents a sizable expense, highlighting comments by FiberNet, which reports that the make ready process for a project in West Virginia averaged \$4,200 per mile and took 182 days to complete.¹⁰ The Plan does not provide comparable data on rights-of-way processes and fees.¹¹

By combining these expenses into a single measure, the Plan makes itself vulnerable to misunderstanding. For instance, a recent Politico article declares, “In its National Broadband

⁸ Connecting America: The National Broadband Plan, at 109 (available online at <http://download.broadband.gov/plan/national-broadband-plan.pdf>) Citing: Omnibus Broadband Initiative, The Broadband Availability Gap (forthcoming); See Letter from Thomas Jones, Counsel to FiberNet, to Marlene H. Dortch, Sec., FCC GN Docket No. 09-51, WC Docket No. 07-245 (Sept. 16, 2009) (FiberNet Sept. 16, 2009 *Ex Parte*) at 20 (noting average cost for access to physical infrastructure of \$4,611-\$6,487 per mile); *Comment Sought on Cost Estimates for Connecting Anchor Institutions to Fiber – NBP Public Notice #12*, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, 24 FCC Rcd 12510 (2009) (NBP PN #12) App. A (Gates Foundation estimate of \$10,500-\$21,120 per mile for fiber optic deployment); see also Letter from Charles B. Stockdale, Fibertech, to Marlene H. Dortch, Secretary, FCC, GN Docket. Nos. 09-47, 09-51, 09-136 (Oct. 28, 2009) at 1-2 (estimating costs ranging from \$3,000-\$42,000 per mile) (other citations omitted).

⁹Connecting America: The National Broadband Plan, at 110.

¹⁰Connecting America: The National Broadband Plan, at 111.

¹¹See Connecting America: The National Broadband Plan, at 113 (asserting that broadband service providers claim that rights-of-way fees “increase the cost and slow the pace of broadband network deployment” and highlighting the variability of rights-of-way fees across jurisdictions, but providing no fee data).

Plan, the commission estimates that *pole attachments* amount to 20 percent of the total cost of deploying fiber-optic cable.”¹² This misstatement has likewise been reiterated by various bloggers, who state that, “The FCC estimates that that pole attachment fees are about 20 percent of the total cost of deploying fiber optic cable needed for broadband networks.”¹³ And the 20 percent figure has taken on a life of its own—even without attribution to the Plan. For example, some sources claim that rights-of-way access alone constitutes 20 percent of construction costs: “The expense of construction and rights-of-way permits for laying fiber often amounts to 20 percent of the cost of building fiber routes for networks.”¹⁴ And yet, as shown above, in some places there is no fee at all (and yet no build-out) and in other areas, the fee is dramatically lower.

To be sure, many localities charge ongoing fees for use or occupancy of the rights-of-way. But these costs are part of the ongoing expenses of system operation, not part of the *deployment* costs.

¹²Brooks Boliek, April 7, 2011, Politico, “FCC aims to lower power-pole fees” (available online at <http://www.politico.com/news/stories/0411/52665.html#ixzz1Oe1vMPjz>).

¹³ Fiber to the Whatever, “[FCC believes lower pole fees will lead to wider broadband deployments](http://fibertothewhatever.com/wp/news/fcc-believes-lower-pole-fees-will-lead-to-wider-broadband-deployments),” April 7, 2011 (emphasis added) (available at <http://fibertothewhatever.com/wp/news/fcc-believes-lower-pole-fees-will-lead-to-wider-broadband-deployments>); see also FierceTelecom, Ethernut, “FCC believes lower pole fees will lead to wider broadband deployments,” April 9, 2011 (available at <http://www.ethernut.net/tag/utilities/>).

¹⁴ <http://riaco-op.net/493652-Optical-Wireless-Solutions-Based-on-Free-Space-Optical-FSO.html>, April 9, 2011.

5 Deployment decisions flow from analysis of a wide range of construction and operating costs, of which public rights-of-way access is a relatively minor matter

A commercial broadband deployment decision comes down to a complex comparison of known costs versus expected revenue, a classic return on investment calculation. While it is difficult to isolate the factors that lead to so complex an investment,¹⁵ it is hardly insightful to note that private broadband investment dollars flow to those areas where potential return on investment is highest and the business case for investment is strongest. This ROI analysis is based on a cost versus revenue ratio that calculates where the investor's dollars are best spent.

