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REDACTED – FOR PUBLIC INSPECTION **Accepted/Files**

January 28, 2016

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BY ECFS

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Federal Communications Commission
Office of the Secretary

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: ***PUBLIC REDACTED*** *Comments of CenturyLink in WC Docket No. 05-25, RM-10593*

Dear Ms. Dortch:

CenturyLink, by its attorneys, hereby files two ***PUBLIC REDACTED*** copies of its comments in response to the Commission's 2012 Further Notice of Proposed Rulemaking in the above-referenced dockets (FCC 12-153). Under separate cover, CenturyLink is also filing one ***HIGHLY CONFIDENTIAL*** copy of this filing.

Consistent with the Public Notice issued by the Wireline Competition Bureau ("Bureau") on Thursday, January 21, 2016 (DA 16-81), CenturyLink has treated as "Highly Confidential" all figures resulting from an independent econometric assessment ("Econometric Analysis") of the data submitted to the Bureau in the above-referenced docket. CenturyLink notes, however, its strong disagreement with the Bureau's conclusion that "the results of any analyses (including statistical descriptions) performed on the Confidential and Highly Confidential data submitted in response to the Commission's business data services data collection are themselves Confidential or Highly Confidential, depending on the data from which they are derived."

The Econometric Analysis presents data that are highly aggregated and thus pose no risk of divulging the confidential information of any specific provider. Specifically, the Econometric Analysis presents information on the number of census blocks in which one or more non-ILEC providers have deployed high-capacity facilities, the number of connections served by such third-party facilities, and the number of business locations so served. In no case do the findings name any individual company or census block. Nor do they indicate the specific number of

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competitors whose facilities have been deployed in a census block, location, or other geographic market. Rather, the data presented generally show that "In MSAs of type X, Y percent of census blocks (or connections, or business locations) are served by one or more competitive providers." In many other contexts, the Commission has recognized that aggregated information of this type – indeed, information even more particularized than this – is not highly confidential, or not confidential *at all*. In fact, the Econometric Analysis's findings are more generalized than reports that the Commission routinely *publishes* for general consumption (including, for example, the "Broadband Deployment Data" made available at https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477, and the biannual "Internet Access Service Report," both of which are based on highly confidential information submitted by broadband providers via Form 477). It is also more highly aggregated than the public national broadband map, which aggregates confidential information but reveals which providers offer service at which locations, and at what speeds. Providers need and deserve to cite in public specific findings of this type; "general, qualitative descriptions or characterizations" simply cannot convey the force of the results. Parties' in-house personnel, moreover, must not be deprived the opportunity to learn and evaluate the core facts that will guide this proceeding to its conclusion except where those facts are genuinely confidential. As the examples above show, at least some of the facts in play are not, and the Commission itself publishes data of the sort in question here. The Bureau and/or the Commission itself must therefore make clear that aggregated findings of the type at issue in the Econometric Analysis need not be treated confidentially.[1]

Please contact the undersigned if you have any questions.

Sincerely,

WILKINSON BARKER KNAUER, LLP

/s/ Russell P. Hanser
Russell P. Hanser

Enclosures

[1] Parties are routinely entrusted with judgments as to what information is and is not protected, and have strong incentives to treat truly confidential materials appropriately. To the extent the Bureau has concerns about individual parties making such decisions, it should issue guidance as necessary.

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JAN 28 2016

Federal Communications Commission
Office of the Secretary

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Special Access for Price Cap Local Exchange Carriers	)	WC Docket No. 05-25
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	)	RM-10593

COMMENTS OF CENTURYLINK

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January 28, 2016

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EXECUTIVE SUMMARY

The 2013 data set collected by the Wireline Competition Bureau ("Bureau") conclusively demonstrates what should have been apparent at each phase of this proceeding: The high-capacity transmission marketplace is one of the most dynamic and competitive sectors of the communications ecosystem. The Commission should reject calls for expansive re-regulation of DSn- or higher-capacity facilities. It should instead begin to put in place a framework that will continue to promote infrastructure investment by all providers in a manner consistent with law, policy, and sound economic principles.

The 2013 Data Demonstrate an Extremely Competitive Marketplace, Especially (But Not Only) in MSAs Subject to Phase I and Phase II Pricing Flexibility. Expert analysis conducted by leading economists and econometricians shows beyond any doubt that the high-capacity transmission marketplace is robustly competitive, especially (but not exclusively) in those areas in which the Commission has granted ILECs "Phase I" and/or "Phase II" pricing flexibility under the triggers adopted in 1999 and suspended in 2012. Examined from every plausible perspective, the data show extensive competitor-deployed facilities providing well-utilized alternatives to the ILEC DS1- and DS3-capacity services at issue here, even if best-effort cable service is excluded from consideration. That analysis eviscerates any claim that the high-capacity transmission marketplace is in need of more regulation. In fact, it demonstrates that ILEC DSn services are in many areas unnecessarily subject to price cap regulation.

