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The FCC Should Preserve and Expand Its Broadband Infrastructure Reforms

by

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I. Introduction and Summary

When a [bipartisan panel](#) of past and present FCC Commissioners spoke at the Free State Foundation's [Fourteenth Annual Policy Conference](#) on May 6, all appeared to agree that removing local barriers to infrastructure buildouts is important to the success of the \$45 billion Broadband, Equity, Access and Deployment ("BEAD") Program and other federal programs intended to promote broadband deployment. The Commission can and should do more to remove such deployment barriers.

Between 2018 and 2021, the Commission adopted several reforms that cleared local regulatory obstacles to the construction of wireless and wireline broadband facilities. The Commission should maintain those reforms, which appear to be working. Data for 2019 and 2020 indicate that broadband access increased significantly and the number of operational cell sites rose sharply compared to prior years. To ensure that the BEAD Program and other programs operate efficiently to expand broadband access, adoption, and affordability, the Commission should adopt additional reforms, including "shot clocks" for resolving pole

attachment requests. It also should adopt shot clocks and fee caps on wireline infrastructure deployment in state and local rights-of-way.

The FCC Commissioners panel at FSF's [Fourteenth Annual Policy Conference](#) – #FSFConf14 – can be viewed [here](#). The panel included Republican Commissioners Brendan Carr and Nathan Simington, as well as Democrat former Acting Chairwoman and Commissioner Mignon Clyburn. In general, the panel's discussion about infrastructure reforms was relatively short compared to prior FSF annual policy conferences. This is best explained by the fact that many important reforms were accomplished during Chairman Ajit Pai's tenure, including the 2018 *Moratorium Order*, the 2018 *Small Cell Order*, the 2018 *One Touch Make Ready Order*, the 2020 *5G Upgrade Order*, and the 2020 *Over-the-Air-Reception-Devices Order*.

Local regulatory barriers to broadband infrastructure deployment have come in the forms of moratoria on construction permit approval, lengthy administrative processing periods for permit applications, high fees for filing permits that bear no relation to the costs of reviewing applications, and high recurring fees for providing service. All such local administrative burdens have stood in the way of expanding Americans' access to broadband services and to next-generation network upgrades.

Moreover, according to findings in the Commission's 2018 *Small Cell Order*, providers in highly populated cities tend to serve populated markets first, and thus local governments in dense cities have monopoly power to implement high fees and barriers to entry. But consumers in less populated areas potentially shoulder a disproportionate burden of the fees and barriers implemented in highly populated cities because serving less populated areas is generally costlier and thus is less profitable. In other words, excessive fees and other regulatory cost barriers to entry in high-population areas drain resources for deployment in the less populated, less profitable communities, exacerbating the digital divide.

The Commission's important recently-adopted infrastructure policy reforms preempt such barriers to broadband facilities construction and upgrades. By reducing unnecessary local regulatory costs, the Commission's reforms help preserve provider resources for investment in additional broadband infrastructure, including in harder-to-serve areas. And the elimination or reduction of excessive local administrative delays allows consumers timelier access to 5G, fiber, and gigabit-speed cable broadband services.

There is evidence that the infrastructure reforms adopted by the FCC between 2018 and 2021 are working. For example, a court issued a swift injunction based on the *5G Upgrade Order* in [T-Mobile West, LLC v. City and County of San Francisco \(2021\)](#), preventing a local government from delaying equipment modifications. But overall, it appears that few cases have been filed – which could mean that localities are no longer issuing moratoria on permits or delaying new cell site builds or upgrades *en masse*. Also, since the passage of infrastructure reforms, cell site and fiber deployment has been expedited. According to [data](#) from CTIA, at the end of 2020 there were over 417,000 cell sites in operation, a 35% increase compared to 2016. And at least [60.5 million homes](#) were passed by fiber in 2021, an annual increase of 12%, up from a 10% annual increase the previous year. Additionally, there is a burgeoning fixed wireless broadband industry that is rapidly gaining subscribers, including half of the 1.065 million nationwide [broadband subscriber additions](#) in Q1 2022. And real broadband

prices are [dropping](#) – by 6.6% for fixed and 9% for wireless – even while other goods and services are squeezed by inflation and supply chain shocks.

