

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Modernizing the FCC Form 477 Data Program)	WC Docket No. 11-10
)	
)	

**COMMENTS OF
ITTA – THE VOICE OF AMERICA’S BROADBAND PROVIDERS**

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ITTA – The Voice of America’s Broadband Providers (ITTA) hereby submits its comments in response to the *FNPRM* seeking comment on potential changes to the Form 477 to increase the quality and accuracy of the information the Commission collects on broadband and other communications services.¹

I. INTRODUCTION AND SUMMARY

At the outset of the *FNPRM*, the Commission declares that its Form 477 is “the principal tool used by the Commission to gather data on communications services, including broadband services, to help inform [its] policymaking.”² As the Commission subsequently elaborates, it uses Form 477 data in connection with numerous of its proceedings and programs, including, but not limited to, its Section 706 inquiries, Universal Service Fund proceedings, and mergers and other transactions.³ Given the myriad important purposes for which Form 477 data is used, ensuring accurate and comprehensive Form 477 data is essential. Thus, ITTA appreciates the Commission’s dual goals underlying the *FNPRM*, namely, to (1) ensure the data it collects is as

¹ *Modernizing the FCC Form 477 Data Program*, Further Notice of Proposed Rulemaking, 32 FCC Rcd 6329 (2017) (*FNPRM*).

² *Id.* at 6329, para. 1.

³ *See id.* at 6338-39, para. 31 (citations omitted).

accurate, and useful to the Commission, Congress, the industry, and the public, as possible; and (2) minimize the burden on filers – particularly smaller companies.⁴

In pursuit of these goals, the Commission should adopt its proposal to discontinue the collection of committed information rate data for fixed broadband providers offering business/enterprise/government services, and should shift to an annual Form 477 collection. The Commission also should decline to require fixed broadband providers to report more granular data. Furthermore, the Commission should solicit further comment on whether to publicize disaggregated subscription data, and on its collection of fixed voice subscription data.

II. THE COMMISSION SHOULD DISCONTINUE THE COLLECTION OF COMMITTED INFORMATION RATE DATA

The Commission currently requires fixed broadband providers offering business/enterprise/government services to report on the Form 477 the maximum downstream and upstream contractual or guaranteed data throughput rate – a.k.a. the committed information rate (CIR) – available in each reported census block. ITTA supports the *FNPRM*'s proposal to discontinue the collection of CIR data.⁵ ITTA agrees that the information collected on the Form 477 for consumer/residential/mass market data already provides the bandwidth data necessary for the Commission's use in numerous proceedings, and that the added CIR data for business/enterprise/government services does not provide additional useful insight.⁶ Therefore, retention of this collection would continue to impose a burden on filers with little or no corresponding benefit. As such, the Commission should eliminate the collection. For the same reasons, the Commission should decline to require fixed broadband providers to continue to

⁴ *See id.* at 6329-30, para. 1; *see also id.* at 6369, Appx., paras. 49-50.

⁵ *See id.* at 6339, para. 31.

⁶ *See id.* at 6338-39, para. 31. The *FNPRM* also recounts concerns that some filers may be reporting CIR data incorrectly, thereby further undermining its utility. *See id.* at 6339, para. 32.

report whether they offer business/enterprise/government services without reporting any speed data associated with such services.⁷

III. THE COMMISSION SHOULD REFRAIN FROM REQUIRING FIXED BROADBAND PROVIDERS TO REPORT MORE GRANULAR DATA

Form 477 collects fixed broadband deployment data on the census-block level. The *FNPRM* recounts that when the Commission last made changes to the Form 477, it considered and rejected collecting fixed broadband deployment data on a more granular level.⁸ The Commission likewise should do so here.

A. Fixed Broadband Providers Should Not be Required to File Geospatial Data

The *FNPRM* seeks comment on giving fixed broadband providers the option of reporting their deployment data by filing geospatial data showing coverage areas instead of reporting a list of census blocks. Relatedly, it seeks comment on whether providers of wired, fixed-terrestrial broadband routinely store their broadband footprints as geospatial coverage data.⁹ ITTA's members do not. In addition, as the *FNPRM* concedes, knowing the areas served provides information on the areas that have or lack service, but not the actual homes or businesses that lack service.¹⁰ Moreover, geospatial representations are prone to overstate coverage.¹¹ Therefore, as compared to census block data, for fixed broadband providers filing geospatial data at best presents a distinction without a difference in data quality.

As such, while the Commission speculates that filing geospatial data could reduce the burden on filers, because many wired, fixed-terrestrial broadband providers do not store their

⁷ *See id.* at 6339, para. 32.