The High-Capacity Transmission Marketplace Is Even More Dynamic and Competitive Than Reflected by the Commission's 2013 Data Set. Unsurprisingly, the marketplace for high-capacity transmission services has become even more highly contested since 2013. Competitive fiber providers such as XO, Windstream, and Level 3 (which acquired tw telecom in 2014) advertise ever-expanding long-haul and metro networks and highlight their leading positions serving the nation's enterprises. Cable providers are accelerating their propulsive advance into the high-capacity marketplace. Comcast, for instance, has announced a new business unit tasked exclusively with selling enterprise services to Fortune 1000 companies on a nationwide basis, and boasts "the largest facilities-based last mile alternative to the phone company." Other cable companies are also expanding aggressively. In all, one analyst estimated the cable industry's 2014 annual growth rate in commercial services revenue to have been 25 percent, compared to a *reduction* of 2.7 percent for the Regional Bell Operating Companies. Increased activity by cable companies has dramatically expanded the availability of Ethernet access and fundamentally changed CenturyLink's experience as a purchaser of high-capacity transmission. Indeed, competitive providers continue to expand, with significant deployments even in the past month. Thus, the 2013 data might be the most wide-ranging data set the Commission has available, but it badly underestimates competition.

There Is No Basis for Re-Regulating in Any Area Currently Subject to Phase I or Phase II Pricing Flexibility. Given the intense and growing competition in this space – particularly in the MSAs subject to pricing flexibility – there is no basis for the Commission to impose new mandates on ILECs where they enjoy relief today. Competitive deployment has proven more than adequate to discipline these markets, as underscored by the fact that no entity

has filed a formal complaint alleging unlawful rates or terms in price-flex MSAs. Any claw-back of prior relief, such as re-imposition of across-the-board price cap regulation, would result in disruption and costs not just for ILECs but for their customers – including CLECs and wireless providers – which have relied on the presence of pricing flexibility to structure their current agreements. To the extent the Commission is inclined to turn back the regulatory clock, it should require a petitioning party to bear a high burden in demonstrating that re-regulation is necessary to address whatever harms they assert.

Any Successor to the Suspended Pricing Flexibility Triggers Must Afford Relief From Price-Cap Regulation Where Another Entity Is Providing, or Reasonably Could Provide, Dedicated Service in Competition With the ILEC. Any new regime must, consistent with legal precedent and principles of sound policymaking, account for both existing and potential competition. Bedrock principles of competitive analysis call for including all reasonably close substitutes in a product market. Disparate treatment of competitors in the same market would undermine the intellectual foundation of fairness and predictability on which any regulatory regime must rest. In addition, the agency must conduct a "forward-looking" evaluation that accounts for prospective competition, using factors such as business density as signals indicating that competitive deployment is economically feasible in a given area.

The Commission Should Establish a Pro-Deployment Framework to Govern DSn-Capacity Services Going Forward. It appears that the data set compiled by the Bureau has yet to be made available for sufficient review in complete and final format. That said, the Commission can and should commit to the following principles, based on the evident presence of widespread and vigorous competition to the DSn services in question:

(1) No rescission of existing pricing flexibility relief.

(2) Expansion of Phase II relief to all Phase I MSAs.

(3) Relief from price caps where there is one or more actual competitor providing the same service in the relevant geographic unit using its own facilities, third-party facilities, or UNEs.

(4) Relief from price caps where business density is high or there are other indicia showing that third parties could economically provision service using their own facilities, third-party facilities, or UNEs.

Once parties and the Commission have been afforded sufficient opportunity to evaluate the collected data, it will be possible to establish concrete mechanisms for effectuating these principles. CenturyLink looks forward to participating in that process.