Some government officials have opposed the FCC's broadband infrastructure reforms. But two key arguments previously raised against those reforms have been effectively dismantled. In [City of Portland v. FCC \(2020\)](#), the Ninth Circuit rejected arguments raised by local governments, and previously voiced by then-Commissioner Jessica Rosenworcel, that the Commission lacked authority to cap deployment fees imposed by local governments on wireless broadband providers for permit applications and rights-of-way usage involving wireless facilities. Additionally, most of the Commission's infrastructure reforms have now been in effect for well over two years. Arguments previously raised by local governments that they would not have time to adjust to the new rules have been mooted.

Certainly, the Commission ought to preserve its broadband infrastructure reforms. Now that the federal government plans to spend over \$45 billion via the BEAD program and many billions more through other broadband-related programs, those reforms are more important than ever. Indeed, the Commission should consider additional ways to remove local regulatory barriers to the buildout of broadband facilities. At #FSFConf14, Commissioner Carr offered two ideas for near-future FCC infrastructure reforms: adoption of [pole attachment reforms](#) and extension of wireless infrastructure shot clocks and fee caps to wireline deployment in state and local rights-of-way. The Commission ought to pursue both.

It is an encouraging sign that the FCC has published a [Notice of Proposed Rulemaking](#) that proposes applying shot clocks and expedited dispute resolution requirements relating to pole attachments. The Commission should consider similar actions for wireline deployments in state and local government rights-of-way. As noted during the [FCC Commissioners' panel](#) at #FSFConf14, these actions could help ensure cost-effective expenditure of \$42.45 billion in funds through the BEAD Program along with the several billions in funds allocated to other programs for closing the digital divide.

II. The Communications Act and the FCC's Infrastructure Siting Reforms

In the [Telecommunications Act of 1996](#), Congress amended the Communications Act to provide the FCC with deregulatory tools to "promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies." One such tool is federal preemption of state and local government actions that delay or add needless cost to the construction or upgrading of infrastructure for communications services, including broadband Internet services.

Multiple provisions in the Communications Act have preemptive effect on local regulatory impediments to the construction of communications facilities. Section 253(a) states "[n]o State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." Similarly, Section 332(c)(7) states that "[t]he regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof—(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 services."

Likewise, Section 1455(a) of the Communications Act, enacted as part of the Middle Class Tax Relief and Jobs Creation Act of 2012, mandates state and local governments to approve wireless equipment modifications that do not "substantially change the physical dimensions" of a "tower or base station." And Section 303(d) gives the Commission sole regulatory authority over "radio stations," which [include residential rooftop antennas](#) for fixed wireless broadband that previously have been restricted by state and local governments, as well as contract provisions in restrictive covenants or residential leases.

The Commission also can preempt barriers to infrastructure deployment using other authorities. For example, Section 224 of the Communications Act gives the Commission authority to regulate pole attachment agreements to prevent discrimination and the exercise of monopoly power to charge above-market rates for access to poles.

During the chairmanship of Ajit Pai, the FCC relied on these authorities when it adopted wireless and wireline infrastructure reforms intended to remove local regulatory obstacles and expedite broadband deployment:

- The *2018 Moratorium Order* prohibits states and local governments from explicitly or constructively banning the deployment of new communications facilities. As the Commission found, many localities had attempted to prevent deployment of new broadband facilities by banning new deployments for fixed or indefinite periods of time, or otherwise refusing to approve any new facilities despite lack of an official policy stating so. The *Moratorium Order* rightly interpreted Section 253(a) of the Communications Act to preempt those state and local policies, because they plainly fall within the statute's prohibition on actions that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."
- The *2018 Small Cell Order* imposes shot clocks, or deadlines, for local governments to approve or deny applications for "small wireless facilities," or "small cells." These modern small wireless antennas are often deployed on poles or on building rooftops to provide 5G service. The order reasonably interpreted state and local government failure to approve or deny small cell applications within applicable timeframes as presumptive "prohibitions" on wireless service under Section 322(c)(7). Under the order, infrastructure providers who are aggrieved by local authority inaction beyond shot clock periods are permitted to file lawsuits in federal court and seek preliminary relief. Lastly, the order interpreted Section 322(c)(7) and 253(a) to bar local governments from charging fees that exceed their objective costs for processing applications and managing rights-of-way to broadband providers deploying small cells.
- The *2018 One Touch Make Ready Order* eliminates delay for broadband deployments that require pole attachment agreements. The order empowers an "attacher" of new broadband equipment to elect to perform all the necessary "make-ready" work for attaching its equipment to poles owned by another company. This solution properly

