Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services

WC Docket No. 19-308

COMMMENTS OF INCOMPAS AND THE NORTHWEST TELECOMMUNICATIONS ASSOCIATION

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COMMENTS OF INCOMPAS AND THE NORTHWEST TELECOMMUNICATIONS ASSOCIATION

INCOMPAS¹ and the Northwest Telecommunications Association,² on behalf of themselves and their respective members, submit these comments in response to the Commission’s Notice of Proposed Rulemaking (“NPRM”) relating to the remaining unbundled network element (“UNE”) and avoided-cost resale obligations under Sections 251(c)(3)-(4) of the Communications Act.³

I. INTRODUCTION AND SUMMARY

The Commission need not look far for evidence that dispels the NPRM’s imprudent proposals to further eliminate unbundling and avoided-cost resale obligations. The record from

¹ INCOMPAS is the preeminent national industry association for providers of internet and competitive communications networks and services, including both wireline and wireless providers in the broadband marketplace.

² The Northwest Telecommunications Association (“NWTA”) is an association of Service Providers and small Competitive Carriers that offers broadband and voice service in all of Oregon, Washington, and Idaho. All providers serve some rural markets, and many provide only to rural markets.

the USTelecom forbearance proceeding brought several facts to light. First, the UNE and resale market-opening provisions enable competition, bringing more choice, innovation, and better customer service to consumers, businesses, governments, and nonprofit organizations. Second, customers are clamoring for more competition, not less, in the telecommunications and broadband marketplace. Over 11,000 customers filed individualized letters to the Commission opposing USTelecom’s forbearance petition and expressing concerns about the impact that forbearance would have on their access to the faster speeds and higher-quality service offered by competitors. Third, competitors have been and are continuing to build new networks on the firm foundation of the Telecommunications Act of 1996’s bipartisan, competition-inducing UNE access. The NPRM’s proposals, if adopted, would harm competitors’ ability to enter new markets, serve new customers, and build new networks. In the language of the Communications Act, removing access to these remaining UNE loops and dark fiber transport “would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.”

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4 Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141.

5 Opposition of INCOMPAS et al. at 12-19, WC Docket No. 18-141 (filed Aug. 6, 2018) (“INCOMPAS Opposition”).

6 Letter from Karen Reidy, Vice President—Regulatory Affairs, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 1-2 (filed May 14, 2019) (“INCOMPAS May 2019 Ex Parte”).


Unfortunately, the Commission’s proposals to yet again rely on the same predictive judgments—which themselves spring from the same flawed data from the BDS proceeding—is severely misguided. Indeed, in the years since the BDS Order was adopted,\(^9\) the evidence has become indisputable that the Form 477 data relied upon in that order provide an inaccurate, overly optimistic picture of the state of broadband competition. Given the significant doubts regarding the reliability of Form 477 data in providing an accurate analysis of broadband competition, which Commissioners themselves have acknowledged, the Commission should not use that data now to justify upending its impairment framework for UNEs.

The findings of the BDS Order and of the USTelecom Forbearance Orders\(^{10}\) are also inapplicable to this proceeding because the underlying statutes have different goals, which in turn call for different analytical approaches and standards. Section 251 focuses specifically on the barriers to competitive providers entering the market, and findings from the BDS Order and derivative orders do not address that issue. Instead, those orders focused on whether tariffs and price regulation were necessary to ensure just and reasonable rates, and they relied on (anticipated) duopolistic competition to discipline prices. The fact that cable providers have been able to enter does not itself show that independent entry of other providers is feasible. Like the ILEC, cable has unique advantages from being an historical monopoly, including existing


customer relationships with many households and having pole attachments and access to rights-of-way and conduit, and associated agreements already in place. These historical advantages make entry for a cable provider substantially easier as compared with a wholly new entrant. Entry by non-incumbents, in contrast, remains impaired without access to the ILEC’s existing copper network, as entrants must first build a customer and revenue base, negotiate local agreements with municipalities for access to public rights-of-way and necessary permitting, as well as obtain pole arrangements, and then build out their own fiber networks. Moreover, Section 251(c) was adopted specifically to provide avenues for telecommunications competition in addition to ILECs and incumbent cable companies; it would have been wholly unnecessary had Congress intended to rely solely on competition between the ILEC and incumbent cable company.11

The evidence in the records of the BDS and USTelecom Forbearance proceedings do not support finding that competitive providers are no longer impaired, because those proceedings do not consider the barriers to entry by a reasonably efficient competitor (including competitors that do not have existing assets nearby). The Commission should assess impairment based on whether, for a reasonably efficient competitor, a lack of access to the UNE would create a barrier to entry to allow competitors to gain customers, enabling their own broadband network deployment to provide service at speeds up to (at least) 1 Gbps, not merely at 10/1, which the Commission now considers inadequate, or 25/3, which the Commission considers only minimally adequate. Adopting such a standard would be consistent with the Commission’s push

11 See Unbundling Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Order on Remand, 20 FCC Rcd. 2533, 2639 ¶ 193 (2005) (“TRRO”) (rejecting the assertion that intermodal competition from cable alone is sufficient for a determination of non-impairment).
for fiber deployment and future proof networks, and would enhance both advanced broadband deployment and deployment of the extensive fiber backhaul facilities that will be essential for 5G.\textsuperscript{12} Evidence from the forbearance proceeding show that UNEs have spurred, rather than delayed, the deployment of fiber and broadband services, including in areas where the ILEC has not upgraded its own facilities. To the extent the Commission considers the effect on fiber deployment in addition to its impairment analysis, the record supports maintaining existing unbundling requirements for the remaining unbundled network elements.

The Commission also lacks any basis to forbear from applying the currently remaining unbundling rules. The record from the USTelecom forbearance proceeding demonstrates the diverse ways that competitive providers utilize UNEs to meet the critical needs of underserved consumers and to promote broadband deployment by competitors and incumbents.\textsuperscript{13} The record also demonstrates the lack of commercially available substitutes for critical UNEs such as DS0 loops and nearly all interoffice dark fiber transport.

With respect to avoided-cost resale, it is inappropriate for the Commission to consider extending its findings to other geographic areas when INCOMPAS and the California Public Utilities Commission are independently challenging the original findings in court. Moreover, avoided-cost resale remains critical to disciplining wholesale prices in non-competitive markets. Eliminating these obligations would particularly harm the business and government customers whose performance of security and public safety functions depend on traditional TDM-based services for a reliable, self-powered network.

\begin{itemize}
  \item \textsuperscript{13} INCOMPAS Opposition at 18-20.
\end{itemize}
The NPRM’s proposal to reduce or eliminate unbundling and avoided-cost resale requirements would harm competition, consumers, and the public interest. The conclusions it attempts to draw are unsupported by the record and buoyed only by flawed data and misapplied assumptions. Accordingly, the Commission should abandon its NPRM proposals.

II. THE COMMISSION SHOULD FOLLOW ITS ESTABLISHED REASONABLY EFFICIENT COMPETITOR FRAMEWORK FOR DETERMINING IMPAIRMENT UNDER SECTION 251(D)(2) INSTEAD OF REAPPLYING THE UNRELIABLE DATA AND FINDINGS FROM THE BDS ORDER AND ITS PROGENY

A. The Proposals in the NPRM Rest on Inaccurate Data and Outdated Predictions

The Commission should not make policy based on inaccurate data or stale assumptions. This is precisely why the NPRM’s proposals must fail. First, the proposal to eliminate unbundling for xDSL-capable DS0 loops in urban areas rests entirely on admittedly flawed Form 477 data. The NPRM claims that UNE DS0 Loops are unnecessary in “urban” areas because calculations based on Form 477 data show “nearly ubiquitous cable deployment” to compete with ILEC broadband service and incentivize network buildouts. But even at best, the Form 477 data offer insufficient evidence of cable deployment and the broadband options available to

14 See NPRM ¶ 39 nn.138-41 (relying on Form 477 data to assert that cable providers provide 25/3 Mbps broadband service without UNEs to 97% of households in urban census blocks and 74% of urban households have at least two 25/3 Mbps providers); see also id. ¶ 21 n.78 (relying on Form 477 data to assert that cable providers provide about 78% of 25/3 Mbps residential subscriptions). The NPRM appears to apply an expansive definition of “urban,” including communities as small as 2,500 people. 2,500 people—with a smaller number of homes and businesses—is a very small pool of potential customers.
customers in any given location.\textsuperscript{15} At worst, the data are wholly inaccurate and misleading.\textsuperscript{16} The Commission has recognized with increasing clarity the limitations of Form 477 data and, even now, is in the process of overhauling the collection of broadband availability information through its Digital Opportunity Data Collection proceeding.\textsuperscript{17}

The current data collection cannot translate into sound policy decisions because it is woefully misleading and inaccurate. Providers indicate where they “could” provide service in their Form 477 submissions—not where they actually provide service. To make matters worse, the Commission’s existing approach, which treats any census block where a provider “could” provide service as entirely served even where the provider only indicates that it “could” offer service to a single location within the census block, overstates the amount of availability and competition.\textsuperscript{18} Indeed, all five Commissioners recently agreed in an oversight hearing before the

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\textsuperscript{18} Letter from Angie Kronenberg et al., Chief Advocate & General, INCOMPAS, to Office of the Secretary, FTC, at 14-15 (filed May 31, 2019) (responding to FTC Hearing No. 10—Competition and Consumer Protection Issues in U.S. Broadband Markets) (“INCOMPAS FTC Competition Comments”); see May 2019 House Hearing at 2:02:37 (testimony of Chairman Pai) (agreeing with Congressman McEachin that the Form 477 “does not currently reflect the best possible way to collect this [broadband availability] data, especially the
House Subcommittee on Communications and Technology that the Commission should not be relying upon the inaccurate information produced by the current Form 477 data for new FCC policy.\textsuperscript{19} All five Commissioners agreed that the existing broadband deployment data are “significantly lacking and deeply flawed” and when the FCC has bad data, “[it] can’t make good decisions.”\textsuperscript{20}

Even the ILECs agree that the current data collection is insufficient for assessing the availability of networks for purposes of the USF high-cost program.\textsuperscript{21} AT&T has recognized that the Form 477 data not only overstate broadband penetration rates but also understate the number of communities without any access to broadband by failing to report on these unserved areas.\textsuperscript{22} In congressional testimony, USTelecom similarly cautioned that the Form 477’s “‘one-served-all-served’ reporting is simply not a reliable tool to accurately understand broadband availability.”\textsuperscript{23} Rather, the flawed methodology “creates an overstatement of served locations,” including in some cases where “only a fraction of locations in the block can access broadband


\textsuperscript{20} \textit{Id.}


\textsuperscript{22} Letter from Ola Oyefusi, Director, Federal Regulatory, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 11-10, 10-90, at 1 (filed Oct. 12, 2018).

services.”24 As USTelecom estimates, millions of locations (in rural areas alone) could be misclassified as “served.”25 Similarly, without better data the Commission cannot accurately determine which urban areas are “served” and competitive enough to warrant removing CLEC UNE access.

