December 4, 2017

Via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, WT Docket No. 17-79

Dear Ms. Dortch:

Section 253(a) of the Communications Act expressly bars any state or local statute, regulation, or requirement that may prohibit or have the effect of prohibiting broadband deployment.\(^1\) Section 253(d) authorizes the Federal Communications Commission ("Commission") to preempt such inconsistent state or local government ("government entity") statutes, regulations, or requirements that are not saved by Section 253(c). In its comments in this docket, AT&T explained that fees charged by a government entity for accessing rights-of-way ("ROW") or for attaching to its vertical structures in the ROW that are not cost-based have the effect of prohibiting an entity from providing broadband service because they discourage or delay providers from investing in or expanding their networks to meet current and future demands for service quality and quantity. To their credit, many states recognize this potential disincentive to network investment and have enacted legislation constraining the prices charged to wireless broadband providers to access ROWs and their structures.\(^2\) In those states, no Commission action is required.

Unfortunately, in other states some government entities continue to leverage their monopoly over the ROW to collect excessive recurring and non-recurring fees to access their ROW and ROW infrastructure, which, as the economic analysis below demonstrates, ultimately harms consumers by inhibiting network deployment and/or elevating prices for quality service. To avoid these results, the Commission should establish a presumptively reasonable safe harbor fee for use of the ROW and government entity-owned structures in the ROW based on the costs to the government entity for such access.

\(^1\) 47 U.S.C. §253(a).

\(^2\) The attached Exhibit lists some of those states.
Wireless broadband service purchased by customers is a mix of characteristics. That is, it is a combination of speed, capacity, availability, degree of national coverage, and price. The total amount of wireless broadband that customers buy/use will depend on the quality/quantity level of all of these characteristics combined. Simply put, customers will buy and use more broadband service if its speed is faster, its network capacity is greater, its peak-period availability is higher, its geographic coverage is greater, or the price charged for it is lower. Now and to a much larger extent going forward, each of these characteristics (speed, capacity, availability, coverage, and price) is strongly influenced by the availability and cost of ROW access and infrastructure to the wireless broadband provider. This is the case because wireless carriers, facing ever-increasing demands for broadband service quantity and quality, must extensively deploy small cell facilities to more efficiently utilize scarce spectrum in ways that will enhance network speed, capacity, availability and coverage, and set the foundation for 5G technology.

ROWS, with their inventory of existing densely-spaced, low-elevation vertical structures, are the most efficient and only practical means to deploy small cell facilities at the large scale to meet this need and as anticipated nationwide. Where government entities managing these ROWs adopt restrictive access regulations or elevated access prices, wireless service providers will be unable to provide (or delayed for years in providing) broadband service at the greater speeds, capacities, availability and coverage that their customers desire; or will be able to provide these quality broadband services only at elevated prices that would

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3 It is beyond empirical question that higher service qualities and lower service prices lead to significant increases in customer demand. Since 2007, wireless broadband speeds have grown from 400 Kbps to 19+ Mbps and prices per megabyte ("MB") have dropped from $1.37 to less than half a cent. See CTIA, Wireless Snapshot 2017, https://www.ctia.org/docs/default-source/default-document-library/ctia-wireless-snapshot.pdf ("CTIA Wireless Snapshot"); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 17-69, Twentieth Report, FCC 17-126 at ¶¶5, 6, 50 (2017) ("20th Wireless Competition Report"). As a result, annual MBs purchased have risen to 13.7 trillion, 35 times the volume of traffic in just 2010. See CTIA Wireless Snapshot. Three or more service providers provide LTE coverage over 96% of the U.S. population in 2017 compared with no LTE coverage and only 76.1% 3G coverage in 2010. See 20th Wireless Competition Report at ¶77; Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 09-66 (Terminated), Fourteenth Report, 25 FCC Rcd 11407, 11413 & 11451 (2010).

4 See Comments of AT&T Services, Inc., WT Docket No. 17-79, at 6, 19-20 (filed June 15, 2017) (citing to CTIA’s estimate that 300,000 small cells will be needed in the next 3-4 years and S&P Global Market Intelligence estimate of 800,000 small cell deployments by 2026).
repress customer demand. As a result, such restrictive regulations or elevated ROW prices have the effect of prohibiting wireless broadband providers from providing the services that their customers most want in contravention of Section 253(a) of the Communications Act.

This does not imply that all restrictions imposed by government entities on access to ROWs or ROW infrastructure, or prices paid to government entities for such access, necessarily violate Section 253(a). Rather, social welfare is maximized (and efficient entry is not prohibited) when the quantities and qualities of broadband services purchased by customers are worth just as much to them as the social resource costs of providing these broadband services (i.e., the incremental social resource cost of wireless broadband provision just equals its price). For this to occur, it is essential that payments made to ROW input providers (i.e., the government entities) be no higher than the social resource cost of their providing access to the ROW and ROW infrastructure that they control.