⁸ *See id.* at 6340-41, para. 36 (citing *Modernizing the FCC Form 477 Data Program*, Report and Order, 28 FCC Rcd 9887, 9904-05, para. 35 (2013)).

⁹ *See id.* at 6341, para. 38.

¹⁰ *See id.*

¹¹ *See id.* at n.61.

broadband footprints in this manner, for these providers the burdens of filing geospatial data would both outweigh the benefits and outweigh the burdens of filing in the census block format that they have been doing for several years. In sum, ITTA does not object to the Commission giving fixed broadband providers the option of filing geospatial data; however ITTA would object to the mandatory filing of geospatial data.

B. The Commission Should Not Require the Collection of Data at a Sub-Census-Block Level

The *FNPRM* seeks comment on whether the Form 477 should collect data at a sub-census block level.¹² ITTA urges that it should not.

As the *FNPRM* depicts, a sub-census-block level collection, for example an address-level dataset, could entail more than a *tenfold* increase in the records associated with each Form 477 filing.¹³ Cast in that light, the *FNPRM*'s assessment that a household-level collection “could require significant additional time and other resources to establish and carry out”¹⁴ is a considerable understatement. Geocoding the addresses would be a Herculean burden, regardless of whether imposed upon providers or upon the Commission – and the endeavor is likely to be fraught with data failures.¹⁵

One ITTA member reports, for example, that geocoding for reporting to the the High Cost Universal Service Broadband (HUBB) Portal administered by the Universal Service Administrative Company (USAC) took an average of 7.4 minutes per address.¹⁶ Assuming there

¹² *See id.* at 6342, para. 39.

¹³ *See id.* at para. 39 & n.63.

¹⁴ *Id.* at para. 39.

¹⁵ *See id.* at n.65.

¹⁶ Another ITTA member describes the measures it has had to take to overcome flawed geocoded data. It had to develop triangulation techniques to score the quality of its geocodes using several geolocators as well as purchased parcel data. It also leveraged a team of GIS specialists to

(continued...)

are at least 150 million locations nationwide to geocode,¹⁷ applying this average to all of them would result in a burden of over one *billion* minutes for Form 477 purposes. While there would be a modest reduction in the overall burden to account for geocoding already performed for HUBB Portal reporting purposes, the burdens estimate speaks for itself. This one particular ITTA member estimates that it would have to spend in excess of one million dollars for the initial geocoding work and upload for Form 477 purposes, and then ongoing costs to verify newly deployed addresses for each filing. Another ITTA member projects that its costs to geocode for Form 477 purposes would exceed that estimate by a factor of at least 7-10.

The imbalance of the prospective burdens is further exacerbated by the at-most speculative benefits associated with the endeavor. The *FNPRM* posits that such data could greatly assist with “broad public policy goals” such as disbursement of high-cost funds, reverse auctions, or assisting consumers with locating broadband competition in their areas,”¹⁸ but conjecture is not sufficient to justify the potentially massive costs associated with amassing and producing such data. ITTA agrees that the Commission “need[s] to be able to articulate how [it] expect[s] the data to be used so that any revised collection is calibrated to meet the intended purposes.”¹⁹ In the absence of a concrete statement of how such data would be used – and one that overcomes the high hurdle of demonstrating how the benefits of such use would exceed the

(Continued from previous page)—————
visually confirm and adjust its service location latitude/longitude coordinates to a rooftop quality.

¹⁷ This estimate is for illustrative purposes and is highly understated. For instance, in the final model results released by the Wireline Competition Bureau (Bureau) when it adopted the Connect America Cost Model, the Bureau identified over 152 million price cap locations. See *Wireline Competition Bureau Announces Connect America Phase II Support Amounts Offered to Price Cap Carriers to Expand Rural Broadband*, Public Notice, 30 FCC Rcd 3905, 3906, n.4 (WCB 2015) (linking to http://www.fcc.gov/wcb/CAM_4.3_Results_Final_042915.xlsx). This, of course, does not account for the tens of millions of locations served by rate-of-return carriers.

¹⁸ *FNPRM*, 32 FCC Rcd at 6342, para. 39.