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Special Access for Price Cap Local Exchange Carriers	)	WC Docket No. 05-25
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	)	RM-10593

COMMENTS OF CENTURYLINK

CenturyLink hereby responds to the questions posed in Part IV.B of the Commission's December 2012 Further Notice of Proposed Rulemaking in the above-referenced dockets ("*Notice*").[1]

INTRODUCTION

As CenturyLink described at length when responding to other aspects of the Notice and expands upon below, the marketplace that prevailed at the time of 1999's *Pricing Flexibility Order* no longer exists. After years of refusing to provide such information voluntarily, competitors of the so-called incumbent local exchange carriers ("ILECs") in this space have now been required to detail their high-capacity infrastructure deployments. Although the data set is incomplete (excluding critical last-mile facilities used as substitutes for ILECs' DSn offerings)

[1] *Special Access for Price Cap Local Exchange Carriers*, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 16318 (2012) ("*2012 Special Access Notice*") (subsequent history omitted).

and already out-of-date (failing to account for the extensive competitive deployment that has occurred since 2013), its core message is undeniable: Competitors have deployed nearly ubiquitous facilities of their own on a nationwide basis. This deployment is not limited to central business districts or to metropolitan statistical areas ("MSAs") in which the Commission's suspended pricing flexibility triggers once would have directed relief from price caps. Rather, driven by long-term, bipartisan, pro-investment policies, *all* providers in the marketplace – including competitive fiber providers, cable operators, wireless companies, and others – have deployed next-generation facilities to compete with ILEC DSn services in nearly every single census block, which they continually enhance and expand to meet ever-increasing demand.

An Econometric Analysis of the Bureau's collected data, conducted by industry experts from Compass Lexecon and entered into this docket today,[2] dispels any doubt on this front. As of 2013, competitors had deployed high-capacity facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of all census blocks in which an ILEC offered special access services. They had deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in MSAs in which ILECs had been granted "Phase I" pricing flexibility, and in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks within "Phase II" MSAs. Even in MSAs with no pricing flexibility, competitors had deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks. As the Econometric Analysis explains, a

[2] *See* Mark Israel, Daniel Rubinfeld, and Glenn Woroch, White Paper, Competitive Analysis of the FCC's Special Access Data Collection (filed Jan. 27, 2016) ("Econometric Analysis").

competitor with facilities in a census block generally can economically serve any establishment within that census block by extending "laterals" from its existing plant to the new location.

While these findings are decisive on their own, they in fact understate competitive deployment. Since 2013, competitive fiber providers such as XO, Windstream, and Level 3 have been expanding their fiber networks as well as their business-grade and wholesale services. Cable providers have assumed an even more prominent role in the marketplace, challenging ILECs and others for business and wholesale customers nationwide, with year-over-year revenue growth in these sectors reaching an amazing 25 percent – all while Regional Bell Operating Company ("RBOC") business revenues have declined. Even in the past month, cable providers and other ILEC rivals have trumpeted their expanding footprints and capabilities.

These facts obliterate any argument for abandoning the Commission's pro-investment policy agenda. Proponents of expansive regulation here have bemoaned the Commission's framework for more than 15 years. Yet, all the while, they have consistently invested in new facilities, won market share, developed new offerings, competed aggressively in the provision of next-generation IP networks and services, and – perhaps most tellingly – highlighted these achievements to Wall Street investors and even to the Commission. A framework imposing sub-market rates and one-size-fits-all tariffs for legacy DSn services would suppress the incentives of *all* providers to deploy high-capacity network architectures. It would in particular inhibit the ongoing, customer-driven migration away from DSn services in favor of more flexible and capable Ethernet services.

Thus, as CenturyLink has said before, the choice faced by the Commission in this docket is simple: Will it maintain and advance policies that facilitate further investment in IP networks? Or will it accede to the parochial demands of some rival providers, pretend that the numerous

competitive alternatives revealed by the record simply do not exist, and resuscitate antiquated monopoly-era regulation of DS1 and DS3 services? It clearly should pursue the first path. At the very least, the Commission must not backtrack by eliminating any pricing flexibility relief already granted. Likewise, whatever successor regime the Commission adopts going forward must account for *both* actual *and* potential deployment in *all* areas. Fundamental economics and black-letter law dictate that competitive analysis reflect all competitive options, that substitutable offerings in the same geographic markets be subject to the same legal mandates, and that potential competition be considered alongside actual competition.

The record before the Commission, including information arising from an unprecedented industry-wide data collection, points to one logical outcome. The Commission should reaffirm its commitment to deployment and to facilities-based competition. It should recognize and affirm the importance of data showing the near-ubiquitous competitive deployment that has resulted from the Commission's established pro-investment regime. It should reject the rhetoric of those who insist on a need for regulatory intervention on their behalf, notwithstanding their fast-growing networks and net worths. Instead, it should refuse to re-regulate the highly competitive and dynamic marketplace at issue here; eliminate price-cap regulation where one or more competitors provide (or could economically provide) service comparable to the ILEC's; and set in place the means to promote even more innovation and infrastructure deployment going forward.