In FCC oversight hearings, House Communications and Technology Subcommittee Chairman Doyle cautioned the FCC against “arbitrary” decision making regarding which proceedings require new accurate data.26 Just as the current data collection is insufficient for designing efficient funding programs, it is insufficient for competition analysis. The NPRM’s cited data likely overstates broadband penetration rates and cannot form the basis for eliminating UNE DS0 Loops.

Second, the NPRM proposes to eliminate unbundling obligations for DS1 and DS3 Loops in all counties deemed “competitive” by the BDS Order.27 Here, the Commission errs in proposing, again, to rely on the findings in the BDS Order. Those findings were themselves based on a predictive judgment about the likely emergence of competition over a period of three years.

24 Id.

25 USTelecom RDOF Comments at 6-7 (“estimate[ing] that approximately five million broadband serviceable locations in rural areas nationwide could be currently errantly counted as served”); CostQuest Report at 7 (reporting that in the pilot mapping initiative, 48 percent of rural census block Fabric location counts do not match Form 477 data location-count estimates and 23 percent of rural pilot locations are not mapped to the correct census block).

26 Dec. 2019 House Hearing (questions of Chairman Doyle) (noting the arbitrariness behind Chairman Pai’s decision to require new data for the Mobility Fund II proceeding while “ignoring the lack of accurate data in its decision making” for UNE forbearance and the next round of Connect America funding).

27 NPRM ¶ 30.
to five years, and evidence in subsequent proceedings contradicts those predictions, revealing that competition has not been as widespread.\textsuperscript{28}

Nearly three years after the \textit{BDS Order}, the Commission should undertake fact finding to determine whether its predictive judgment was correct, rather than robotically using the same predictions to further deregulate.\textsuperscript{29} Moreover, the predictions in the \textit{BDS Order} relied on competitors entering the market, including through using UNEs as a cost-effective way to expand their existing networks.\textsuperscript{30} Eliminating access to UNEs in markets where competitors are otherwise impaired would undermine that prediction.

Third, for dark fiber transport, the \textit{NPRM} proposes to eliminate unbundling in any wire center that is located within one-half mile of non-I\textit{LEC} fiber.\textsuperscript{31} As with DS1 and DS3 loops, the support for this proposal is not based on evidence of competition but on the Commission’s prediction in the \textit{BDS Order}. Moreover, by relying on Form 477 data, the \textit{NPRM}’s alternative proposal to eliminate unbundling for dark fiber transport based on a minimum percentage of end users served by 25/3 Mbps internet access service in the area is even more flawed.

The Commission must have more accurate data before assessing the necessity of existing UNE obligations. Without such data, it would be arbitrary and capricious for the Commission to significantly scale back the availability of UNEs as proposed in the \textit{NPRM}. As the Commission

\textsuperscript{28} \textit{See} INCOMPAS Opposition at 58-60 (noting that USTelecom’s forbearance petition failed to present any evidence that the Commission’s \textit{BDS Order} prediction has been proven accurate).

\textsuperscript{29} \textit{See} Letter from Phillip Berenbroick, Policy Director, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-308, at 1 (filed Nov. 18, 2019) (noting that “leading cable and incumbent telecommunications carriers claimed the 2013 BDS data was already stale and outdated by 2016”).

\textsuperscript{30} \textit{See} INCOMPAS Opposition at 61-64.

\textsuperscript{31} \textit{NPRM} ¶ 73.
has recognized, the broadband deployment data collected via Form 477 are insufficient for determining any broadband availability, much less competitive broadband availability.\textsuperscript{32} To move forward with inaccurate and misleading data threatens consumer harm and anticompetitive outcomes. The NPRM’s rush to remove UNE obligations is all the more unwarranted when improved broadband availability data could be achievable within 12 to 15 months.\textsuperscript{33} The Commission should complete its broadband mapping effort, rather than relying on flawed Form 477 data, to understand which locations actually have facilities-based broadband availability and competition.\textsuperscript{34} This becomes even more important when examining advanced broadband services, such as gigabit services. Rarely are these high-speed services offered by more than one provider.\textsuperscript{35}

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\textsuperscript{32} See FCC, EXPLANATION OF BROADBAND DEPLOYMENT DATA (Jan. 2020), https://www.fcc.gov/general/explanation-broadband-deployment-data; see also INDUS. ANALYSIS AND TECH. DIV., WIRELINE COMPETITION BUREAU, FCC, INTERNET ACCESS SERVICES: STATUS AS OF JUNE 30, 2017, at 6 (Nov. 2018), https://docs.fcc.gov/public/attachments/DOC-355166A1.pdf (“A provider that reports offering service in a particular census block may not offer service, or service at that speed, to all locations in the census block. Accordingly, the number of providers shown in Figure 4 does not necessarily reflect the number of choices available to a particular household and does not purport to measure competition.”).

\textsuperscript{33} Letter from B. Lynn Follansbee, Vice President—Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 19-195, 10-90, 19-126, at 1 (filed July 22, 2019).

\textsuperscript{34} INCOMPAS FTC Competition Comments at 16.

\textsuperscript{35} See infra pp. 17-18.
B. The BDS Order and 2019 USTelecom Forbearance Order Do Not Provide an Analytical Framework for Determining Impairment to Reasonably Efficient Competitors, Which Is Required by Section 251 of the Telecommunications Act

1. The BDS Order’s Singular Focus on Prices Makes Its Conclusions an Insufficient Basis for Determining Impairment

The current unbundling rules were established based on the Commission’s analysis of whether, for a “reasonably efficient” competitor, “lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic.”36 This follows from Section 251’s directive that, in making unbundling determinations, the Commission consider whether “the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.”37

The Commission’s unbundling rules selected proxies for impairment “based on the characteristics of markets where actual deployment has occurred.”38 They not only account for intermodal competition by looking at fiber-based collocators, which already include cable providers,39 but also account for the potential for self-deployment by looking at line count as a proxy for revenue potential. The fundamental premise of the current impairment test is to identify markers that indicate lower entry barriers. That is the right objective and should remain so. As discussed further below, entry barriers for non-cable entrants remain exceedingly high. In contrast, the Commission’s approach in the BDS Order and subsequent deregulating orders

36 TRRO ¶ 26.
38 TRRO ¶ 28 (emphasis added).
39 See id. ¶ 95.
asked whether there would be adequate competitive discipline on *prices*, irrespective of whether that discipline sufficiently lowers barriers to entry such that competitors are not impaired.\(^{40}\)

While INCOMPAS and NWTA continue to believe that duopoly is not sufficient competition to discipline prices and promote innovation, this is a different analysis—based on a different statutory directive— than what has been applied by the Commission in the unbundling context and what is expressly required by Section 251.

The *BDS Order* explicitely cited the potential entry by *one* nearby competitor as sufficient over the medium term to discipline ILEC prices because of the dynamics of bidding for BDS.\(^{41}\)

The Commission found that the bidding process for BDS allowed “even an uncommitted, though usually nearby, entrant” to compete and build out to the customer after a winning bid.\(^{42}\)

However, the Commission has previously noted that the requirement of Section 251(c)(3) is not satisfied merely by pricing discipline provided by a fellow duopolist. As the Commission explained in the *TRRO*, the statutory standard of Section 251(c)(3) is distinct from the “just and reasonable” standard of Section 202(a): The former “looks carefully at duplicability and

\(^{40}\) Indeed, INCOMPAS members have seen dramatic increases in BDS pricing since the FCC deregulated in 2017.

\(^{41}\) See *BDS Order* ¶ 15 (“[T]he presence of two current competitors or providers with their own fiber nodes within a half mile, hereafter referred to as medium-term entrants, or that will serve over the medium term, are sufficient to provide competitive pressure to adequately discipline prices.”); see also *2019 USTelecom Forbearance Order* ¶ 20 (“In addition to alternative wholesale inputs that competitive LECs can use to continue to offer TDM voice services in the absence of UNE Analog Loop availability, the widespread availability of VoIP and wireless voice services will also discipline voice service availability and rates for consumers.”); *BDS Remand Order* ¶ 35 (“To the limited extent there remain locations where there is not an immediate competitive threat, the Commission has previously explained that we anticipate reasonably competitive outcomes in the short- to medium-term (i.e., over several years) will discipline prices.”).

\(^{42}\) See *BDS Order* ¶ 14.
economic entry”; while the latter “concern[s] itself solely with the ability to constrain prices.”

Congress wanted the unbundling obligations “to enable entry by multiple competitors through use of the incumbent LEC’s network.” A non-impairment standard that could be satisfied merely by the presence of a single competitor would frustrate Section 251’s purpose to “create[e] robust competition in telecommunications.”