¹⁹ *Id.* at 6372, Statement of Commissioner Michael O’Rielly.

gargantuan costs – the Commission should not entertain the prospect of imposing a highly onerous sub-census-block level collection.²⁰

Finally, as the *FNPRM* observes, the Commission already is receiving a good deal of fixed broadband deployment data on a level more granular than by census block.²¹ Section 54.316 of the Commission’s rules requires rate-of-return recipients of A-CAM model-based support, rate-of-return recipients of CAF-BLS, price cap recipients of Connect America Phase II model-based support, and winners of Connect America Phase II support through competitive bidding to submit geocoded deployment data via the HUBB Portal.²² Some of these support recipients additionally are required to file with the HUBB Portal geocoded deployment data for locations served prior to receiving the subject support.²³ Even if the Commission was to impose the cost-prohibitive mandate of all deployment supported by universal service high-cost funding being retroactively geocoded and submitted to the Commission and/or USAC, it would provide the Commission with an incomplete set of deployment data, as it would not account, for instance, for unsubsidized deployment. Therefore, the substantial burdens would far eclipse any purported

²⁰ Nor should the Commission require providers to submit data indicating, for each census block, whether they can make service available to all residential and business locations within that block. *See id.* at 6343-44, para. 43. While this approach would certainly be less burdensome both on providers and the Commission than an address-level collection, the data it would yield would hardly be more useful than the current requirement that providers submit a list of all census blocks where they do, or could without an extraordinary commitment of resources, make broadband service available.

²¹ *See id.* at 6341, para. 37.

²² 47 CFR § 54.316.

²³ *See, e.g., Connect America Fund*, Order, 32 FCC Rcd 1445, 1449, para. 14 (WCB 2017) (clarifying the obligations of A-CAM support recipients to report “pre-existing” broadband deployment information in the HUBB Portal).

benefits of mandating the provision of such data (which, as discussed above, are speculative to begin with).²⁴

For all of the foregoing reasons, the Commission should decline to require the additional collection of deployment data at the sub-census-block level.

IV. THE FORM 477 SHOULD BECOME AN ANNUAL COLLECTION

The *FNPRM* seeks to refresh the record on whether the Commission should shift the Form 477 to an annual collection.²⁵ ITTA supports such a change. While the per-round burden might increase with an annual filing²⁶ – especially given the manual intensiveness of corroborating the data – providers would have the option of achieving efficiencies by aggregating the data internally more frequently. An annual filing also provides a temporal buffer for companies expanding through acquisitions, insofar as systems integration likewise can render scrubbing the data a quite intensive process. In sum, ITTA agrees that the overall filing burden

²⁴ ITTA notes with incredulity the Commission’s estimate of 8-30 hours annually for each submission of geocoded deployment location data to the HUBB Portal. *See* FCC, Connect America Fund, 82 Fed. Reg. 14639, 14640 (Mar. 22, 2017). While that estimate of information collection burdens submitted in support of the Commission’s effort to secure OMB approval of the collection pursuant to the Paperwork Reduction Act should have encompassed both the time to geocode the location data as well as the time to actually report it in the HUBB Portal, the burdens of actually geocoding clearly were not considered. *See* Paperwork Reduction Act Comments of NTCA-The Rural Broadband Association Before OMB, ICR Reference No. 201612-3060-022 (filed Jan. 30, 2017), https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201612-3060-022. Because the burdens associated with geocoding and reporting deployment data were so vastly understated, the Commission should not rely on its previous estimates in evaluating the costs of now imposing a sub-census-block level data collection in this proceeding. Nor should it rely on its proposed revised estimate of 8-60 hours annually, which suffers from the same infirmities. *See* FCC, Information Collection Being Reviewed by the Federal Communications Commission, 82 Fed. Reg. 44785, 44786 (Sept. 26, 2017).

²⁵ *See FNPRM*, 32 FCC Rcd at 6348, para. 56.

²⁶ *See id.*

associated with Form 477 would decrease by switching to annual filing,²⁷ and ITTA urges the Commission to adopt this change.

V. WITHOUT FURTHER INDICATION OF WHAT IT CONTEMPLATES, THE COMMISSION SHOULD NOT PUBLICIZE DISAGGREGATED SUBSCRIPTION DATA

The *FNPRM* seeks comment on whether the Commission should make public “the number of subscribers at each reported speed on a national level.”²⁸ ITTA has concerns with this suggestion. For one thing, it is unclear precisely what level of disclosure the Commission is contemplating. While the *FNPRM* avers that “this change would not involve expressly identifying the specific filers submitting the information,”²⁹ that disclaimer arrives a mere two sentences after the Commission asserts its belief that “increased public access to disaggregated subscription data could have significant benefits” that may outweigh any confidentiality interests in such data.³⁰ Thus, it is difficult to discern, for instance, how such disaggregated data would differ from aggregated data, such as percentages of subscribers with access to broadband at speeds of 25/3 Mbps or greater, that the Commission already makes available. ITTA is also given pause by the *FNPRM*’s concession that with such disaggregated subscription data, “it might be possible to infer with reasonable certainty the provider or providers reporting subscribers at higher speeds, for which fewer providers offer service.”³¹

Without more specificity regarding what the Commission envisions, ITTA cannot determine whether disclosure of “this information” would be beneficial in any way and it must vigilantly safeguard the competitive sensitivity of disaggregated deployment data until it can

²⁷ *See id.*

²⁸ *Id.* at 6347, para. 53.

