Comments in the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment
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I. Introduction

Thank you for the opportunity to comment on this important, though often underappreciated, issue. All parties concerned believe that rural broadband connectivity must remain a top priority for the FCC as it fulfills its mandate to connect all Americans. Finding an equitable and cost-effective way to share the expense associated with pole attachments is part and parcel of that process. The challenge confronting both the FCC and industry alike is how best to realize this goal in a timely and economically sustainable fashion.

The pace of broadband rollout is contingent upon its cost. The more expensive deployment becomes, necessarily, the more difficult it is to realize sustainable profits on that deployment. This dynamic invariably leads to a more selective use of scarce resources to the detriment of rural deployment.

Thus, the central question presented by this docket is: How does the FCC properly incentivize the economically efficient rollout of broadband on existing infrastructure in order to optimize the process to ensure deployment as quickly as possible?

II. Background on pole attachments

Current estimates suggest that as much as twenty-five percent of the cost of broadband deployment in rural areas comes from attachers dealing with pole replacement and upgrade issues. That’s a massive expense.

As the NCTA noted in its petition, part of the cost of pole replacement arises as a result of pole owners allowing some substantial portion of their pole inventory to remain in use after their useful life has ended. When attachers, like broadband providers, endeavor to add their equipment to those poles, the owners seek to offload the cost of replacing or repairing the poles onto the attachers. In other cases, pole owners make demands for “betterment” of existing poles that are not quite past their useful lifespan before new equipment can be installed.

The net effect of these inequitable practices is the unreasonable enrichment of pole owners, not just at the expense of attachers, but also at the expense of consumers – since broadband
providers must necessarily pass along at least some of this cost. This is not a surprise. For example, a review of the pass-through literature published by the United Kingdom’s Office of Fair Trading, reports that 56-70% of increased wholesale price increases are passed through to consumers and 5.0-6.4% of increased commodity prices are passed through to consumers.\[4\]

And even where the cost is partially internalized by the broadband provider, this cost-shifting from pole owners to attachers forces a tradeoff for attachers which, in the end, results in slower and more expensive rollout. This ultimately results in rural customers receiving speed upgrades more slowly than their suburban and urban counterparts, while facing potentially higher prices when those upgrades happen.\[5\]

Allowing this situation to go on only encourages pole owners to continue to shift costs and introduce delays, to the detriment of consumers. Both the current administration, as well as the Biden campaign have announced 5G deployment as an important priority.\[6\] This bipartisan vision can only be realized if broadband is deployed in a cost-effective manner — including by requiring equitable sharing of pole replacement costs.

III. Costs should be shared between pole owners and attachers

Continuing to permit pole owners to shift the cost of replacing their property onto broadband providers and other attachers violates both legal and economic logic.

First, Section 224 of the Communications Act requires that the FCC enforce “just and reasonable” terms for pole attachment requirements:

\[\text{T}he\ \text{Commission}\ \text{shall}\ \text{regulate}\ \text{the}\ \text{rates,}\ \text{terms,}\ \text{and}\ \text{conditions}\ \text{for}\ \text{pole}\ \text{attachments}\ \text{to}\ \text{provide}\ \text{that}\ \text{such}\ \text{rates,}\ \text{terms,}\ \text{and}\ \text{conditions}\ \text{are}\ \text{just}\ \text{and}\ \text{reasonable}[.]\] [7]

If pole owners are able to shift all improvement costs of their poles onto attachers, pole owners are forcing others to pay to replace their own property—a clear violation of a requirement that pole attachment conditions are “just and reasonable.”

Second, even a rudimentary understanding of economics demonstrates that broadband deployment will become more expensive and slower if pole owners are not required to equitably share in the costs of replacing their own property. A simple and straightforward illustration shows why requiring firms to pay the entire cost of a pole replacement will result in lower replacement rates than a policy in which the costs are equitably distributed.

Consider three hypothetical companies deciding how many polls to install. Each company (A, B, and C), values the marginal benefit of each poll differently. For example, Company A
values the first pole at $3,000 while Company B values the first pole at $2,500. Each company faces a diminishing marginal benefit: the first poll is more valuable than the second, and so on.