The BDS Order also expressly weighted other factors in favor of its conclusion, factors that are neither implicated by the existing unbundling rules nor relevant to analyzing impairment on the merits. For example, the Commission cited administrability benefits of making competition findings at the county level. The Commission likewise considered the potential public interest benefits of reducing the administrative burden on ILECs for complying with

43 TRRO ¶ 96 n.272.

44 See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area, Memorandum Opinion and Order, 25 FCC Rcd. 8622, ¶ 32 (2010) (“Qwest Phoenix Forbearance Order”) (”[T]he major purpose of the 1996 Act was to establish ‘a pro-competitive, deregulatory national policy framework,’ and one of its key goals was to open ‘the local exchange and exchange access markets to competitive entry.’ Indeed, in considering the 1996 Act, Congress recognized that cable operators were likely to emerge as facilities-based competitors for local telephone services. Were that level of competition sufficient to fulfill Congress’ goals for telephone services, the 1996 Act only would have needed to require interconnection.”).

45 See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd. 3639, ¶ 55 (1999) (“UNE Remand Order”) (“We believe that Congress rejected implicitly the argument that the presence of a single competitor, alone, should be dispositive of whether a competitive LEC would be ‘impaired’ within the meaning of section 251(d)(2) . . . A standard that would be satisfied by the existence of a single competitive LEC using a non-incumbent LEC element to serve a specific market, without reference to whether competitive LECs are ‘impaired’ under section 251(d)(2), would be inconsistent with the Act’s goal of creating robust competition in telecommunications.”).

46 BDS Order ¶ 124 (“We find this policy to be sound even if our market analysis does not result in the perfect regulation of every building in the country—for any administrable rule will necessarily be overinclusive in some cases and underinclusive in others.”).
tariffing requirements under its Section 10 analysis. Administrability considerations may have been appropriate in those other contexts, but maintaining the existing impairment tests would not impose any additional administrative burden on either the Commission or the ILECs.

2. Recent Competition Analyses by the Commission and the Department of Justice Provide a More Appropriate Framework

The Commission’s approach in the BDS Order does not provide an appropriate analytical framework for the Commission’s analysis of impairment or competition in the UNE context. A more appropriate parallel to UNEs would be the Commission and Department of Justice’s analysis of the remedies needed to prevent anticompetitive effects from the proposed T-Mobile/Sprint merger. Just as they do in the mobile wireless market, competitors face high barriers to full-facilities-based entry in both the residential and business broadband markets. These barriers include the high costs of building new network facilities, the lack of streamlined permitting, and securing building entry into multi-tenant environments (“MTEs”). In its competitive impact analysis of the T-Mobile/Sprint merger, the DOJ’s Antitrust Division recognized that in such a highly concentrated market, reducing competitors below four, without further remedial action, significantly increases the risk of anticompetitive behavior and could “harm[] consumers through a combination of higher prices, reduced innovation, reduced quality, and fewer choices.” The DOJ also found that one important factor for protecting consumers in the market was the competition between Sprint and T-Mobile in selling wholesale wireless

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47 BDS Remand Order ¶ 46 (“Forbearing from section 203 and our tariffing rules will reduce unnecessary administrative costs, which can be significant, and allow carriers to redirect their resources to deploying service capabilities and providing service.”).

48 See infra Section III.A.

service to Mobile Virtual Network Operators ("MVNOs"), which allowed MVNOs to introduce innovative, lower-cost alternatives.\textsuperscript{50}

To counter the anticompetitive effects from a three-provider market, the DOJ is requiring T-Mobile and Sprint to, among other remedial actions, enter into a seven-year “Full MVNO” agreement that allows DISH to use the combined wireless networks of a merged T-Mobile and Sprint to provide service to customers while preserving DISH’s option to construct and use its own facilities.\textsuperscript{51} As a Full MVNO, DISH “owns some facilities that it can use to carry a portion of its traffic, while relying on wholesale agreements to carry the remainder.”\textsuperscript{52} The Full MVNO agreement would “grant [DISH] control over a broader range of technological component, which allow the MVNO to manage the customer relationship more directly.”\textsuperscript{53}

CLECs using UNE competitive access have the same competitive capabilities and role in local fixed broadband markets as a Full MVNO in the mobile wireless market. With UNE access, competitors are able to combine their own assets with ILEC UNEs to provide differentiated, innovative services to customers.\textsuperscript{54} Their presence not only helps discipline prices, but also places competitive pressure on incumbent providers to upgrade their networks and improve service quality.\textsuperscript{55} For example, CLECs such as Sonic, Access One, Allstream, and

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{50} See id.
\item \textsuperscript{52} See Competitive Impact Statement, supra note 49, at 5.
\item \textsuperscript{54} See infra Sections III.B, IV.
\item \textsuperscript{55} Id.
\end{itemize}
\end{footnotesize}
Socket combine UNE DS0 Loops with their own electronics, which allows them to deliver broadband at speeds up to 100 Mbps that rival or often exceed ILEC offerings—even though they are utilizing the ILEC’s loops—and, additionally, because they have deployed their own electronics, allows them to customize and control the services provided over the loop to match customers’ specific service quality and security needs. Many CLECs also use UNEs as a stepping stone for deploying their own fiber facilities, including in areas where no other provider was doing so. Sonic, for example, has migrated from 100% UNEs and resold services underlying its offerings at the start of 2016, to 41% service over its own fiber as of February 2020. This is similar to what the Department of Justice’s Consent Judgment contemplates will be the result of the DISH Full MVNO, and is a significant reason why the Department could find that its remedies ameliorated the anticompetitive effects that it found. By providing this bridge to privately-financed additional full-facilities-based networks, UNE access contributes to the creation or strengthening of “maverick” firms that constrain anticompetitive effects “through [their] disruptive behavior or refusal to follow industry consensus on prices or other strategic actions, to the benefit of consumers.”

Moreover, this bridge to broadband is a critical competitive stimulus to the deployment of fiber networks capable of delivering gigabit services. According to even the overstating Form 477 data, as of December 31, 2018, of approximately 10.5 million census blocks in the United

56 INCOMPAS Opposition at 31-32.
57 Id. at 19-20, 47-50.
58 See Letter of Julie Veach, Counsel to Sonic Telecom, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed June 12, 2019) (showing over 30% of customers served by fiber as of December 31, 2018). Sonic provided to INCOMPAS its updated percentage of 41% as of February 5, 2020.
59 T-Mobile Sprint Merger Order ¶ 179.
States, about 1 million census blocks were offered services at or exceeding 1 Gbps downlink and 500 Mbps uplink. Of those, nearly all (953,000) had only one provider offering such services. Only 44,000 census blocks had two providers offering such services somewhere in the census block, and a paltry 1,600 had three or more providers offering such services in the census block. CLECs like Sonic that use UNEs as a bridge to their own fiber networks put pressure on ILECs to upgrade their own networks to fiber, and also to improve the quality of services provided. For example, Form 477 data shows that in census blocks where AT&T and Sonic both offer gigabit services, only Sonic reports committed information rates of 1 Gbps down and 1 Gbps up.

Just as the Commission recognizes the importance of the DISH Full MVNO agreement to safeguarding competition and consumer protections in a highly-concentrated, three-firm market and in providing a bridge to the emergence of an additional facilities-based provider, the Commission should preserve UNE competitive access to protect consumers against the anticompetitive effects of an anticipated broadband facilities-based duopoly. Nor should the Commission set a shorter transition period than the seven years provided for DISH to have the assets and transitional services required to become a facilities-based provider. A longer transition period would protect customers against service disruption and provide UNE-based

60 FCC Form 477 data, December 31, 2018. Analysis by INCOMPAS.
61 Id.
62 Id.
63 Id.
64 T-Mobile Sprint Merger Order ¶ 292.
65 Compare T-Mobile/Sprint Order ¶ 194 (seven years) to NPRM ¶ 97 (proposing a three-year transition period for existing customers).
CLECs, particularly smaller CLECs in underserved areas, more time to complete their use of UNEs to transition towards expanding their own fiber facilities.66

Under the appropriate impairment analysis, the Commission would place much more weight on potential barriers to entry for a reasonably efficient competitor, including reasonably efficient competitors that do not already have existing nearby assets. Specifically, the Commission should assess impairment based on whether lack of access to the UNE would create a barrier to entry for a reasonably efficient competitor service at speeds up to 1 Gbps, to continue the Commission’s push for fiber deployment deeper into the networks and future proof networks. By examining competition at 1 Gbps, the Commission would be ensuring that, although UNE loops cannot be used to provide 1 Gbps services, UNE-based providers can use UNE loops as part of their migration path to 1 Gbps-capable fiber networks, and have the transport capacity, through dark-fiber UNEs, to backhaul traffic from those new fiber networks.

In the T-Mobile and Sprint merger proceeding, the Commission recognized the importance of holding providers to a higher speed standard, in order to safeguard the public interest and offset competitive harms. There, the Commission conditionally approved the merger after T-Mobile and Sprint committed to providing “5G download speeds of at least 50 Mbps to almost everyone in the United States (99% of the population), and 5G download speeds of at least 100 Mbps to 90% of the U.S. population” within six years.67 The Commission’s recent

66 See Letter from John Nakahata and Mengyu Huang, Counsel to INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 17-144, 16-143, 05-25, 18-141, at 2 (filed July 3, 2019).

67 T-Mobile Sprint Merger Order ¶¶ 26-31, 387-88. It would be inappropriate for the Commission to rely upon this condition for purposes of granting its proposals in the NPRM. A commitment that must not be met for six years is well beyond the three year timeframe antitrust authorities rely upon for competitive analysis.
The draft Rural Digital Opportunity Fund Order similarly recognized the importance of promoting “a framework that prioritizes faster broadband speeds of up to a gigabit per second.” The draft Order establishes the “Baseline” tier of eligible service at 50/5 Mbps, with incentives for USF recipients to commit to building low latency networks with the capability of services in excess of 1 Gbps. To achieve the higher speeds and lower latency targeted by the Commission’s policy, competitive providers will need to deploy fiber deeper in their networks to reach their end users. They also will need to be able to aggregate and transport that data through fiber-based transport networks. And they cannot simply rely on UNE loops over the longer term, because the obligation to provide unbundled loops itself is extinguished when the ILEC deploys fiber.