DISCUSSION

I. THE HIGH-CAPACITY SERVICES MARKETPLACE IS EXTREMELY COMPETITIVE

Contrary to the sepia-tinged images evoked by the very term "special access," the high-capacity transmission marketplace is one of the most dynamic and competitive sectors of the communications marketplace. That intensely competitive environment is conclusively demonstrated by the 2013 data set collected by the Wireline Competition Bureau ("Bureau"), but it is even more apparent and undeniable today.

A. Data Collected Regarding 2013 Demonstrate a Highly Competitive Marketplace Overall, and an Especially Competitive Marketplace in MSAs Subject to Phase I and Phase II Pricing Flexibility.

In the lead-up to these comments, the Bureau, at the direction of the Commission, engaged in a relatively expansive effort to compile data regarding the state of competition in the provision of high-capacity services.[3] Today, three leading economists and econometricians with

[3] As the Commission knows, CenturyLink believes that the data collection effort did not properly account for the full range of cable-based competition. In the Application for Review of CenturyLink, filed on October 22, 2013, CenturyLink sought reversal of the Report and Order released by the Bureau on September 18, 2013 ("*Bureau Order*") on the grounds that it violated the Commission's directive in its 2012 Report and Order and Further Notice of Proposed Rulemaking ("*Data Collection Order*") to collect data regarding all communications pathways with the "capability to provide a dedicated service." *See* Application for Review of CenturyLink, *Special Access for Price Cap Local Exchange Carriers* et al., WC Dkt. No. 05-25 (filed Oct. 22, 2013). The *Bureau Order* violated the Commission's directive by exempting cable system operators from the requirement to provide location-by-location data for "facilities [within their franchise areas] that are not linked to a Node capable of providing Metro Ethernet (or its equivalent)" and that were not "used during the relevant reporting period to provide a Dedicated Service or a service that incorporated a Dedicated Service within the offering as part of a managed solution or bundle of services sold to the customer." *Bureau Order* ¶ 27. Cable operators can and do use hybrid fiber-coaxial plant to provide Dedicated Services in direct competition with ILEC-provided DS1s and DS3s. As CenturyLink predicted, the absence of cable connections capable of providing dedicated services in the data collection has caused the Commission to systematically underestimate competition for locations connected to (or nearby)

decades of collective experience assessing regulated industries – Mark Israel of Compass Lexicon, Daniel Rubinfeld of New York University and U.C. Berkeley, and Glenn Woroch of U.C. Berkeley – are filing a White Paper evaluating the data that the Bureau compiled.[4] That analysis shows beyond any doubt that the high-capacity transmission marketplace is robustly competitive, especially (but not exclusively) in those areas in which the Commission has granted ILECs "Phase I" and/or "Phase II" pricing flexibility under the triggers adopted in 1999 and suspended in 2012. Israel et al. reviewed the data submitted regarding facilities deployment by incumbents and other providers alike, and identified the relevant census block for each connection reported.[5] They excluded from their analysis any connection served using unbundled network elements ("UNEs") under Section 251(c)(3) of the Act. Examined from every plausible perspective, the data show extensive competitor-deployed facilities providing and competing for the DS1- and DS3-capacity services at issue here.

The Econometric Analysis began by examining competitive deployment in each census block, defining deployment to include the presence of reported CLEC last-mile connections, reported CLEC fiber routes, and/or fiber or DOCSIS 3.0 service identified on the National Broadband Map. That analysis found that competitors operated facilities in **[BEGIN HIGHLY CONFIDENTIAL]** ■ **[END HIGHLY CONFIDENTIAL]** percent of *all* census blocks in which the ILEC offered special access-type service. **[BEGIN HIGHLY CONFIDENTIAL]** ■

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cable system operators' networks, in direct conflict with the *Data Collection Order*. *Data Collection Order*, 27 FCC Rcd at 16346 ¶ 68.

[4] *See* Econometric Analysis.

[5] *See id.* at 16-19 (explaining the Econometric Analysis's methodology).

[END HIGHLY CONFIDENTIAL] percent of all connections reported to the Bureau were in census blocks in which competitors had facilities, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of all business establishments were in such census blocks.[6] Among MSAs in which the relevant ILEC had been granted "Phase I" pricing flexibility, the percentages were higher: competitors had deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks with any high-capacity service, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of reported connections were in census blocks with competitive deployment, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** of business establishments were in those census blocks.[7] And the numbers for "Phase II" MSAs were nearly identical to those in "Phase I" MSAs: competitors had deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of reported connections were in census blocks in which competitors had deployed, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of business establishments were in such census blocks.[8] But even MSAs in which the ILEC had not been granted *any* pricing flexibility showed very high levels of competitive deployment: Competitors had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks with

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[6] *Id.* at Table C.

[7] *Id.* at Table C-PF1.