aligns incentives for expedited deployment – attachers of new equipment have obvious incentive to quickly perform "make-ready" work, as compared to monopoly pole owners, which might discriminatorily stall such work to block a new competitor from entering the market.

- The 2020 *5G Upgrade Order* applies Section 1455's provision for automatic approval to equipment modifications needed to upgrade existing facilities to 5G. The order clarifies that minor equipment upgrades involving the addition of ground equipment or taller deployments within certain parameters are not "substantial modifications" that require the issuance of new permits by state and local governments.
- The 2021 *Over-the-Air-Reception Devices Order* preempts state, local, and contractual regulation of certain rooftop antennas used to provision fixed wireless broadband. The order is technically complicated, but the gist is that the Commission exercised its preemptive power to regulate radio antennas under Section 303(d) to permit broader deployment of types of antennas that improve service quality and coverage of fixed wireless networks. A [FSF Blog](#) explains the rule in more detail.

III. FCC's Infrastructure Siting Reforms Should Be Preserved

There are several good reasons why the infrastructure siting reforms adopted by the FCC during Chairman Pai's tenure ought to be preserved. Importantly, the Commission's infrastructure siting reforms counteract forces that have likely fueled the digital divide. For example, in the *2018 Small Cell Order*, the Commission analyzed "the aggregate effects of fees imposed by individual localities, including... the potential limiting implications for a nationwide wireless network." It found that local governments in heavily populated cities frequently enacted policies that increased the cost of building or upgrading cell sites, draining resources for deployment in rural and lightly populated areas:

Where providers seek to operate on a regional or national basis, they have constrained resources for entering new markets or introducing, expanding, or improving existing services, particularly given that a provider's capital budget for a given period of time is often set in advance. In such cases, the resources consumed in serving one geographic area are likely to deplete the resources available for serving other areas.

Because broadband providers can spread lower deployment costs over larger numbers of subscribers in high-population areas, providers are somewhat dependent on access to these markets for return on their investments. Thus, large cities have often been the first to be served, the first to get service upgrades, and the most likely to have multiple service options. And for those reasons, the local governments in these highly populated cities have monopoly power to collect excess rents from providers. But the excess rents collected by local governments in highly populated cities drain resources for deployment in lightly populated areas. Accordingly, money spent by broadband providers on excess fees and compliance costs in highly populated areas comes straight out of the budgets of providers who later deploy elsewhere. The order helps to preclude such scenarios by prohibiting local governments from

imposing fees on new cell sites and facilities upgrades that exceed objective costs of administration and rights-of-way management.

Even critics of the reforms concede that the preempted state and local policies increased deployment costs. For example, an *Ars Technica* headline published in response to the Ninth Circuit upholding the 2018 *Small Cell Order* in [City of Portland v. FCC](#) read: "[FCC beats cities in court, helping carriers avoid \\$2 billion in local 5G fees.](#)" Yet consumers would ultimately pay for at least a substantial portion of that \$2 billion in the form of higher service charges. And to the extent that market competition or other factors constrain the ability of wireless providers to pass excess fees on to consumers' monthly bills, wireless providers would have fewer financial resources available to invest in network expansion and upgrades. For consumers, that would mean reduced network quality and reduced access to next-generation services.