As the Commission is aware, a number of INCOMPAS’ members are deploying fiber networks. However, as discussed below, significant barriers to entry remain for competitive providers seeking to deploy their own loops and transport fiber, and the availability of UNE loops and UNE dark fiber are critical to their fiber deployment agenda.

III. THE RECORD DOES NOT SUPPORT FINDING CARRIERS ARE NOT IMPAIRED WITHOUT ACCESS TO THE REMAINING UNES.

The NPRM’s unbundling proposals cannot satisfy the statutory requirement for a non-impairment finding when significant barriers to entry remain for competitive providers without access to UNE loops and dark fiber transport. Rather than confine its analysis to irrelevant, inconclusive factors such as the BDS Order’s half-mile test and cable presence, the Commission should meaningfully examine the extent that competitive providers remain impaired by barriers

68 Draft RDOF Order ¶ 4.
69 Id. ¶¶ 31-32.
70 Id. ¶ 38.
71 See, e.g., INCOMPAS Opposition at 4, 19-20, 47-48.
such as the anticompetitive agreements barring building entry to MTEs, the patchwork of local permitting processes and timelines for fiber deployment, and the lack of commercial substitutes for many UNEs.

Additionally, the record shows that access to UNEs *promotes, not inhibits*, fiber deployment. While INCOMPAS and NWTA agree that the Commission should consider promoting broadband deployment as a relevant factor, broadband deployment cuts *in favor, not against*, maintaining unbundling requirements. The record contains multiple examples of CLECs that rely on UNEs to build a customer base and revenue source in an ILEC market before becoming the first major fiber builder in those areas. As the stepping stones to fiber deployment, UNEs further the Commission’s goals of transitioning the country toward higher-capacity networks to provide the backbone for 5G deployment and future technologies. In contrast, eliminating UNE obligations would disincentivize fiber deployment by severely limiting opportunities for competitors to build a customer base, as well as potentially driving competitors out of the market and removing incentives under the current copper retirement rules for providers to speed up fiber deployment.

A. **There Are Still Significant Barriers to Entry for Competitive Providers that Lack Access to Unbundled Loops and Dark Fiber Transport**

As discussed in Section II, the Commission cannot conclude that there is non-impairment when its finding rests on flawed data and unreasonable assumptions. This section highlights the shortcomings with the *NPRM*’s non-impairment proposals and lays out the significant barriers to entry that competitive providers face if deprived of access to the following UNEs.
DS1 and DS3 Loops. On its own, the presence of competitive fiber does not offer conclusive evidence regarding the barriers to entry into the markets for DS1 and DS3 loops. The Commission cannot base a non-impairment finding on the BDS Order’s half-mile test when this test simply reflects areas where CLECs said they “might,” under the right (hypothetical) circumstances with low enough entry barriers, deploy the last half-mile of fiber. Moreover, deregulating at the county level does not adequately account for differences in entry barriers between different locations within the county.

There is no reason to eliminate the existing, more granular wire-center-based approach. The current unbundling rules limit the availability of UNE DS1 and DS3 Loops based on “both a minimum number of business lines served by a wire center and the presence of a minimum number of fiber-based collocators” (at least 60,000 business lines and four facilities-based collocators for UNE DS1 Loops and at least 38,000 business lines and four-based collocators for UNE DS3 Loops). And while collocations as a part of this test may need to be revisited to find a more suitable proxy, the idea of developing proxies to “capture[] areas characterized by high revenue opportunities and the likely presence of multiple competitive fiber rings” such that entry barriers could be anticipated to be lower was and remains sound.

In contrast, the analysis in the BDS Order barely acknowledged the relevance of revenue opportunity in assessing barriers to entry, concluding “that the high sunk cost nature of the BDS

72 Id. at 59-60 (explaining the shortcomings of the BDS half-mile test in determining current barriers to competitive entry).
73 Id. at 59 (explaining that the BDS Order test offers no evidence that barriers to build out for competitive providers would be low within a half mile).
74 TRRO ¶¶ 167-68, 171-72, 178; 47 C.F.R § 51.319(a).
75 Id. ¶¶ 168-69.
market gives providers the incentive to extend their network facilities to new locations with demand even when those locations contribute revenue only marginally above the incremental cost of the network extension.”76 But, as explained above, Section 251(c)(3)’s focus is on “duplciability and economic entry.”77 Moreover, it does not assume that a reasonably efficient competitor already has significant sunk costs in the form of nearby assets.78 Applying the BDS analysis would ignore the exact factors relevant to an impairment assessment of DS1 and DS3 Loops.

Separately, there is no basis for the Commission to conclude that the market DS1 and DS3 capacity services are “sufficiently competitive without the use of unbundling.”79 In the TRRO, the Commission made such a finding for long distance and CMRS because those services were robustly competitive at the retail level, with at least four or more facilities-providers in the market at the time.80 This is also consistent with the T-Mobile/Sprint merger competitive impact analysis, where the DOJ found that reducing competitors below four, without further remedial action, significantly increases the risk of anticompetitive behavior and threatens the lower prices and better service that customers have enjoyed from a competitive four-provider market.81 There is no evidence of such widespread robust competition in the DS1 and DS3 market. The analysis

76 BDS Order ¶ 121.
77 TRRO ¶ 96 n.272.
78 See id. ¶ 26 (“[W]e do not presume that a hypothetical entrant possesses any particular assets, legal entitlements, or opportunities . . . .”); id. ¶ 26 n.77 (“[T]he fact that one carrier possesses rights-of-way that mitigate the costs of constructing transmission facilities would not render ‘inefficient’ another carrier that does not enjoy such rights-of-way.”).
79 See NPRM ¶ 36.
80 See TRRO ¶¶ 34, 36 n.107 (citing prior FCC findings that the long distance market has “a number of ubiquitous facilities-based competitors”).
in the *BDS Order* looks for the existence of a single competitive provider or “potential” competitive provider, far short of the level of competition required by the *TRRO*’s findings.

At minimum, the Commission should not limit its “rural” exemption for UNE DS1 and DS3 Loops to rural *residential* use.\(^2\) The Commission is correct that UNE DS1 Loops are an important element for CLECs to reach residential customers in rural areas without broadband alternatives and where the customers are too far from a central office to be served using DS0 loops.\(^3\) But the *NPRM*’s proposed distinction is far too narrow in the rural context, where business locations (e.g., farm office) may regularly overlap with residential locations (e.g., farmhouse). In any event, there is no reason to distinguish a residential farmhouse from a nearby farm office, feedlot, or grain elevator.

**xDSL-Capable DS0 Loops.** Likewise, the *NPRM*’s approach to assessing impairment for DS0 Loops is problematic. As discussed above, the Commission should not rely on flawed Form 477 for its decisions on the state of competition for UNE DS0 Loops. Even if Form 477 data were reliable, however, they are not a useful proxy for whether a competitive provider is currently impaired, because the vast majority of connections are from cable providers that originally built out their networks as a historical monopoly and have long ago been able to secure pole attachment rights and agreements, state or local rights-of-way franchises, and building access for MTEs.

\(^2\) See *NPRM* ¶¶ 32, 34. As noted above, the Commission’s definition of “rural” is also extremely restrictive, excluding communities as small as 2,500 persons.

\(^3\) INCOMPAS Opposition at 4, 52-55; Opposition of Sonic Telecom, LLC to Petition for Forbearance of USTelecom at 2-4, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Sonic Opposition”).
Moreover, the Commission’s impairment analysis relies on mistaken assumptions regarding the lower barriers to fiber deployment with its pole access reforms.\textsuperscript{84} While INCOMPAS and NWTA are supportive of those reforms, they do not address all the barriers that competitive fiber providers face. Indeed, as INCOMPAS has detailed in the MTE proceeding, approximately a third of Americans live in MTEs, and competitors face significant barriers reaching those customers due to anticompetitive practices by MTE owners and managers.\textsuperscript{85} MTE owners circumvent the Commission’s prohibition on exclusive service agreements by entering into commercial agreements with incumbent providers that grant graduated revenue sharing and exclusive wiring, marketing, and rooftop access that hinders competitors’ deployment.\textsuperscript{86} These arrangements are specifically designed to exclude or inhibit new entrants, including competitive fiber providers, from deploying to MTE customers.\textsuperscript{87}

\textsuperscript{84} See NPRM ¶ 40.

\textsuperscript{85} Comments of INCOMPAS at 4-8, GN Docket No. 17-142 & MB Docket No. 17-91 (filed Aug. 30, 2019) (“INCOMPAS MTE Comments”); Reply Comments of INCOMPAS at 4, GN Docket No. 17-142 & MB Docket No. 17-91 (filed Sept. 30, 2019) (“INCOMPAS MTE Reply Comments”) (“The Commission need only examine the diversity of providers that have weighed in to express concern to recognize that use of some commercial arrangements to deny competitors rightful access to MTEs is pervasive throughout the industry. Unless you are the rare major provider with economies of scale, access to MTEs is going to continue to be a competitive impediment.”); see also INCOMPAS Opposition at 29 (“Without access to higher density MTEs, competitive providers are even less likely to clear the revenue hurdles . . . that are necessary to make fiber deployment economically viable.”).

\textsuperscript{86} INCOMPAS MTE Comments at 7 (“New entrants and smaller providers cannot overcome anticompetitive and discriminatory practices between incumbent providers and building owners and managers—like graduated revenue sharing and exclusive wiring and marketing agreements—that aim to ensure that a single provider monopolizes an MTE in exchange for compensation to the MTE owner.”).