[8] *Id.* at Table C-PF2.

some form of high-capacity service in those MSAs, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of connections were in census blocks with competitive deployment, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONIDENTIAL]** percent of business establishments were in such census blocks.[9] These nationwide findings apply fully to CenturyLink's MSAs: The Econometric Analysis found that robust competitive deployment in CenturyLink MSAs with Phase II pricing flexibility,[10] Phase I pricing flexibility,[11] and no pricing flexibility at all.[12] And the nationwide deployment figures rise significantly when the evaluation is limited to census blocks representing 80 percent of the MSA's total demand.[13]

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[9] *Id.* at Table C-PC.

[10] For example, competitors had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in the Phoenix, Arizona MSA, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in the Las Vegas, Nevada MSA, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in the Davenport-Rock Island-Moline, Iowa/Illinois MSA. *Id.* at Table MSA-PEN-C.

[11] For example, competitors had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in the Minneapolis-St. Paul, Minnesota MSA. *Id.*

[12] For example, competitors had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks in the Fort Walton Beach, Florida MSA, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of the Columbia, Missouri MSA. *Id.*

[13] *See id.* at Table C80.

As CenturyLink and others have explained before, competition in the provision of high-capacity services must necessarily account for the services offered by cable providers.[14] Indeed, the following section addresses at length cable's propulsive growth in the business- and carrier-grade service markets.[15] Nevertheless, recognizing that some have questioned the relevance of best-effort cable service in the business and wholesale markets, Israel et al. also conducted a version of the same analysis described above excluding such services. This evaluation continued to show impressive competitive deployment. Excluding these best-effort cable offerings, competitors had deployed facilities in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of all census blocks with any high-capacity service, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of connections were in census blocks in which non-cable competitors had deployed, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of establishments were in such census blocks.[16] In MSAs where the ILEC had received Phase I pricing flexibility, competitors had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks with high-capacity service, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of connections were in census blocks with non-cable competitive deployment, and **[BEGIN**

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[14] *See, e.g.*, Reply Comments of CenturyLink, Inc. at 12-13, WC Docket No. 05-25 (filed Nov. 24, 2015); Comments of CenturyLink, Inc. at 8-10, WC Docket No. 05-25 (filed Mar. 9, 2015); Letter from Maggie McCready, Vice President, Verizon, to Marlene Dortch, FCC, WC Docket No. 05-25 (filed Jan. 14, 2016), http://apps.fcc.gov/ecfs/document/view?id=60001404716.

[15] *See infra* Part I.B.

[16] *See* Econometric Analysis at Table F.

HIGHLY CONFIDENTIAL] [redacted] **[END HIGHLY CONFIDENTIAL]** percent of establishments were in such census blocks.[17] In Phase II MSAs, competitors not relying on best-effort cable services had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks with high-capacity service, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of connections were in blocks in which non-cable competitors had deployed, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of establishments were in such census blocks.[18] Even in MSAs in which the ILEC had received no pricing flexibility, non-cable competitor had deployed in **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of census blocks, **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of connections were in census blocks with such deployment, and **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent of business establishments were in such MSAs.[19] And here too, the figures increase appreciably when the analysis is limited to census blocks representing 80 percent of demand in each MSA.[20]

The Econometric Analysis eviscerates any claim that the high-capacity transmission marketplace is in need of more regulation. In fact, this analysis demonstrates that ILEC DSn services are unnecessarily subject to price cap regulation in many areas. Competitive providers

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[17] *See id.* at Table F-PF1.

[18] *See id.* at Table F-PF2.

[19] *See id.* at Table F-PC.

[20] *See id.* at Table F80.

have constructed facilities almost ubiquitously, covering the vast majority of census blocks even in MSAs that have not been awarded any pricing flexibility. As Israel *et al.* explain, "investment in facilities required to deliver service is an especially informative measure of competition," because, among other things, such "durable commitments" reflect sunk investments, "ensur[ing] that the provider has an economic incentive to service the market in the short run and over the longer run."[21] Moreover, sunk investments minimize the avoidable costs associated with the provision of service, and guard against the provider's exit from the marketplace.[22] Because "[i]t is relatively easy for a provider to expand its capacity to service customers within the route structure of its existing network," a competitor's deployed plant can be upgraded to address growing demand.[23] Further, "the reach of an embedded network can extend beyond the location of its current connections to serve additional customers in the immediate vicinity,"[24] ensuring that sunk investment also facilitates expansion of the provider's serving area.

B. The High-Capacity Transmission Marketplace Is Even More Dynamic and Competitive Than Reflected by the Commission's 2013 Data Set.