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

achieve reasonable certainty that disclosure of such information would not cause its members competitive harm. Thus, if the Commission wishes to continue to pursue this idea, it should seek further comment bolstered by a much greater level of detail concerning what it is contemplating.

VI. THE COLLECTION OF FIXED VOICE SUBSCRIPTION DATA IS CONFUSING AND WARRANTS IMPROVEMENT TO BE ACCURATE AND USEFUL

The *FNPRM* asserts that “[a]ccurate and reliable data on fixed and mobile broadband and voice services are critical to the Commission’s ability to meet the goal of decision-making based on sound and rigorous data analysis.”³² While the *FNPRM* contains sections seeking comment on potential revisions to the Commission’s data collection on mobile voice deployment and subscription,³³ fixed voice subscription data only receive peripheral treatment in one paragraph, wherein the Commission proposes to use such data, in conjunction with Study Area Boundary data, to develop and publish aggregated voice line counts for every rate-of-return study area.³⁴ ITTA believes that further examination is warranted in order to render such data “accurate and reliable.”

A number of problems surround the collection of data on non-traditional voice services. For instance, interconnected VoIP service providers are directed to report the number of interconnected VoIP service subscriptions sold to their own end-user customers by census tract. For enterprise customers, providers are to report the subscriptions based on the maximum number of interconnected VoIP calls that customers may have active, at the same time, between their physical locations and the public switched telephone network. The maximum number of such calls may be set out under the terms of service agreements or “may be determined by some other method that best reflects customer needs and requirements,” which the provider then is to

³² *Id.* at 6331, para. 6.

³³ *See id.* at 6336-38, Secs. III.A.3, 4.

³⁴ *See id.* at 6346, para. 50.

describe in the Explanations and Comments section of the form.³⁵ In the absence of further guidance, many providers spend an inordinate amount of time trying to determine an appropriate counting method and then actually tabulating the data. Moreover, the inevitable variance in methods between carriers calls into question the accuracy and reliability of the data.

Another example involves the directive that providers identify the census tract for each over-the-top interconnected VoIP customer by the customer's Registered Location, which is defined as the "most recent information obtained by an interconnected VoIP service provider that identifies the physical location of an end user."³⁶ Because customers can access over-the-top interconnected VoIP services from anywhere they have a broadband connection and providers have no control over whether users actually update their Registered location when they connect from a new location, this again begs the question of the accuracy and reliability of the data. And yet another illustration involves the reporting of Session Initiation Protocol services, which do not fall clearly within the Form 477's definition of either local exchange telephone service or interconnected VoIP service.

These are just a few examples of the confusion caused by the collection of fixed voice subscription data on the Form 477. The end result is that the collection threatens to defeat the Commission's goals of accurate and reliable data. The Commission should seek further comment on this collection with the objectives of lessening the burdens on providers and improving the quality of the data it yields.

VII. CONCLUSION

ITTA welcomes the opportunity initiated by the *FNPRM* for the Commission to increase the quality and accuracy of the information it collects via the Form 477 while also streamlining

³⁵ See FCC Form 477: Local Telephone Competition and Broadband Reporting, Instructions, at 19-20 (Dec. 5, 2016), <https://transition.fcc.gov/form477/477inst.pdf>.

³⁶ *Id.* at 37 (citing 47 CFR § 9.3 (defining interconnected VoIP Registered Location); *see also id.* at 19.

requirements and thereby reducing the burdens on filers.³⁷ For the foregoing reasons, the Commission should discontinue the collection of committed information rate data for fixed broadband providers offering business/enterprise/government services, decline to require fixed broadband providers to report more granular data, and shift the Form 477 collection to an annual one. In order to additionally advance these aims, the Commission also should seek further comment on its ambiguous suggestion that it may make public disaggregated subscription data, and on several aspects of its collection of fixed voice subscription data.

Respectfully submitted,

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³⁷ See *FNPRM*, 32 FCC Rcd at 6331, para. 6.