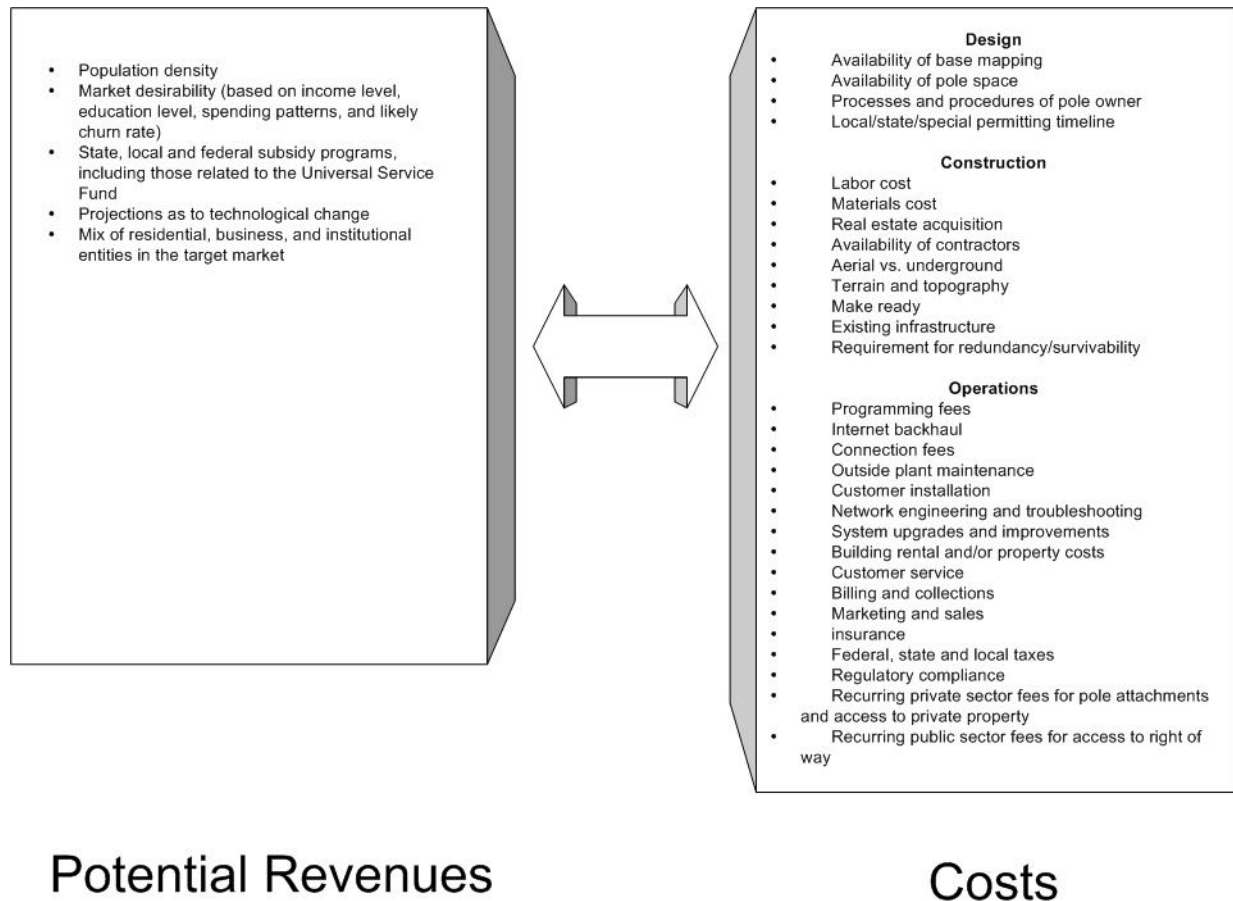
In our experience observing the various sectors of the communications industry, as well as working on public and non-profit broadband projects in the United States and abroad, there exist a wide range of substantial cost and revenue factors that determine investment patterns with respect to construction or upgrade of communications infrastructure. In simplified form, that list can include (on the cost side):

- A full range of costs of design, including those described in Section 2
- A full range of costs of construction, including those described in Section 3
- A full range of costs of operations

These are summarized in Figure 1.

¹⁵ Analogous to rights-of-way fees in this regard is the relatively small tax levied by some states on Internet access. Economists at the University of Tennessee found "no empirical evidence that Internet access rates are lower in states that have levied a tax on Internet access, all else equal." Nor did they find a difference in broadband deployment between those states. Donald Bruce, John Deskins, and William F. Fox, "Has Internet Access Taxation Affected Internet Use?" *Public Finance Review*, volume 32, No. 2, 2004.

Figure 1 – Return on Investment Is Modeled Based on Potential Revenues and Costs



Based on our experience observing broadband communications build-out patterns since the advent of the broadband cable platform in the 1970s, changes to either permitting fees or to ongoing fees for access to rights-of-way access are unlikely to change the ratio enough to encourage investment where it is otherwise unfavorable. This is especially true in a rural area such that it would become more desirable for investment relative to more densely populated areas where per premises build-out costs are lower and per capita revenue projections are higher.