Pro-consumer trends in broadband prices observed in the face of 40-year high inflation may even be partly attributable to the Commission's infrastructure siting reforms. Over the past year, real prices [decreased](#) by 6.6% and 9.0% for fixed and mobile broadband, respectively. In fact, *nominal* mobile broadband prices fell by .7% over the past year, meaning that *actual wireless price tags in stores*, not just inflation-adjusted prices, have shrunk. And nominal fixed broadband prices are only up by a meager 1.7% despite an 8.3% annualized inflation rate and supply chain issues wreaking havoc in other markets. To the extent that the Commission's reforms reduced fees and other local regulatory compliance expenses, broadband providers may be enjoying more margin to absorb supply chain shocks and other inflation-era cost increases.

Moreover, by ensuring that broadband providers can seek injunctive relief in federal courts even when states and localities refuse to take action on permit applications, the infrastructure siting reforms reduce delays in deployment. In prior years, lack of clear rules effectively required wireless providers to wait for a local government to make a final decision to deny a permit application before they could seek relief in court. As a result, local governments faced little or no repercussions for effectively blocking new cell sites through lengthy administrative delays. But the shot clocks established through the FCC's infrastructure reforms give broadband providers opportunity to file complaints when local government inaction exceeds shot clock timeframes, and enable providers to obtain legal remedies. For example, in [T-Mobile West, LLC v. City and County of San Francisco](#), T-Mobile filed a complaint in November 2020 in response to San Francisco's failure to approve wireless facility modifications within 60 days pursuant to the *5G Upgrade Order*. Less than four months later, in March 2021, a U.S. District Court granted summary judgment in T-Mobile's favor by applying the clear terms of the *5G Upgrade Order*.

To date, there appears to be few filed court cases alleging that local governments have violated the FCC's 2018-2021 infrastructure siting reforms. This may be an indicator that local governments are approving new infrastructure permit applications in compliance with Commission policies and that the reforms are achieving their primary intended effect in speeding infrastructure deployment.

In fact, any future Commission action to undo its infrastructure siting reform would risk undermining the accelerated growth trends for broadband infrastructure that have been

observed over the past few years. The number of cell sites in the United States [increased](#) by 35% between 2016 and 2021, after only increasing a meager 1% between 2013 and 2016. According to [CTIA](#), the number of cell sites in operation increased to more than 417,000 in 2020, a 35% increase compared to 2016. This strong trend in new cell sites should be expected to continue, as long as the Commission's infrastructure reforms are maintained and thereby continue to facilitate the ongoing buildout of 5G networks in mid-band and high-band spectrum frequencies, which require small cells. The wireless industry [projects](#) that 80% of future cell deployments will be small cells.

There also has been a notable jump in fiber deployment, with [60.5 million homes](#) now passed by fiber, a number that increased by 12% in 2021, up from a 10% increase the previous year. Accelerated fiber network buildout may be partly due to reforms in the *One-Touch-Make-Ready Order* that make wireline deployments easier. In any event, ongoing aggressive fiber buildouts surely will be spurred on by the order.

Additionally, the Commission's infrastructure siting reforms are likely facilitating strong growth for fixed wireless broadband services. Within the past several months, fixed wireless broadband providers are rapidly gaining subscribers. In the first quarter of 2022, [half](#) of the 1.065 million nationwide broadband subscriber additions went to fixed wireless providers. During the same quarter, Verizon alone [gained](#) almost 200,000 fixed wireless subscribers, a figure almost 250% higher than its performance during Q1 2021. And T-Mobile and Verizon together are [projected](#) to gain 1.8 million fixed wireless subscribers for the full 2022 year. The *Over-the-Air-Reception-Devices Order* may be boosting fixed wireless gains by enabling the placement of antennas needed to improve fixed wireless network quality and make it an attractive competitive option for consumers.

Furthermore, events and circumstances have neutralized arguments that critics previously raised against the Commission's 2018-2021 infrastructure reforms. Arguments that the Commission lacked authority to preempt state and local fees on wireless infrastructure siting were rejected by the Ninth Circuit in [City of Portland v. FCC](#), and the Supreme Court [denied certiorari in that case](#). Likewise, the D.C. Circuit [upheld](#) the *Over-the-Air-Reception-Devices Order* in [Children's Health Defense v. FCC \(2022\)](#).

