

Issue Brief: Pole Attachments and Broadband Build-out

The case for reform

*Kristian Stout
Ben Sperry*

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Introduction

President Joe Biden has made broadband build-out part of his Build Back Better plan, arguing that it constitutes essential infrastructure, much like electricity and water.¹ The plan calls for \$100 billion in subsidies for “future-proof” broadband—that is, connection modes that are expected to meet, or can be readily upgraded to meet, future connectivity needs—with a particular focus on municipal broadband and other nonprofit Internet service providers (ISPs). Congress also has taken up the question of broadband subsidies as part of its ongoing debate over infrastructure spending. But while it is important to get subsidies right, the most expedient public-policy change to ensure greater deployment and adoption of broadband would be to reform policies that needlessly impede the construction and efficient operation of broadband services.

Broadband connectivity continues to be a top priority for the Federal Communications Commission (FCC) and for state and local governments. But to build out wireline broadband, ISPs need access to poles, many of which are owned by electric cooperatives, utilities, and municipal governments. Unfortunately, these entities can charge exorbitant prices to access the necessary inputs. Moreover, the cost to replace, repair, and improve these poles is frequently offloaded onto ISPs and other attachers. These practices drive up the cost to deploy broadband, leading to slower deployment and higher prices for consumers.

The more expensive deployment becomes, the more difficult it is for providers to realize sustainable profits on those investments. This dynamic invariably leads to more selective use of scarce resources, to the detriment of costlier, less-profitable rural deployment. The challenge confronting policymakers and industry alike is how best to equitably and cost-effectively allocate the expenses associated with pole attachments.

The FCC has authority under Section 224 of the Communications Act to review the rates charged for pole attachments to ensure that they are “just and reasonable.”²

¹ *Fact Sheet: The American Jobs Plan*, THE WHITE HOUSE (Mar. 31, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>.

² 47 U.S.C. § 224 (2018).

Pursuant to that authority, the FCC recently found that “utilities throughout the country have disparate and inconsistent practices with regard to cost responsibility for pole replacements.”³ The FCC also declared it unreasonable for utilities to “impose the entire cost of a pole replacement on a requesting attacher when the attacher is not the sole cause of the pole replacement.”⁴

In order to facilitate greater broadband deployment, the FCC should consider rule-making governing how to allocate pole-replacement costs more equitably. States should also reform how the costs of upgrades are distributed when municipal governments and electric cooperatives own the poles.

Background on pole attachments

Current estimates suggest that as much as 25 percent of the cost of broadband deployment in rural areas stems from pole-replacement and upgrade issues.⁵ As the NCTA (previously known as the National Cable & Telecommunications Association) noted in a July 2020 petition to the FCC, pole owners commonly allow poles to remain in use after their useful life has ended⁶ and seek to offload the cost of replacing or repairing the poles onto attachers.⁷ In some cases, pole owners demand “betterment” of poles not quite past their useful lifespan before new equipment can be installed.

The FCC largely agreed with the NCTA’s petition, finding earlier this year that:

The record developed in response to the NCTA Petition revealed, however, that utilities throughout the country have disparate and inconsistent practices with regard to cost responsibility for pole replacements. Specifically, comments in the record indicate that some utilities may

³ Declaratory Ruling, In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, at para. 3 (Jan. 19, 2021), *available at* <https://docs.fcc.gov/public/attachments/DA-21-78A1.pdf>.

⁴ *Id.*

⁵ Petition of NCTA for Expedited Declaratory Ruling, In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84 (July 16, 2020), at 5-9, *available at* https://www.ncta.com/sites/default/files/2020-07/071620_17-84_NCTA_Petition_for_Declaratory_Ruling.pdf.