In our experience, the fundamental dynamic of broadband build-out is that wireline build-out is capital intensive and investment dollars flow to areas where projected returns are greatest because demand is highest and most concentrated. Rights-of-way fees do not change that fundamental dynamic. In fact, it is our observation that carrier deployment investment decisions are made centrally and that the carriers' operating entities in various localities and regions are competing with each other for investment dollar allocations. As a result, even where the economics of rural build-out could be marginally improved (though elimination or

reduction of a cost of doing business), investment patterns do not change because the fundamental economics do not change. We have never observed a build-out scenario where reduced marginal costs such as rights-of-way diverted to a rural or underserved area funds that were allocated for build-out in more populous areas.

This observation is supported by independently-evaluated data. The U.S. Government Accountability Office attributes broadband deployment decisions to a diverse collection of factors relating to “both the cost to deploy and operate a broadband network and the expected demand for broadband service.”¹⁶ Indeed, a company “will deploy broadband service in an area only if the company believes that such a deployment will be profitable.”¹⁷

As the Center on Budget and Policy Priorities has explained in the context of a related proceeding:

Where to make broadband available, and when, are fundamental strategic decisions for telephone, cable TV, and wireless access providers that affect billions of dollars in annual investment spending. These decisions are largely being driven by the income levels of potential customers. They are also strongly influenced by the enormous cost differences incurred in deploying Internet access infrastructure to sparsely populated rural areas, as compared to crowded urban neighborhoods dominated by multifamily buildings or suburban subdivisions in which single-family homes predominate. There is no evidence at all to suggest that these decisions have been influenced to the slightest degree by the presence or absence of existing state and local access taxes.¹⁸

Indeed, according to GAO, “the decision to deploy broadband service is a function of:

- The population in the area
- The population density in the area
- The percentage of the population residing in an urban area
- The per capita income in the area
- The educational attainment of the population in the area
- The population teleworking in the area
- The age of the population in the area
- The distance to a metropolitan area with a population of 250,000 or more

¹⁶US GAO, GAO-06-426, May 2006, Telecommunications: Broadband Deployment Is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas,” at 4 (<http://www.gao.gov/new.items/d06426.pdf>).

¹⁷ Ibid., 46.

¹⁸ Michael Mazerov, “The Internet Tax Freedom Act and the Digital Divide,” Center on Budget and Policy Priorities, Sept. 26, 2007, at 6 (<http://www.cbpp.org/files/9-11-07sfp.pdf>) (while this paper assesses the impact of taxation for Internet services, we contend that rights-of-way access fees represent a similar modest cost relative to the cited factors influencing deployment).

- Whether the state in which the area is located imposed a tax on Internet access”¹⁹

Frankly, in our experience, there is almost nothing that any local government can do to encourage carrier build-out of advanced networks where the carrier does not already have a compelling business interest and business plan to achieve the same goal. In fact, we have, with and on behalf of many of our local government clients, approached carriers to request enhanced build-out and to inquire as to how the locality can facilitate and enable such build-out (the effort to request and sometimes plead for carrier investment is almost a universal first step before any locality investigates potential public broadband projects). In both rural and urban areas, the responses have uniformly been negative—even where localities commit to eliminating regulation and fees, we have not seen carriers commit to new investment. In addition, we hear carriers frequently inform the locality that existing facilities adequately meet consumer and business needs, and that no additional investment is necessary.

¹⁹ Ibid, 46-47.

6 Conclusion

Local permitting processes and fees have very small impact on the broadband design and deployment process, in the experience of CTC engineers and analysts, participating in and observing wireline broadband deployment across the United States over two decades. In fact, the permitting process and local government coordination can help and facilitate deployment. When it is done effectively, it protects the integrity of existing infrastructure and provides opportunities for joint trench construction and other economies of scale.

The optimal way to facilitate and smooth the permitting process is for carriers to work with localities to prepare for, anticipate, and stage the permitting process. Carriers can help themselves through reasonable collaborative practices such as joint advance planning of the application process, reasonable staging of application filing (rather than filing large numbers all at once and expecting government staff to process them overnight), and filing of complete and accurate applications.

It is our experience that localities are highly motivated to facilitate and incentivize broadband build-out, and that they are willing to use the permitting and other processes to enable and smooth the deployment process as much as possible. Broadband acceleration can best be achieved if carriers undertake a similarly collaborative, constructive engagement with localities.