\textsuperscript{87} See id. at 10 (explaining that graduated revenue sharing agreements “are specifically designed to exclude new entrants”); id. at 16 (explaining that exclusive marketing arrangements “significantly inhibit[] competition in MTEs, particularly when used in conjunction with revenue sharing agreements or wiring exclusivity [where the practices] amount to a firewall that results in de facto exclusive access”); id. at 19 (“[Some types of]
Competitive providers also face barriers when it comes to the lack of streamlined permitting processes and timelines for fiber.\(^{88}\) As a result, INCOMPAS and NWTA members have faced significant delays and/or unreasonable permitting fees on fiber deployment. Similarly, Zayo recently filed a letter with the FCC detailing the barriers to fiber deployment in numerous cities.\(^{89}\) As summarized by Zayo, “many local and state governments condition [its] access to public rights of way for the purpose of deploying wireline facilities on the payment of above-cost and discriminatory access fees as well as on compliance with ambiguous in-kind contribution requirements.”\(^{90}\) CenturyLink also recently noted adverse impacts to its rural broadband deployment because the FCC’s pole attachment requirements are not universally applied.\(^{91}\) Given the prevalence of these experiences across a range of providers, it is incorrect to assume that deployment barriers for competitive fiber are low.

As further evidence of impairment without access to ILEC facilities, the record shows that CLECs have no commercial substitutes for UNE DS0 Loops.\(^{92}\) ILEC promises to provide rooftop exclusivity could disadvantage competitive providers preparing their networks for next generation services, like 5G.”

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\(^{88}\) Reply Comments of INCOMPAS at 7-10, WTB Docket No. 17-79 (filed July 17, 2017) (“Carriers must navigate multiple and frequently overlapping jurisdictions to obtain the needed franchises, permits, and zoning approvals.”).

\(^{89}\) Letter from Thomas Jones, Counsel for Zayo Group, LLC, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79 & WC Docket No. 17-84 (filed Oct. 31, 2019).

\(^{90}\) *Id.* at 1.

\(^{91}\) Letter from Craig J. Brown, Assistant General Counsel, CenturyLink, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-83 & WC Docket Nos. 17-84, 19-126, 10-90, at 3-4 (filed Oct. 30, 2019) (describing the delays to deployment caused by the outdated exemption of municipal and cooperative utilities from Section 224).

\(^{92}\) INCOMPAS Opposition at 30-32 (“Competitive providers such as Sonic, Allstream, and Socket use DS0 loops with their own equipment to offer customers high-speed broadband services. However, there simply is no special access or Ethernet equivalent to unbundled copper pairs.”).
such an alternative are vaporware. There is no basis for the Commission to eliminate UNE DS0 Loops—and therefore risk leaving CLECs with no economically viable wholesale alternatives and consumers without services provided using UNE DS0 Loops—from ILECs’ “suggested” intent to offer commercial substitutes. 93 The ILECs have no obligation to provide commercially-negotiated alternatives to replace UNE DS0 Loops, and have little incentive to do so, especially when a CLEC is using the UNE Loop as a bridge to building its own fiber network. 94 Indeed, INCOMPAS and NWTA are not aware of the ILECs offering any commercial replacement product for DS0s to any of our members.

Moreover, attaching minimum volume and term requirements to UNEs, which currently are month-to-month, will raise the costs of migrating from UNEs to a new fiber network, thus effectively increasing the costs of deploying alternative fiber. The availability of other commercial products in other contexts, such as UNE-P, does not compel incumbents to offer alternative, commercial products in this context. Accordingly, the Commission should not rely on that behavior. The record supports a finding that competitive providers would be impaired without access to DS0 loops.

Subloops (Inside Wiring). Nor is there any basis for the Commission to eliminate UNE subloops, for either drops or inside wire. 95 As discussed above, CLECs serving MTEs face significant barriers to entry because of the many anticompetitive practices imposed by MTE

93 See NPRM ¶ 46.
94 See Reply Comments of U.S. TelePacific Corp., et al. at 12, WC Docket No. 18-141 (filed Sept. 5, 2018) (noting that neither Frontier nor CenturyLink offer platform service in their legacy territories, “underscor[ing] that incumbent LECs do not have to—and have declined to—make available commercial replacement services”).
95 See NPRM ¶¶ 67, 69.
owners and managers. For inside wiring, incumbent providers and MTE owners enter into sale-and-leaseback arrangements ensuring that “the inside wiring will be unavailable for use by competitors when the customer is ready to change providers.” Without adequate restrictions on exclusive wiring and other anticompetitive practices, access to UNE subloops remains essential for CLECs to enter MTE markets.

**Dark Fiber Transport.** The NPRM makes the additional unreasonable assumption that the presence of non-ILEC fiber within a half-mile of a wire center implies that that non-ILEC providers will have dark fiber to lease. There is no basis for assuming that all providers with fiber within one half-mile will have “dark fiber available to lease” such that its mere proximity is enough to discipline prices. Indeed, in INCOMPAS members’ experience, it is rarely the case that fiber network builders are willing to lease dark fiber on their networks.

The BDS data collection did not differentiate between the uses of the fiber, and there is no reason to assume that fiber installed as part of a long-haul network would not be suitable or available for use as part of a metro ring. Moreover, the availability of fiber within at least one half-mile does not indicate how those fiber networks were funded. Those paid-for by

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96 INCOMPAS MTE Comments at 9-20; INCOMPAS Reply MTE Comments at 5-11.
97 INCOMPAS MTE Comments at 14-15 (quoting Comments of the Fiber Broadband Association at 15-16, MB Docket No. 17-91 (filed May 18, 2017)).
98 See NPRM ¶ 73.
99 See Sonic Opposition at 10 (“[T]here are no available wholesale alternatives that match the quality, flexibility, and price of the interoffice dark fiber UNE.”); Declaration of Fletcher Kittredge ¶ 13, attached as Attachment 10 to INCOMPAS Opposition (“Kittredge Decl.”) (“There is no substitute dark fiber provider in North Deering, Gardiner, Windham, Gorham, Old Orchard Beach, Kennebunkport, Lisbon Falls, Livermore Falls, and Norway.”); Declaration of Daniel Friesen ¶ 10, attached as Attachment 11 to INCOMPAS (“Friesen Decl.”) (“Without dark fiber interoffice transport UNEs, IdeaTek would have to decide on a community-by-community basis whether to raise prices or exit certain markets that have no feasible alternative for dark fiber transport.”).
government funding (versus private sector funding) indicate strong market barriers in those areas that deter any fiber deployment, absent subsidies, and fail to support the FCC’s presumption that competitors are no longer impaired because other providers have built fiber nearby. There is also no reason to assume that a nearby fiber owner would be willing to overbuild existing ILEC interoffice route, given that the existence of dark fiber suggests there is already capacity going underutilized by the ILEC. 100 By refusing to make available dark fiber, incumbents can deny competitive providers access to that fiber, while also deterring potential entry, particularly in less dense markets that do not have the level of demand and revenue potential to justify a high risk investment by the nearby fiber owner.

Lit transport service is not an adequate substitute that would enable a competitor to compete without access to unbundled dark fiber. Competitive providers have integrated dark fiber UNEs into their networks and cannot replace them with lit circuits, even if they are available, without significant operational complexity, cost, and delay. For example, IdeaTek explained in the USTelecom forbearance proceeding that dark fiber transport UNEs “are integrated into [its] network backbone and serve both as a primary and sometimes critical redundant path to our network.” 101 Lit transport services are in many cases prohibitively costly, rather than available “on a commercial basis at competitive rates” as assumed in the NPRM. 102 Sonic estimated in the USTelecom forbearance proceeding that purchasing commercial

100 See Friesen Decl. ¶ 4 (“Many of these rural unserved central offices, while containing ILEC fiber capacity, are not being used by the ILEC to provide broadband services to the last mile. In contrast, we utilize the ILEC’s unused dark fiber transport UNE in such support fiber-to-the-home services.”).

101 Friesen Decl. ¶ 7.

102 NPRM ¶ 73.
wholesale Ethernet transport would cost over 700 times more than its current unbundled dark fiber to provide the capacity that Sonic is able to achieve using its own electronics.\textsuperscript{103} Similarly, Allstream noted that replacing its dark fiber UNEs with lit transport would result in a price increase of between nearly 400\% and nearly 1800\%.\textsuperscript{104} The cost of replacing the interoffice dark fiber transport UNEs with a fiber network built from scratch would also be uneconomic even for those competitors that are investing in their own fiber loops. Sonic estimated that building a replacement for its dark fiber UNEs would “cost over $580 million,” which represents an over 100-fold increase on its current monthly transport costs even when amortized over 20 years.\textsuperscript{105}

Furthermore, the analogy to the Full MVNO applies here as well. When an entrant purchases a dark fiber UNE, it must invest in the collocation and electronics necessary to make that dark fiber into a usable transport facility. This investment allows the CLEC utilizing dark fiber to configure the fiber—and to change its configuration—to meet the needs of its customers.\textsuperscript{106} It can integrate dark fiber into offers that allow the customer to reconfigure and manage its services, which the CLEC would not be able to do to nearly the same extent if it was limited to purchasing lit fiber services that utilize the ILEC’s electronics.\textsuperscript{107} In addition to allowing the CLEC to offer these transparent network services, dark fiber also allows the CLEC

\textsuperscript{103} Declaration of Dane Jasper ¶ 16, attached as Attachment A to Sonic Opposition (“Jasper Decl.”).
\textsuperscript{104} See Declaration of Douglas Denney ¶ 17, attached as Attachment 4 to INCOMPAS Opposition.
\textsuperscript{105} See Jasper Decl. ¶ 17.
\textsuperscript{106} Comments of Windstream Services, LLC at 8-12, WC Docket No. 19-308 (filed Feb. 5, 2020) (“Windstream UNE NPRM Comments”); Sonic Opposition at 4-5 (“With Sonic’s own electronics powering this amount of capacity, Sonic can very efficiently provision transport that supports a whole community.”).
\textsuperscript{107} See Windstream UNE NPRM Comments at 14-15.
to upgrade transport capacity to meet customer demand, without the delays that would result if it had to rely on the ILEC to upgrade the lit services delivered to the CLEC.\textsuperscript{108}

\textit{Operations Support Systems.} As previously stated in the record, CLECs rely on UNE OSS for many functions other than to provision other UNEs, particularly ordering number porting and managing listings in ILEC directories.\textsuperscript{109} Without access to UNE OSS, competitive providers would face significant barriers to port new customer telephone numbers. A premature elimination of OSS unbundling obligations would adversely impact public safety, as CLECs like TPx and Socket rely on UNE OSS to access 911 databases and connect through ILEC selective routers to PSAPs for 911 services.\textsuperscript{110} At a minimum, OSS for number porting, directory listing, and 911 databases should remain available.