The marketplace has become even more competitive since 2013, led by cable's aggressive entry and expansion. As CenturyLink has explained before, ILEC services face aggressive competition from CLECs, fixed wireless, and cable providers in the provision of high-capacity transmission, and the marketplace is shifting away from the services at issue here

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[21] *Id.* at 6-7.

[22] *Id.* at 7.

[23] *Id.* at 9.

[24] *Id.* at 10.

and toward higher-capacity fiber Ethernet services. Even since 2013, competitive providers have advanced substantially. The attached declaration from Carla Stewart underscores the wide variety of options of which CenturyLink can and does avail itself as an out-of-region access purchaser, illustrating the dramatic shift in the wholesale marketplace that has occurred since the last data collection.[25] In January 2014, CenturyLink had access to **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** commercial buildings or addresses through non-ILEC providers.[26] As of November 2015, that number had grown to over **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** commercial buildings or addresses through non-ILEC providers, an increase of more than **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** percent since January 2014. Thus, concepts such as "market power" and "bottleneck facilities" may be found in abundance in certain parties' pleadings, but they are absent from the marketplace itself.

Despite occasional acknowledgements that competition in the high-capacity service marketplace is increasing,[27] the Commission does not appear to have fully grasped the extent and

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[25] *See generally* Declaration of Carla Stewart, attached hereto as Exhibit 1 ("Stewart Decl."). CenturyLink attached this declaration to its initial response to the Wireline Competition Bureau's investigation of certain pricing plans and attaches it here (along with the corresponding discussion) in the interest of ensuring a complete record in this docket.

[26] Some providers identify the number of standalone commercial buildings in which they offer access services, while others identify those locations by street address.

[27] *See, e.g.*, *Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans*, 30 FCC Rcd 11417, 11419 ¶ 4 (2015) ("*Designation Order*") (stating that "competitors continue to expand their market presence by building IP-based facilities or extending TDM[-]based facilities to additional buildings"); *id.* at 11422 ¶ 10 (conceding that "competitive LECs have had success in obtaining a significant share of the market for Ethernet services").

the significance of that trend. The recent pricing plan investigation is a case in point. Not only did the Bureau's *Designation Order* single out legacy, TDM-based, ILEC-provisioned special access services without accounting for the burgeoning supply of Ethernet and other broadband alternatives from intermodal competitors, but it then relied on outdated data to assess this shrinking slice of the marketplace in isolation.[28] The Commission cannot shirk its responsibility to consider the entire competitive landscape. Rather, as CenturyLink has explained, the Commission has stated, and courts have held, bedrock principles of competitive analysis compel consideration of all substitutes, including intermodal alternatives.[29] Moreover, as discussed below, such analysis must account for incipient competition as well as already-existing competition.[30] When the full range of competitive alternatives are properly taken into account, it should be clear that ILECs provide TDM-based special access services within a broader high-

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[28] *See, e.g.*, *id.* at 11419, 11423-24 ¶¶ 3, 14 (citing data from 2013 and earlier).

[29] *See, e.g.*, Comments of CenturyLink, WC Docket No. 05-25, at 12-13 (filed Feb. 11, 2013) (citing Areeda & Hovenkamp, Antitrust Law 369 ¶ 562 (3d ed. 2007) (a product market "includes (1) identical products, (2) products with such negligible physical or brand differences that buyers regard them as the same product, and (3) other products that buyers regard as such close substitutes that a slight relative price change in one will induce intolerable shifts of demand away from the other") (internal citations omitted)); Comments of Qwest Commc'ns Int'l, Inc. WC Docket No. 05-25, at 5-6 (filed Aug. 8, 2007) ("The Commission's analysis of the market must account not only for traditional dedicated wireline facilities, but also for point-to-point services offered via other platforms and for the xDSL offerings that are increasingly relied on by small enterprise customers. As the Commission and the courts have emphasized, this analytical framework best reflects the wide array of options presented to the sophisticated users that purchase special access services.") (internal citations omitted)); *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 389-90 (1999).

[30] *See infra* Section III.B; *see also, e.g.*, U.S. DOJ & FTC, *Horizontal Merger Guidelines* § 5.1, at 15-16 (Aug. 19, 2010).

capacity transmission marketplace in which they are steadily losing market share to other providers.