<table>
<thead>
<tr>
<th>Poles</th>
<th>Co A</th>
<th>Co B</th>
<th>Co C</th>
<th>Vertical Sum</th>
<th>Cost of Pole</th>
<th>Cost of Pole / 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>$3,000</td>
<td>$2,500</td>
<td>$2,000</td>
<td>$7,500</td>
<td>$4,000</td>
<td>$1,333</td>
</tr>
<tr>
<td>Second</td>
<td>$2,000</td>
<td>$1,500</td>
<td>$1,000</td>
<td>$4,500</td>
<td>$4,000</td>
<td>$1,333</td>
</tr>
<tr>
<td>Third</td>
<td>$1,000</td>
<td>$500</td>
<td>$0</td>
<td>$1,500</td>
<td>$4,000</td>
<td>$1,333</td>
</tr>
</tbody>
</table>

Assume the cost of installing a pole is $4,000 and poles are a public good, in which case the market “demand” is given by the vertical summation of each company’s marginal benefit schedule. Combined, the companies value the first poll at $7,500. If the first pole were installed, the three companies would have a surplus of $3,500 ($7,500 – $4,000).

But, no single firm values the first poll at $4,000. Thus, in the absence of coordination, no polls would be installed.

However, if the installation cost is split three ways, the cost to each company would be $1,333 per pole. Because each company’s share of the cost is less than its marginal benefit, each company would enjoy a surplus from installing the first poll. So, at least one poll will be installed.

It’s also possible that coordination could allow for the installation of a second poll. If the cost is split evenly across the three firms, Companies A and B would enjoy a surplus, but the cost to Company C would exceed the benefits it would receive. With coordination, some of the benefits to A and B could be used to compensate C sufficiently to entice C to participate.

Moving from the example back into concrete terms, two lessons may be extrapolated. First, that unappreciated pole costs for poles not yet ready for replacement should be shared between pole owners and attachers and, second, that pole owners should be compensated equitably for the cost of replacing end-of-life inventory, and should not reap a windfall. By connection, new attachers should be responsible for the incremental costs associated with attachment.

Thus, on the complementary bases of the facial legal reasoning of the NCTA petition and straightforward economic judgment, we support the recommendations and conclusions of the NCTA’s petition to the Commission.

IV. Controversies should be resolved expeditiously

On a related basis, we believe that a system should be employed to ensure that cases and controversies involving access to, and the costs of replacing, poles are resolved in an
expeditious manner. Pole attachment issues are ripe for such treatment by virtue of the relatively limited universe of facts and analysis that may be determinative in related disputes. What’s more, a system already exists within the remit of the FCC to accomplish that objective in the form of Accelerated Docket Proceedings, which find resolution within 60 days.\[9\] The goal of closing the digital divide should not be subverted by largely superfluous procedural wrangling and, to that end, the Commission should direct staff to place more pole attachment disputes on the accelerated docket.

V. Conclusion

The changes proposed by NCTA are “just and reasonable” and, therefore, comport with the requirements of Section 224. Moreover, they also comport with sound economics, and will serve to further the timely deployment of broadband to all Americans. It is not every day that the FCC can undertake such seemingly small steps while having such an outsized impact on closing the digital divide.


\[2\] Id.

\[3\] Id.

\[4\] RBB Economics, Cost Pass-through: Theory, Measurement, and Potential Policy Implications


\[5\] Hearing Before the Senate Committee on Commerce, Science, and Transportation on Oversight of the Federal Communications Commission, 114th Cong. (2015) (testimony of Commissioner Ajit Pai), available at https://www.govinfo.gov/content/pkg/CHRG-114shrg98498/html/CHRG-114shrg98498.htm. (Because of increased fees on broadband providers, “the reduction competition that Title II is going to work across this country, but especially in rural America, is going to be substantial. You’ve heard our exchanges about how some of these smaller ISPs, in particular, are going to have to either, you know, suck up the cost or go out of business altogether.”)


[8] This is in contrast to the market demand for private goods, which is the horizontal summation of individual demand schedules.


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