\textbf{B. Unbundling Has Promoted Fiber Deployment and Will Continue to Be Essential in Many Markets in which They Would No Longer Be Available under the NPRM’s Proposal}

The \textit{NPRM} correctly notes that promoting broadband deployment is a relevant factor to consider in addition to impairment.\textsuperscript{111} However, its assertion that these remaining unbundling

\textsuperscript{108} See Declaration of Jeff Buckingham ¶ 10, attached as Attachment 6 to INCOMPAS Opposition (“Buckingham Decl.”) (stating that switching to ILEC lit transport “would increase costs by a factor of 40” and would also “eliminate the flexibility of easily increasing the speed” by using dark fiber); Windstream UNE NPRM Comments at 14 (explaining that “the timeframe for increasing capacity on a lit transport connection can easily exceed 60 days, and longer if an upgrade the ILEC’s equipment is required”).

\textsuperscript{109} Letter from Christine N. Sanquist, Counsel to Charter Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-308 (filed Nov. 11, 2019).

\textsuperscript{110} See Socket Comments in Support of Motion for Summary Denial at 2, 4, WC Docket No. 18-141 (filed Sept. 5, 2018); Letter from William P. Hunt III, Senior Vice President, General Counsel & Secretary, TPx Communications, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed Nov. 12, 2018); Jasper Decl. ¶ 20.

\textsuperscript{111} \textit{NPRM} ¶ 8.
obligations discourage the deployment of next-generation networks\textsuperscript{112} cites only its finding with respect to analog voice-only loops, not digital loops, and overlooks the reality that small, competitive providers use UNEs as a bridge to fiber deployment and are building more fiber than incumbents in many markets.\textsuperscript{113} The record from the USTelecom forbearance proceeding establishes the ways in which UNEs have been vital in promoting fiber broadband deployment.

No one is building fiber based on speculation. Rather, every provider must have some customer base to justify the business case to build fiber. UNEs have allowed competitive providers to attain a customer base that then enables competitive providers to deploy last-mile fiber to their customers. As shown in the USTelecom forbearance proceeding, this includes last-mile fiber in areas where it previously was not being built. For example, in the San Francisco Bay Area, Sonic is building fiber that “provides unique reach” to residential areas.\textsuperscript{114} In most areas where it has engaged in fiber buildout, Sonic was the first provider to deploy fiber on a broad scale and has spurred its competitors toward their own fiber upgrades.\textsuperscript{115} Over the past three years, Sonic has migrated almost half its customers to its own fiber networks, and it offers gigabit services over those networks with service level assurances that exceed those offered by AT&T.\textsuperscript{116} Additionally, Virginia Global has built last-mile fiber to reach residential and small

\begin{footnotesize}
\begin{itemize}
\item[112] Id. ¶ 23.
\item[113] See Declaration of William P. Zarakas ¶¶ 5-9, tbls.1-2, attached as Attachment 2 to INCOMPAS Opposition (“Brattle UNE Decl.”).
\item[114] Letter from Karen Reidy, Vice President of Regulatory Affairs, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 2 (filed November 13, 2018) (“Sonic November 2018 Ex Parte”) (attaching map of Sonic fiber network in San Francisco); see Sonic Opposition at 8 (“More broadly, as of December 2016, Sonic was the only fiber-based provider in 342 of the census blocks where it offers service over fiber.”).
\item[115] Jasper Decl. ¶¶ 13, 19.
\item[116] See discussion, supra p. 17.
\end{itemize}
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and medium-sized business customers in rural Virginia.\textsuperscript{117} IdeaTek in Kansas, Socket in Missouri, Race in California, and Gorge Net in Oregon also are building in rural markets, and their reliance on UNE availability has been critical to financing fiber where no other provider is doing so.\textsuperscript{118}

Moreover, “natural forbearance” through the copper retirement rules encourages all competitors to speed up their fiber deployment.\textsuperscript{119} CLEC\textsuperscript{s} already have incentive to build fiber as expeditiously as possible, knowing that they would lose access to UNE loops once the ILEC retires copper.\textsuperscript{120} And ILECs can sunset their loop unbundling obligations by building their own fiber and retiring their copper networks, so eliminating UNE unbundling requirements simply serves to dampen, rather than increase, ILEC incentives to deploy fiber. Without the competitive pressure or UNE obligations to encourage copper retirement, ILECs have further incentive to delay network upgrades in markets that do not present the highest revenue potential, i.e., markets outside of major central business districts and routes that serve large data centers or towers. For example, even in the San Francisco Bay Area, Sonic has been the only provider to deploy fiber to the western residential portions of the city, extending beyond the financial district.\textsuperscript{121} There is

\begin{itemize}
  \item \textsuperscript{117} See Declaration of Dusan Janjic ¶¶ 2-5, attached as Attachment 16 to INCOMPAS Opposition.
  \item \textsuperscript{118} INCOMPAS Opposition at 47-50.
  \item \textsuperscript{119} \textit{Id.} at 9, 71; Letter from Julie A. Veach, Counsel to Sonic Telecom, LLC to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 2 (filed Oct. 15, 2018) (“Sonic October 2018 Ex Parte”).
  \item \textsuperscript{120} See id.; see also Kettredge Decl. ¶ 13 (“Eight years ago GWI was entirely dependent on dark fiber interoffice transport UNEs. In the intervening interval, GWI has replaced most dark fiber interoffice transport UNEs with dark fiber it has constructed itself or in partnership with others.”).
  \item \textsuperscript{121} See Sonic November 2018 Ex Parte at 2 (“Zayo’s publically [sic] available network map shows, in blue lines, its reach in business buildings in and around the financial district. But
no basis to conclude that, absent these competitive pressures, ILECs would speed up their fiber deployment. Indeed, after completing the fiber build-out commitments under its DirecTV merger terms, AT&T announced a significant slow-down in fiber build-out, noting that, moving forward, it would instead invest in fiber “based on the incremental, economic case.”

There is also no evidence that the availability of UNE-based services would slow consumers’ transition away from legacy services to advanced networks. UNEs should not undercut providers’ incentives to deploy advanced networks because, even if UNEs were the low-cost approach, the market would be expected to price to the second lowest cost provider. In addition to the incentives from “natural forbearance,” CLECs face additional incentives to deploy fiber because of the limits of xDSL technology and, more specifically, the limits of DS0 Loops. As Sonic noted in the forbearance proceeding, “the xDSL-capable DS0 loop is not available if the wire length is more than 17,500 feet”; it lacks the reach or capacity to provide all of Sonic’s services. Unlike the Gigabit services that fiber delivers, Sonic’s xDSL technologies achieve considerably slower speeds of 50/15 Mbps using VDSL2 over a single loop or up to Sonic Telecom’s network (green and red lines) provides unique reach for the residential portions of the city to the west.”


123 See NPRM ¶ 41.

124 INCOMPAS Opposition at 71.

125 See Sonic Opposition at 3, 5; Jasper Decl. ¶¶ 4, 5.
100/30 Mbps over a bonded pair of loops for residential customers (or lower speeds for ADSL2+ technology). With these limitations in mind, it is unsurprising that CLECs leverage UNEs “as [the] transitional means to reduce risk associated with investment in their own fiber buildout,” rather than as “long-term substitute[s] for their own fiber investment.”

Through UNEs, INCOMPAS members are investing in facilities-based networks that further the Commission’s goal of encouraging fiber deployment. Fiber has many benefits unparalleled by other existing technologies. It is faster, more robust, scalable, and future-proof. Over time, fiber becomes increasingly indispensable for “enabl[ing] the next generation of applications that depend on high-throughput, low-latency, high-reliability connections,” as its “speed chasm” with other technologies “is only going to grow more pronounced.” As the Commission acknowledges, fiber also is critical for 5G deployment, which requires high-speed, high-capacity terrestrial fixed networks.

Additionally, as the RDOF Order recognizes with its baseline 50/5 Mbps tier, moving beyond 25/3 Mbps service is critical for “meeting the ‘immediate broadband needs’ of

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126 Even for enterprise customers, fiber allows speeds up to 10 Gbps while xDSL technologies are limited to, at best, 100 Mbps symmetric or up to 400 Mbps/50 Mbps asymmetric services. See Sonic Opposition at 3, 5; Jasper Decl. ¶ 5.
127 David E. M. Sappington, Premature, Ubiquitous Forbearance Will Harm Consumers, at 14-15, attached as Attachment 1 to INCOMPAS Opposition (“Sappington Report”).
128 See INCOMPAS Reply Comments at 6-7.
130 Id.
consumers today” and the deployment of future-proof networks such as fiber.\textsuperscript{132} Indeed, INCOMPAS has urged the Commission to adopt 1 Gbps down as the metric for broadband service, to better promote fiber deployment deeper into the networks.\textsuperscript{133} Meeting these higher-capacity needs require carriers to upgrade their facilities, a process that CLECs have jumpstarted by using UNEs to migrate to fiber.\textsuperscript{134} Competitors in the forbearance proceeding repeatedly stated how the availability of UNEs supports their fiber builds.\textsuperscript{135}

The 477 data, as flawed as it is, shows a demonstrable lack of competition for services with advertised speeds at or above 100 Mbps download and 10 Mbps upload. Even using numbers inflated by counting as served any census block with one subscriber that could be served, as of the end of 2017:

- 31% of developed census blocks lack any provider
- Another 44% of developed census blocks have only one such provider.