The Commission already has compiled a record to support a finding of robust competition, but certain aspects of that evidence warrant emphasis and updating. There can be no meaningful dispute that – as even the Bureau has acknowledged[31] – customers continue to migrate rapidly from ILEC legacy services to Ethernet and other broadband offerings provisioned by competitive providers over fiber and hybrid coaxial facilities. Sprint's successful migration of its wireless backhaul needs to competitive Ethernet providers serves as merely one illustration of the extent to which legacy services are being phased out.[32] Indeed, in an era characterized by demand for speeds of 100 Mbps to 1 Gbps, it should be no surprise that DS1 and DS3 links, which top out at 1.544 Mbps and 44.736 Mbps, respectively, are being displaced by faster Ethernet services.[33] These Ethernet services are much better suited to today's marketplace not only because they accommodate more data than legacy DS1s and DS3s, but also because they offer quality-of-service options allowing the customer to govern its voice, data, and video offerings – options not offered over traditional transmission facilities. These capabilities facilitate expeditious deployment and upgrades once an Ethernet-based service has been deployed to a customer.

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[31] *Designation Order* at 11419 ¶ 3.

[32] Letter from Keith M. Krom, Gen. Atty. & Assoc. Gen. Counsel, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, at 6 & n.34 (filed Oct. 13, 2015) ("AT&T Oct. 13 Letter").

[33] Comments of CenturyLink, WC Docket No. 05-25, at 15 (filed Feb. 11, 2013).

Customers enjoy substantial choice among Ethernet providers, and the options are in no way limited to ILECs. Notwithstanding aggressive investment in their networks,[34] ILECs constitute a *minority* of the top eight Ethernet providers.[35] That list currently includes two CLECs that have been among the leaders in lobbying the Commission to tilt the playing field against ILECs – Level 3 (the second-largest provider of Ethernet services, following a series of acquisitions between 2011 and 2014), and XO (which actually climbed a spot in the rankings during a six-month span this year)[36] – as well as three of the largest cable companies in the country. And no provider on the list – including the ILECs – has a port share exceeding one-fifth of the market.[37] Meanwhile, several dozen smaller providers together have an aggregate market share of more than twenty percent.[38]

Competitive Fiber Providers. Many competitive fiber providers – generally CLECs – offer service on a national basis and within a footprint equivalent in reach to that of large ILECs. For instance, XO's Ethernet private line service offers a "[b]road nationwide reach to more than 85 major metro markets," "more than 1 million fiber miles," and the "[u]se of multiple Ethernet

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[34] CenturyLink alone devotes $3 billion annually to capital investment expenditures, adding to the $37 billion of invested property, plant, and equipment already on its books.

[35] CenturyLink Reply Comments, PS Docket No. 14-174 *et al.*, at 6 (filed Mar. 9, 2015); Vertical Systems Group: *Mid-Year 2015 U.S. Carrier Ethernet Leaderboard* (Aug. 24, 2015), http://www.verticalsystems.com/vsglb/mid-year-2015-u-s-carrier-ethernet-leaderboard/.

[36] Vertical Systems Group: *2014 U.S. Carrier Ethernet Leaderboard* (Feb. 19, 2015), http://www.verticalsystems.com/vsglb/2014-u-s-carrier-ethernet-leaderboard/.

[37] AT&T Oct. 13 Letter at 2 (citing Vertical Systems Group, ENS Research Program, 2015).

[38] *Id.*

access technologies to reach over 10 million business locations."[39] XO's nationwide, intercity long haul network is designed to handle high-capacity traffic from DS1 (1.544 Mbps) to 100 Gbps.[40] Similarly, Level 3 (which completed its acquisition of tw telecom in 2014) offers a range of enterprise broadband services, including Private Line, Ethernet Private Line, and Ethernet Virtual Private Line, among others.[41] Level 3 recently reported 55,000 route miles of fiber in metropolitan markets, with roughly 33,300 buildings on-net in North America and over 100,000 enterprise buildings near its fiber net.[42] And Windstream provides comparable services over its own nationwide network, offering Ethernet at speeds of up to 1 Gbps with "the same reliability and performance of a traditional T1."[43] Windstream boasts that it is the "provider of choice for four out of five Fortune 500 companies for data, voice, network and cloud solutions."[44]

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[39] XO Communications, Ethernet Private Line, http://www.xo.com/network-services/ethernet-services/private-line/ (last visited Dec. 17, 2015).

[40] XO Communications, Network Assets, http://www.xo.com/why/the-right-network/assets/ (last visited Dec. 17, 2015).

[41] Level 3 Communications, Inc., *Second Quarter 2015 Results*, at 13 (July 29, 2015), http://investors.level3.com/files/doc_downloads/2Q15-Earnings/2Q15-External-Earnings-Presentation_Final-PDF.pdf.

[42] *Id.* (reporting approximately 42,200 total on-net buildings, 79 percent of which are in North America).