⁶ *Id.*

⁷ *Id.*

delay needed pole replacements until they receive a request for a new attachment, at which point they allocate the entire cost of the replacement to the new attacher. Thus, in an effort to provide clarity and promote consistency, today we issue a Declaratory Ruling to clarify that it is unreasonable and inconsistent with section 224 of the Communications Act, the Commission's rules, and past precedent, for utilities to impose the entire cost of a pole replacement on a requesting attacher when the attacher is not the sole cause of the pole replacement.⁸

The FCC declined at the time to elaborate on how costs should be allocated in other scenarios, stating that “a rulemaking is a more appropriate forum to more fully address questions concerning the universe of situations where the requesting attacher should not be required to pay for the full cost of a pole replacement and the proper allocation of costs among utilities and attachers in those situations.”⁹

The issue of allocating pole-replacement costs also has drawn interest at the state level. To date in 2021, legislatures in five states have considered bills to cap rates and require equal treatment by pole owners.¹⁰ Cable and internet companies have gone so far as to intervene in front of utility boards on electrical rate-increase requests, in order to raise the issue of pole-attachment cost allocation.¹¹

But not all disputes are subject to FCC review. Specifically, the FCC lacks jurisdiction over poles owned by electrical cooperatives or municipal governments.¹² While 22 states (and the District of Columbia) have certified they have regulatory authority

⁸ Declaratory Ruling, In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84, at para. 3 (Jan. 19, 2021), *available at* <https://docs.fcc.gov/public/attachments/DA-21-78A1.pdf>.

⁹ *Id.* at para. 11.

¹⁰ See Soraya Mohamed, *Five States Advance Bills Regulating Pole Attachment Rates*, DAVIS WRIGHT TREMAINE LLP (May 11, 2021), <https://www.dwt.com/blogs/broadband-advisor/2021/05/five-states-pole-attachment-rate-regulations>.

¹¹ See News Service of Florida, *Cable group seeks to weigh in on FPL rates*, FLORIDA TREND (Jul. 6, 2021), <https://www.floridatrend.com/article/31710/cable-group-seeks-to-weigh-in-on-fpl-rates>.

¹² See 47 U.S.C. § 224(a)(1) (“The term “utility” means any person who is a local exchange carrier or an electric, gas, water, steam, or other public utility, and who owns or controls poles, ducts, conduits, or rights-of-way used, in whole or in part, for any wire communications. Such term does not include any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.”).

over pole attachments,¹³ some jurisdictions are inconsistent in how different pole owners are regulated. This has contributed to a situation in which electrical cooperatives and municipal governments charge rates for pole access that are more than double those of private utilities.¹⁴

TABLE 1: Summary Statistics for 2017 NCTA Data

POLE OWNER TYPE	AVG. ANNUAL RATE	MEDIAN	MIN	MAX	STD. DEV.	RANGE
Investor Owned (n=45,834,546)	\$6.84	\$6.40	\$0.19	\$39.36	\$4.13	\$39.17
Muni (n=3,120,379)	\$14.86	\$14.18	\$0.30	\$65.24	\$9.01	\$64.93
Coop (n=3,283,549)	\$15.39	\$16.24	\$0.16	\$94.50	\$7.29	\$94.34
All Combined (n=52,238,474)	\$7.86	\$6.60	\$0.16	\$94.50	\$5.53	\$94.34

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 the consumers to whom broadband providers must necessarily pass along some of the cost. Such pass-throughs are to be expected. A review of the pass-through literature published by the United Kingdom's Office of Fair Trading reports that 56% to 70% of wholesale price increases are passed through to consumers and between 5.0% and 6.4% of increased commodity prices are passed through to consumers.¹⁵

Even where the cost of a pole attachment is partially internalized by a broadband provider, cost-shifting from pole owners to attachers forces tradeoffs that ultimately lead to slower and more expensive rollout. As one consequence, rural customers tend

¹³ FCC, Public Notice: States that have Certified that they Regulate Pole Attachments, WC Docket No 10-101 (Mar. 19, 2020), available at <https://docs.fcc.gov/public/attachments/DA-20-302A1.pdf>.

¹⁴ See Michelle Connolly, *The Economic Impact of Section 224 Exemption of Municipal and Cooperative Poles* (Jul. 12, 2019), available at <https://www.ncta.com/sites/default/files/2019-07/NCTA%20Muni%20and%20Coop%20Poles%20Connolly%20Paper%20Ex%20Parte%20Filing%2007-22-19.pdf>.