\textsuperscript{132} Draft RDOF Order ¶¶ 31, 35.

\textsuperscript{133} Comments of INCOMPAS, WC Docket Nos. 19-126, 10-90, at 6-7 n.3 (filed Sept. 20, 2019) (“INCOMPAS RDOF Comments”) (agreeing with NCTA—The Internet and Television Association’s statement that the United States “must transition from an era defined by megabits to one which gigabit connectivity is unleashed” to maintain its global leadership in fixed broadband and fiber deployment).

\textsuperscript{134} See INCOMPAS RDOF Comments at 6 (“Where our members have deployed competitive fiber, they are able to offer 1 Gigabit symmetrical service at reasonable prices.”); INCOMPAS Opposition at 4, 19-20, 47-50.

\textsuperscript{135} See, e.g., Sonic October 2018 Ex Parte at 1 (“Sonic’s business model—and ability to deploy fiber—relies on the availability of UNEs.”); Reply Comments of INCOMPAS et al. at 6-7, WC Docket No. 18-141 (filed Sept. 5, 2018).
Only 5% of census block had three or more providers advertising service somewhere in the block.136

And, as discussed above, the picture is even bleaker for services of at least 1 Gbps down and 500 Mbps up; in the census blocks having any such service, nearly all only have a single provider offering it.137

Nor would the important role that UNEs have played in spurring and supporting fiber deployment be filled by fixed wireless providers. Though the Commission presumes that 5G would become a competitive alternative to fixed broadband, its proposal to eliminate UNE DS0 Loops in urban areas ignores the important role that these UNEs play in enabling competitive providers to deploy the fiber needed to support 5G and fixed wireless networks.138 Moreover, INCOMPAS members indicate that very few customers view mobile offerings as adequate substitutes for their fixed broadband needs. While some INCOMPAS members also offer fixed wireless, fixed wireless is not a ubiquitous solution. Starry, for example, has recognized that its fixed wireless technology does not work in areas where houses are miles apart.139 Even in urban areas, Starry must have access to buildings from building owners (i.e., overcome the common anticompetitive practices prevalent in MTEs), meaning there is no guarantee that all the

137 See discussion supra pp. 17-18.
138 See, e.g., Jasper Decl. ¶¶ 13, 19.
households in a provider’s fixed wireless footprint would be able to get service.\textsuperscript{140} Moreover, fiber is used for backhaul for fixed wireless. For example, INCOMPAS and NWTA member Mammoth Networks is relying on UNE dark fiber to both its last-mile fiber network and its fixed wireless network. For all the forgoing reasons, eliminating UNEs, a crucial lifeline for competitive fiber buildout, would counteract goals to ensure “deeper” fiber penetration to prevent fiber from becoming a “bottleneck” for 5G and fixed wireless deployment.\textsuperscript{141}

IV. THE COMMISSION HAS NOT MET THE STATUTORY STANDARD FOR GRANTING FORBEARANCE FROM SECTION 251(C)(3)

Section 10 of the Communications Act authorizes the Commission to forbear from applying a regulation or provision of the Act if and only if the Commission determines, based on the record, that:

(1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;

(2) enforcement of such regulation or provision is not necessary for the protection of consumers; \textit{and}

(3) forbearance from applying such provision or regulation is consistent with the public interest.\textsuperscript{142}

\textsuperscript{140} Id.


\textsuperscript{142} 47 U.S.C. § 160(a) (emphasis added).
As detailed below and in the USTelecom forbearance proceeding, UNEs remain essential for preserving and, indeed, fostering competitive choice, and thus pricing and service quality discipline. They enable competitive providers to innovate and spur fiber deployment, to the benefit of consumers and the public interest. A decision to forbear from Section 251(c)(3)’s unbundling obligations would fail to satisfy any of the three statutory factors.

A. Forbearance Would Damage Competition Necessary to Ensure Just and Reasonable Rates and to Prevent Unjust and Unreasonable Discrimination

UNEs are critical for protecting customers’ ability to access advanced communications services at just and reasonable prices. The remaining unbundling rules create a wholesale market where competitive providers can purchase network inputs at cost. This access enables competitive providers to offer new or differentiated services to customers, including higher-quality services than what ILECs provide. By lowering the barriers to competitive entry, UNEs play a critical role in disciplining pricing and incentivizing further investments in service quality and delivery by incumbent providers.

Forbearance would effectively shut down the wholesale market for UNEs that lack commercial substitutes, such as DS0 Loops and, except in rare cases, interoffice dark fiber transport. CLECs such as Sonic, Allstream, and Socket combine UNE DS0 Loops with their own electronics to deliver high-speed broadband to customers. The customers served by UNE DS0 Loops do not merely reside in rural areas. Access One, for example, uses DS0 Loops to provide small businesses and non-profits in underserved urban, suburban, and rural communities.

143 See Sappington Report at 11-12.
144 Id. at 10-13.
145 INCOMPAS Opposition at 66.
146 Id. at 31-32.
Ethernet over Copper, which provides “the most (often only) cost-effective way” for these entities to gain the high-bandwidth capacity and reliability to access modern services such as cloud-based applications and secure networks.\(^\text{147}\)

The effects of forbearance would be particularly devastating because, as repeatedly demonstrated in the forbearance proceeding, there are no comparable special access or Ethernet counterparts to UNE DS0 Loops. The existing non-UNE options prevent CLECs from being able to customize, upgrade, or control the electronics to provide differentiated and high-quality service to consumers.\(^\text{148}\) Eliminating UNE DS0 Loops, even in urban areas, would leave CLECs with no economically viable wholesale alternatives and, consequently, would leave customers with fewer options and higher prices.

UNE dark fiber transport provides CLECs with a cost-effective way to connect isolated service areas of last mile fiber into a network.\(^\text{149}\) Forbearance would likewise leave CLECs with almost no economically viable wholesale alternatives to serve routes to rural and remote areas.\(^\text{150}\) Nor is competitive dark transport commonly available between ILEC central offices where CLEC collocate their equipment.\(^\text{151}\) The available commercial options are limited generally to

\(^{147}\) See Declaration of John Hoehne ¶¶ 6-8, 10, attached as Attachment 3 to INCOMPAS Opposition (“Hoehne Decl.”).

\(^\text{148}\) INCOMPAS Opposition at 32.

\(^\text{149}\) Id. at 5.

\(^\text{150}\) Id. at 7-8.

\(^\text{151}\) Id. at 32.
lit transport services, and in the rare cases where commercial dark fiber is available, the prices may be hundreds of times more than the cost of unbundled dark fiber.\footnote{152}

Although there are commercial substitutes for UNE DS1 and DS3 Loops, these come in the form of special access and Ethernet service rates where ILECs have both the incentive and free rein to charge significantly higher prices intended to increase competitors’ barriers to entry.\footnote{153} Even where competitors can pay these higher rates and are not driven out the market, they would pass on these costs in the form of significantly higher rates for customers. As discussed above, limiting the forbearance to BDS Competitive Counties and Study Areas does not sufficiently contain the harm. The BDS data is outdated and an inappropriate assessment of competition in this market. As a result, if forbearance were granted, customers will have to pay higher rates or will lose access to the specific services that meet their needs.

\section*{B. Forbearance Would Undermine Consumer Protection and Be Inconsistent with the Public Interest}

In evaluating whether forbearance furthers the public interest, including the impact on competition, the Commission cannot simply ignore impairment under Section 251(d)(2). While

\footnote{152} See id. ("For example, Sonic estimates that purchasing commercial wholesale Ethernet transport would cost over 700 times more than its current unbundled dark fiber to provide the capacity that Sonic is able to achieve using its own electronics.")

\footnote{153} Id. \textit{at 65-67}; see Hoehne Decl. ¶ 11 ("In Illinois, where Access One would be most affected, UNE DS1 tails sell for a maximum of $54, without a service term. A monthly term Special Access DS1 service costs $250 to $320, depending upon the zone of the service address."); Declaration of Margi Shaw ¶¶ 17-18, attached as Exhibit A to Opposition of First Communications, LLC, WC Docket No. 18-141 (filed Aug. 6, 2018) ("If First Communications were no longer able to obtain DS1 UNE loops, DS1 special access circuits would be approximately $200 more expensive."); Declaration of Gregory J. Darnell ¶ 8, attached as Attachment 8 to INCOMPAS Opposition; Declaration of Jeff Rhoden ¶ 10, attached as Attachment 12 to INCOMPAS Opposition; Declaration of R. Matthew Kohly ¶ 51, attached as Attachment 15 to INCOMPAS Opposition ("Special Access DS1 Loops can range from 140% to 189% higher than Socket’s average cost of UNE DS1 loops depending on the term.").
a finding of impairment does not preclude a finding that forbearance furthers competition, if the Commission is going to forbear in the face of demonstrable impairment, then it has an obligation to articulate how the public interest is furthered, notwithstanding the loss of competition from telecommunications providers that are impaired without access to UNEs. Nothing in the record of the USTelecom forbearance proceeding provides a basis to conclude that competition and the public interest are served by withdrawing UNE-based competition.