[43] Windstream, Ethernet Internet, http://www.windstreambusiness.com/products/enterprise-network-services/dedicated-internet-services/ethernet-internet. (last visited Dec. 17, 2015)

[44] Windstream Business, Why Windstream?, http://www.windstreambusiness.com/why-windstream (last visited Dec. 17, 2015).

This is just a sampling of the CLEC offerings available in this marketplace. Given their individual and collective successes, it is implausible for these providers to suggest that greater – or indeed any – regulatory oversight is required. Even companies with smaller market share still have a full or nearly nationwide presence. For instance, Birch Communications has an Ethernet port share of less than 1 percent, but its national IP network is capable of supporting 1 Gbps+ data transmission rates, with over 500 points of presence in 22 states, and its optical transport network spans 31,000 fiber route miles.[45] EarthLink is in the same market share category, with just as large a footprint.[46]

Cable Providers. Perhaps the greatest transformation in this space is due to the relentless efforts of cable companies, which in just a short time moved on from their strong position serving residences and small/medium-sized businesses to become major national competitors for large enterprise customers. CenturyLink's own experience demonstrates that increased activity by cable operators since 2013 has been a primary driver behind the rapidly expanding availability of wholesale alternatives to ILEC offerings – as a buyer of access, CenturyLink has entered into various arrangements with these companies and has, during that timeframe, increased greatly the volume of access it acquires from them.[47] **[BEGIN HIGHLY CONFIDENTIAL]** [redacted]

[45] Birch Communications, *The Birch Nationwide Network: Our Data and Internet Network*, http://www.birch.com/about/service-areas/maps/data-and-network (last visited Dec. 17, 2015).

[46] EarthLink, *EarthLink Business Interactive Network Map*, http://www.earthlinkbusiness.com/support/network-map.xea (last visited Dec. 17, 2015).

[47] Stewart Decl. ¶ 4.

[redacted] **[END HIGHLY CONFIDENTIAL]**[48]

Cable's ascent in this space is highlighted by Comcast Corporation's ("Comcast's") recent announcement of a new business unit created specifically to market and sell enterprise services to Fortune 1000 companies on a nationwide basis.[49] Soon after that announcement, Comcast emphasized that it is targeting "large enterprises that have 300 locations or more" and

[48] *Id.*

[49] Press Release, *Comcast Business Announces New Unit Targeting Fortune 1000 Enterprises*, (Sept. 16, 2015), http://corporate.comcast.com/news-information/news-feed/comcast-business-announces-new-unit-targeting-fortune-1000-enterprises ("Comcast Fortune 1000 Press Release"). *See also* Letter from Jonathan Banks and Diane Griffin Holland, US Telecom, to Marlene H. Dortch, Sec'y, FCC, WC Docket No. 05-25, RM-10593 (Sept. 18, 2015).

that it provides managed services "to more than 20 large enterprise companies and ha[s] already signed multiple eight figure deals."[50]

Even before that announcement, Comcast was reporting substantial success in connection with its business services. Indeed, Comcast Business already had signed "large customers from multiple industries," ranging from financial services firms to banks to hospitality chains to retailers.[51] Comcast Business offers "the largest facilities-based last mile alternative to the phone company," with over 141 national route miles of fiber and the first and largest fully 40G backbone.[52] Comcast's first quarter revenue from business services in 2015 grew 21.4 percent from the previous year, to over $1.1 billion.[53] In fact, Comcast's business services have been "the second-largest contributor to overall cable revenue growth for 18 of the last 19 quarters with third-quarter revenue increasing 19.5% to $1.2 billion."[54]

Meanwhile, Charter Communications, Inc. ("Charter") has explained that a core piece of the rationale for its transaction with Time Warner Cable Inc. ("TWC") is that the combined company's post-merger footprint would "offer[] us greater ability to develop products and to

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[50] Thomson Reuters StreetEvents, *CMCSA – Q3 2015 Comcast Corp. Earnings Call*, Edited Transcript, at 14 (Oct. 27, 2015) ("*Comcast Q3 Earnings*") (quoting Neil Smit, Senior EVP Comcast Corp., President & CEO of Comcast Cable Communications).

[51] Comcast Fortune 1000 Press Release.

[52] Comcast Business: The Comcast Network (2014), http://i.crn.com/custom/The-Comcast-Network-Overview.pdf.

[53] TheStreet, *Comcast Earnings Report: Q1 2015 Conference Call Transcript* (May 4, 2015), http://www.thestreet.com/story/13137080/4/comcast-cmcsa-earnings-report-q1-2015-conference-call-transcript.html.

[54] *Comcast Q3 Earnings* at 5 (quoting Mike Cavanaugh, Senior EVP & CFO of Comcast Corp.).