The social resource cost of ROW and infrastructure use to government entities has two components—incremental costs and opportunity costs. Incremental costs, such as annual inspection and maintenance costs, are incurred by a government entity to manage the ROW and its government entity-owned infrastructure. These are separate and distinct from the non-recurring costs associated with a survey, engineering review, recordkeeping, processing, and related make-ready, construction, infrastructure repair, and installation work, all of which would be passed through to the applicant during the application process. Opportunity costs are those costs to the government entity of having its ROW and ROW infrastructure used for wireless broadband rather than for some now-foreclosed alternative use. These opportunity costs would be the profits that the government entity might have otherwise earned had it alternatively used the ROW or ROW infrastructure for its next most valuable use. For example, such opportunity costs could be the foregone profits that the government entity may not receive from newspaper box rentals because its sidewalks are occupied by small wireless broadband equipment boxes, or from rentals to billboard companies if wireless broadband equipment on ROW infrastructure now prevents use of such infrastructure for advertising banners. If a government entity restricts the use of its ROW or ROW infrastructure, or imposes charges for its use that are not warranted by the incremental or opportunity costs of permitting such use, otherwise socially efficient amounts of wireless broadband service will be denied to customers – either because of lack of (or delay in) network deployment or elevated service pricing. Framed in terms of Section 253(a), deployment of wireless broadband will be inhibited or limited.

See John W. Mayo, Will Ideology Block Opportunity? Regulatory Reform in the Infrastructure Industries, Georgetown University, McDonough School of Business, Economic Policy Vignette (Nov. 2017) (“Indeed, with the rapid growth in demand for mobile and fixed broadband services, the economic fact is that failure to enable infrastructure buildout will produce an array of maladies ranging from elevated prices to reduced quality.”), available at http://cbpp.georgetown.edu/sites/cbpp.georgetown.edu/files/EPV-Mayo-Will%20Ideology%20Block%20Opportunity-29NOV2017.pdf.
The empirical question remaining is what is a reasonable approximation of the incremental and opportunity costs of making ROW or ROW infrastructure available for wireless broadband use? As to the incremental costs of ROW infrastructure, the prices developed for pole attachments pursuant to Section 224 of the Commission’s rules suggest an annual incremental cost of substantially less than $50 per pole.\(^6\) Opportunity costs are harder to identify, and may be highly idiosyncratic to the particular type of ROW and locality. AT&T would expect opportunity costs to approach zero in most jurisdictions because local governments typically restrict the use of their infrastructure, such as light poles and traffic light structures, for advertising,\(^7\) and because wireless small cell equipment placed on one pole would rarely foreclose the local government’s use of the same pole or adjacent poles for other purposes.

As discussed in AT&T’s comments in this docket, unconstrained ROW and ROW infrastructure fees have ranged into the thousands of dollars annually per location.\(^8\) Compared to the safe harbor recommendations made by AT&T of $50 for ROW access and $50 for ROW infrastructure access, the adverse economic impact becomes obvious. If, as S&P Global Market Intelligence estimates, small-cell deployments reach nearly 800,000 by 2026,\(^9\) excess ROW access and ROW infrastructure fees of even a few hundred dollars could amount to a significant combination of foregone investment and resulting lower (or delayed) service quality or higher service prices to recoup the excessive costs of deployment. This lost investment and/or higher service costs would harm consumers and materially inhibit or limit a service provider’s ability to provide wireless services at the quantity and quality customers now demand.

To minimize costly disputes trying to calculate a specific access fee representing incremental costs and opportunity costs for each government entity, AT&T proposes that the Commission adopt safe-harbor fees for ROW use and ROW infrastructure access of $50 each, or, in the alternative another reasonable level based on those fees adopted in state ROW legislation, as represented in the attached Exhibit. These legislatively adopted fees represent a credible data source for the sum of both incremental and opportunity costs, as legislatures can be expected to impose fees that permit their municipalities to recover their fair and reasonable

\(^6\) See Letter from Kevin Rupy, Vice President-Law & Policy, USTelecom, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 17-84 (filed Nov. 21, 2017) (attaching the USTelecom Pole Attachment Rate and Pole Ownership Report); AT&T Comments at 18, 21.

\(^7\) See, e.g., Chicago Municipal Code §10-8-320; Fort Worth, TX Code of Ordinances §23-14; Municipal Code of Des Moines, IA §6-2;

\(^8\) See AT&T Comments at 18-19.

costs to manage the ROW and their infrastructure. Fees higher than these safe harbor levels would be permitted if and only after the government entity can demonstrate to the Commission that its forward-looking ROW and/or structure access incremental costs and opportunity costs exceed the safe harbor.

This letter is being filed electronically pursuant to Section 1.1206 of the Commission’s rules. Should you have any questions, please contact the undersigned.

Sincerely,

Henry G. Hultquist

cc (via e-mail): Don Stockdale
Dana Shaffer
Garnet Hanly
Suzanne Tetreault
David Sieradzki
Adam Copeland
Paul D’Ari
Patrick Sun
Catherine Matraves
# Small Cell ROW and Attachment Fee Legislation Passed in 2017

**November 6, 2017**

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<th>State</th>
<th>Annual Recurring ROW Fee</th>
<th>Annual Attachment Fee to Municipal Pole or Structure in ROW</th>
<th>Streamlined Process for Small Wireless Facilities</th>
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<td>Direct and actual cost of managing the ROW; capped at $50</td>
<td>Nondiscriminatory; not to exceed $50/year</td>
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<td>CO</td>
<td>Reasonably related to direct cost</td>
<td>No more than federal pole attachment rate</td>
<td>Permitted Use; processing timelines</td>
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<td>DE</td>
<td>$0**</td>
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<td>FL</td>
<td>$0</td>
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<td>RI</td>
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<td>TX</td>
<td>$250 per node; $28 wireless backhaul</td>
<td>$20 per node for city poles including light poles, traffic signals; FCC formula for municipal owned electric utility poles</td>
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<td>Permitted use; processing timelines</td>
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**Limited to Delaware Department of Transportation right-of-way and poles.**

***Limited to municipal traffic signals and light poles**