¹⁵ RBB ECONOMICS, *COST PASS-THROUGH: THEORY, MEASUREMENT, AND POTENTIAL POLICY IMPLICATIONS: A REPORT PREPARED FOR THE OFFICE OF FAIR TRADING 156-57* (Feb. 2014), available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/320912/Cost_Pass-Through_Report.pdf. One reason for the wide variation of pass-through rates is the nature of competition and vertical arrangements that govern the relationship between upstream and downstream firms.

to receive speed upgrades more slowly than their suburban and urban counterparts, while facing potentially higher prices when those upgrades are made.¹⁶

Costs should be shared between pole owners and attachers

A simple illustration demonstrates why requiring attachers to pay the entire cost of pole replacements results 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 also faces a diminishing marginal benefit: the first poll is more valuable than the second, and the second more valuable than the third.

TABLE 2: Hypothetical Pole-Attachment Benefits

POLE	BENEFIT TO COMPANY			VERTICAL SUM OF BENEFITS	COST PER-POLE	TOTAL SURPLUS
	A	B	C			
1 st	\$3,000	\$2,500	\$2,000	\$7,500	\$4,000	\$3,500
2 nd	\$2,000	\$1,500	\$1,000	\$4,500	\$4,000	\$500
3 rd	\$1,000	\$500	\$0	\$1,500	\$4,000	-\$2,500

Assume the cost to install each 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.¹⁷ Combined, the companies value the first poll at \$7,500. If

¹⁶ 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.”)

¹⁷ This contrasts to the market demand for private goods, which is the *horizontal* summation of individual demand schedules.

the first pole were installed, the three companies would have a surplus of \$3,500 (\$7,500 of benefits minus \$4,000 cost to build the pole).

Because no single firm values the first poll at \$4,000, however, no poles would be installed in the absence of coordination. If the installation cost was to be 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 \$500 of surplus to A and B could be used to compensate Company C and entice it to participate. The third pole, whose proportional cost would exceed the benefits to each of the three companies, likely would not be installed.

Two lessons may be extrapolated from this example. First, that costs to repair and upgrade poles that have not reached the end of their useful life should be shared between pole owners and attachers and, second, that pole owners should be compensated equitably to replace poles, but should not reap a windfall. New attachers should be responsible for the incremental costs associated with those attachments.

Controversies should be resolved expeditiously

Relatedly, to support the goal of rapid broadband build-out, there needs to be an expeditious system to resolve pole-access and pole-replacement controversies. Given the relatively limited set of facts and analysis at-issue in pole-attachment cases, establishing a system of rapid dispute resolution should not prove too difficult. The FCC is already authorized to conduct mini-trials in the form of Accelerated Docket Proceedings, which must find resolution within 60 days.¹⁸ The FCC should direct staff to place more pole-attachment disputes on the accelerated docket to further the goal of closing the digital divide.

¹⁸ 47 C.F.R. § 1.736(a) (2018).

States may also intervene to ensure rapid resolution of pole-attachment disputes. For example, the Pennsylvania Public Utility Commission has created a Pole Attachment Working Group to streamline dispute resolution between utilities and pole attachers without having to rely on the FCC.¹⁹ Other states should consider similar ways to address disputes.

Conclusion

Action at both the federal and state level will be necessary to promote broadband deployment. By adopting rules and a process to limit rent extraction from broadband providers, build-out will be much more efficient and deployed at lower prices for consumers.

¹⁹ See 52 Pa. Code § 77, <https://casetext.com/regulation/pennsylvania-code-rules-and-regulations/title-52-public-utilities/part-i-public-utility-commission/subpart-c-fixed-service-utilities/chapter-77-pole-attachments/section-777-working-group>. See also Statement of Chairperson Gladys Brown Dutrieuille:

I support asserting Commission jurisdiction over pole attachment disputes when doing so is consistent with federal law. With today's action, this Commission gains the authority to resolve disputes about pole attachments, meaning that our utilities and telecommunication providers will not have to resolve their disputes at the Federal Communications Commission (FCC). I believe that our Commission can streamline the dispute resolution process. Having an accessible and efficient dispute resolution process in place is important because pole attachment disputes have long been considered a major barrier to broadband deployment.