The record evidence from the forbearance proceeding demonstrates that UNEs remain necessary for consumer protection and for upholding the public interest. Forbearance would harm consumers and the public interest by depriving CLECs of the UNEs that serve as the critical bridge to fiber deployment. As discussed in Section III.B, UNEs allow competitive providers to enter a market and, after developing a sustainable revenue and customer base, to begin fiber deployment. Through the stepping stone provided by UNEs, competitive providers’ fiber deployment have outpaced that of incumbents in many markets.\textsuperscript{154} Sonic in the San Francisco Bay Area, IdeaTek in Kansas, Socket in Missouri, Race in California, and Gorge Net in Oregon are all examples of providers that have relied on UNE access to build their own fiber networks in markets where they were the first provider to deploy fiber.\textsuperscript{155} Forbearance would slow fiber deployment by neutralizing the current incentives under “natural forbearance” for all competitors to upgrade and expand their own fiber networks; ILECs would no longer need to upgrade their copper networks to shed their unbundling obligations.\textsuperscript{156} In other words, forbearance reduces ILEC incentives to deploy the fiber necessary for advanced broadband

\textsuperscript{154} See Brattle UNE Decl. ¶¶ 5-9, tbls.1-2.

\textsuperscript{155} INCOMPAS Opposition at 47-50.

\textsuperscript{156} Id. at 70.
services, and it reduces competitors’ ability to deploy fiber to support those same services, as well as to provide mobile wireless providers competitive alternatives for fiber backhaul for 5G.

Competitive providers also rely on UNEs to serve niche customers such as multilocation customers and smaller enterprises that have needs unmet by mass market- and enterprise-focused incumbents. The record shows the diverse and innovative services that CLECs offer through UNEs, from upgrading central office equipment to achieving higher speeds than what ILECs provide over legacy facilities. Unbundled dark fiber transport provides a cost-effective way for providers to carry traffic from users served by remote central offices (where there are no competitive transport providers) to central offices in denser areas, where competitive providers can then use their own networks or commercial transport services. UNE DS0 Loops allow CLECs to use their own electronics and thus customize and control services to meet customers’ service and security needs. These UNE-enabled services are particularly important to customers with heightened security and service demands, such as healthcare, banking, and governmental entities. UNE DS0 Loops also allow CLECs to provide Ethernet services to the

157 Id. at 15-16, 70.
158 Id. at 37-52, 69.
159 See Friesen Decl. ¶ 4 (“We use dark fiber UNEs to connect from a more urban central office, where we can obtain critical wholesale broadband and transport services, to more rural unserved central offices.”); see also, e.g., Buckingham Decl. ¶ 10 (“There are no competitive dark fiber or lit services between central offices so the only services available are the much more expensive ILEC lit services that would increase costs by a factor of 40 and eliminate the flexibility of easily increasing the speed of the dark fiber loops.”); Kittredge Decl. ¶ 13 (explaining that GWI uses UNE dark fiber to serve 1100 customers in 9 communities where “[t]here is no substitute dark fiber provider”).
160 Buckingham Decl. ¶ 9.
161 Id.
many locations where ILEC end offices are not Ethernet-enabled. CLECs like Access One use DS0 UNEs to provide its customers, from small businesses to health care providers and governmental entities, with high-bandwidth Ethernet over Copper.

Access One likewise relies on UNE DS1s and DS3s to serve multi-location enterprises with significant security and compliance needs. Without UNE availability, these small business and government customers would need to pay substantially higher costs to meet their security needs and, even then, would potentially be unable to achieve the “truly private network” that they currently have through UNE-enabled services. Additionally, CLECs like Socket use UNE DS1 Loops and DS1 EELs to provide ISDN-PRI services to its customers, including state law enforcement agencies and emergency services, to allow them to pinpoint the specific locations of emergencies, a critical public safety function. Through facilitating competitive entry and providing the inputs necessary for CLECs to offer differentiated services, UNEs enable CLECs to exert competitive pressure on incumbents and cable providers to upgrade their networks and to match or beat CLECs’ service offerings.

Moreover, the USTelecom forbearance proceeding demonstrated that consumers are clamoring for more competition. Over 11,000 customers filed individually written comments to

162 See INCOMPAS Opposition at 4.
163 Hoehne Decl. ¶¶ 6, 10.
164 Id. ¶ 7.
165 Id. ¶ 6-7.
166 INCOMPAS Opposition at 15-16.
167 See Sappington Report at 16 (“As CLECs expand their fiber networks to serve customers in these regions, ILECs often will feel pressured to follow suit. This fact has been identified in empirical research.”); see also Buckingham Decl. ¶ 13 (“Our entry utilizing UNES has pushed other broadband providers to upgrade their services. The local cable company, Charter/Spectrum has recently upgraded speeds in San Luis Obispo County and AT&T has
the FCC advocating that competitors are serving their needs—often better than the incumbent—providing significant benefits such as faster speeds, better customer service and lower prices.\textsuperscript{168} Not surprisingly, these consumers advocate that they don’t want to lose the service of their competitive provider. They stress that the Commission should have policies that are enabling and promoting competition, not limiting it. The Commission should abandon the NPRM’s proposals because forbearance from the unbundling rules would hurt the public interest by reducing competition and the incentives for providers to invest in high-capacity fiber networks.

V. THE COMMISSION HAS NOT MET THE STATUTORY STANDARD FOR GRANTING FORBEARANCE FROM SECTION 251(C)(4)’S AVOIDED-COST RESALE REQUIREMENT IN NON-PRICE CAP CARRIER AREAS

Likewise, the Commission lacks basis to extend forbearance of Section 251(c)(4)’s avoided-cost resale requirements to non-price cap ILEC service areas.\textsuperscript{169} First, it is inappropriate for the Commission to consider extending its findings on avoided-cost resale to other geographic areas when INCOMPAS and the California Public Utilities Commission are independently begun building some limited fiber to high end homes in San Luis Obispo.”); Mammoth ¶ 2 (“Within two years of us offering service in Ranchester, Wyoming, CenturyLink and the cable company rolled out their own broadband offerings.”); Declaration of Raul Alcaraz ¶ 10, attached as Attachment 14 to INCOMPAS Opposition (“We have experienced that upon our entry into rural markets using existing middle mile systems and UNEs, existing providers have been forced to upgrade their networks to keep a significant market share.”); Jasper Decl. ¶ 13.

\textsuperscript{168} See INCOMPAS May 2019 Ex Parte at 1-2 (“Nearly ten thousand residential and business consumers from various industries, especially small businesses, have expressed concern with the impact forbearance would have on their operations and their ability to grow in their respective marketplaces, noting the faster speed, better quality of service, more affordability, and a willingness to accommodate the unique needs of growing businesses offered by competitors.”). On February 4, 2020, Public Knowledge resubmitted these letters into the current proceeding for Commission consideration given their continued relevancy. Letter from Jenna Leventoff, Senior Policy Counsel, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-308, at 1 (filed Feb. 4, 2020).

\textsuperscript{169} See NPRM ¶ 92.
challenging the original findings in court.¹⁷⁰ The Commission should wait for the courts to complete their review and for a more robust record of the effects of forbearance in price-cap areas. Second, forbearance would increase prices and cause substantial harms to consumers and the public interest. Avoided-cost resale has been critical to disciplining wholesale prices in a non-competitive market.¹⁷¹ Eliminating these obligations in non-price cap areas would not only increase by significant margins resale rates but also wholesale line procurement costs.¹⁷² These price increases reduce CLECs’ ability to offer product differentiation and innovation to customers at reasonable rates.

The adverse impact on retail customers is significant, as the reliability of traditional TDM-based telephone service is highly demanded by multi-location businesses, government agencies, and public safety institutions.¹⁷³ Yet, for many customers, there are no adequate alternatives to provide the line-powered reliability they need.¹⁷⁴ Already CLECs have detailed how forbearance harms companies operating critical systems such as medical alerts and fire/sprinkler monitors, that depend on the ability of traditional TDM to continue to operate


¹⁷² INCOMPAS Opposition at 72-73.

¹⁷³ See id. at 33; Antonellis Decl. ¶¶ 9, 12-27.

¹⁷⁴ See INCOMPAS Opposition at 33; Antonellis Decl. ¶ 12-13.
during power outages. CLECs also have demonstrated how forbearance harms the many government customers that rely on copper-based telephone services to perform critical governmental functions. Customers such as the National Weather Service of the National Oceanic and Atmospheric Administration (“NOAA”), which relies on copper-based services to perform critical functions such as supporting NOAA Weather Radio, a service that provides nationwide weather warnings, watches, forecasts, and other hazard information, and supporting the Automated Surface Observing System, America’s primary surface weather observing network for aviation. Traditional TDM services are also required by agencies like the Federal Aviation Administration to ensure travel safety and to operate its flight monitoring system and the National Airspace System. Without avoided-cost resale, government entities will lose out on competitive bids for services from competitive providers, limiting their ability to obtain lower-cost, higher-quality services. Given the harms to competition and consumers’ ability to perform public safety and other essential functions, the Commission cannot meet the statutory standard for extending forbearance of avoided-cost resale to non-price cap areas.

\[175\] INCOMPAS Opposition at 45 (citing Antonellis Decl. ¶ 26).
\[177\] Granite Nov. 2018 Ex Parte, at 1.
\[178\] INCOMPAS Opposition at 45 (citing Antonellis Decl. ¶ 26).
\[179\] Granite Nov. 2018 Ex Parte, at 1-2.
VI. CONCLUSION

For the foregoing reasons, the Commission should reject the NPRM’s proposals to further eliminate unbundling and avoided-cost resale requirements. The Commission should not eliminate UNEs that are facilitating competitive entry and the construction of alternative fiber networks, or UNEs or avoided cost resale requirements that deliver better choice and service for consumers, including government agencies, on the basis of inaccurate data and outdated predictions. Proceeding with the NPRM’s rushed, unsupported proposals would eliminate competitive choice for consumers, slow fiber deployment, increase prices, and damage the public interest.

Respectfully submitted,

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