And finally, time and experience have mooted arguments made years earlier by local governments, and voiced by then-Commissioner Jessica Rosenworcel, that the Commission's infrastructure reforms were moving too fast to allow for proper consultation with state and local governments. Those infrastructure reforms have now been in effect for at least two years, if not more. In the event that the Commission is reconstituted with a 3-2 Democratic majority, any future repeal of the infrastructure reforms could cause uncertainty for broadband providers and undermine their investment-backed expectations regarding infrastructure siting costs and timeframes.

IV. The FCC Should Pursue Additional Infrastructure Reforms on Pole Attachments and Wireline Facilities in Rights-of-Way

Chairwoman Rosenworcel should lead the FCC in pursuit of additional infrastructure reforms that will further reduce the digital divide and promote timely expansion of broadband access.

The Commission should diligently follow through with its current proceeding to update the agency's rules for pole attachments. In particular, the Commission should adopt a shot clock for the completion of pole replacements when a replacement is necessitated by a broadband provider that seeks to attach to an existing pole.

Section 224 of the Communications Act confers the Commission the power to "regulate the rates, terms, and conditions of pole attachments to provide that such rates, terms, and conditions are just and reasonable, and . . . adopt procedures necessary and appropriate to hear and resolve complaints concerning such rates, terms, and conditions." Although pole attachment rules should respect the property rights of pole owners, it is also important that the rules prevent pole owners from exercising monopoly power to unreasonably deny attachments to new entrants or to charge above-market rates for leasing access to poles. In its current proceeding, the Commission should amend its rules to require a pole owner to complete the replacement or designate an authorized contractor to do so within a reasonable timeframe.

The Commission also ought to amend its rules regarding wireline broadband infrastructure by adopting shot clocks and fee caps for deployments of wireline facilities in state and local rights-of-way. This idea for reform was suggested by Commissioner Carr at the Free State Foundation's [Fourteenth Annual Policy Conference](#). The Commission could adopt this reform by expanding its present interpretation of Section 253(a), as upheld by the Ninth Circuit in *City of Portland v. FCC* (2020), to also apply to wireline deployments.

Importantly, the Commission ought to act with dispatch in advancing infrastructure reforms for pole attachments and wireline facilities deployments using rights-of-way. The reduced costs and other regulatory obstacles to network infrastructure buildout certainly will help speed deployment of 5G, fiber, and cable broadband services. And timely action by the Commission likely would help improve cost-effectiveness of the BEAD program and other federal broadband deployment funds. Indeed, current and past Commissioners who appeared at FSF's Fourteenth Annual Policy Conference all acknowledged, to some degree or another, that relief from or at least avoidance of local regulatory barriers to deployment is critical to the success of those federal subsidy programs in rapidly connecting all Americans to broadband service.

V. Conclusion

Local permit approval and other regulatory costs have long posed one of the most significant barriers to broadband deployment. But the FCC's *2018 Moratorium Order*, *2018 Small Cell Order*, *2018 One-Touch-Make-Ready Order*, *2020 5G Upgrade Order*, and *2020 Over-the-Air-Reception-Devices Order* have cleared many of those barriers. Coinciding with those important broadband infrastructure reforms, broadband deployment has accelerated, operational cell sites have increased significantly, and consumer broadband prices have dropped.

Now that the federal government plans to spend \$45 billion on broadband deployment via the BEAD program and billions more through other broadband-related programs, those infrastructure reforms are as important as ever. Indeed, the infrastructure reforms adopted by the Commission during Chairman Pai's tenure should be expanded. Two promising new

reforms that the Commission can pursue include shot clocks for pole attachments as well as shot clocks and fee caps for wireline facilities deployments using state and local rights-of-way. As noted during the [FCC Commissioners' panel](#) at #FSFConf14, these actions could help ensure cost-effective expenditure of the \$42.45 billion BEAD program and other federal broadband deployment funds allocated for closing the digital divide.

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Further Readings

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