



Comcast Corporation
300 New Jersey Avenue, NW
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**REDACTED FOR PUBLIC INSPECTION – SUBJECT TO REQUEST FOR
CONFIDENTIAL TREATMENT PURSUANT TO 47 C.F.R. §§ 0.457 AND 0.459**

November 28, 2018

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Request for Confidential Treatment: Modernizing the FCC Form 477 Data
Program, WC Docket No. 11-10

Dear Ms. Dortch:

Comcast Corporation (“Comcast”) hereby submits the attached redacted version of its Notice of *Ex Parte* filing regarding its meetings with Federal Communications Commission (“FCC” or “Commission”) staff in the above-referenced docket (the “*Ex Parte*”). A confidential version of the *Ex Parte* has been hand delivered to the Commission today.

Pursuant to Exemption 4 of the Freedom of Information Act (“FOIA”) and FCC rules,¹ Comcast requests confidential treatment for the information in the *Ex Parte*, which contains commercially sensitive information (the “Comcast Information”). The Comcast Information relates to Comcast’s network and deployment of broadband service in the United States and includes company-specific, highly confidential and/or proprietary commercial information, including information protected from disclosure by FOIA Exemption 4² and the Commission’s rules protecting information that is not routinely available for public inspection and that would customarily be guarded from competitors.³

¹ 5 U.S.C. § 552(b)(4); 47 C.F.R. §§ 0.457(d) and 0.459; *see also* 18 U.S.C. § 1905 (prohibiting disclosure “to any extent not authorized by law” of “information [that] concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association”).

² 5 U.S.C. § 552(b)(4).

³ 47 C.F.R. §§ 0.457(d) and 0.459.

1. *Identification of the specific information for which confidential treatment is sought.* Comcast requests that the Comcast Information be treated as confidential pursuant to Exemption 4 of FOIA and Sections 0.457(d) and 0.459 of the Commission's rules, which protect confidential commercial and other information not routinely available for public inspection. The Comcast Information concerns Comcast's network and deployment of broadband service. This is company-specific, competitively-sensitive, business confidential and/or proprietary and commercial information concerning Comcast's operations that would not routinely be made available to the public, and has been carefully guarded from competitors. If it were disclosed, Comcast's potential competitors could use it to determine information regarding Comcast's competitive position, operations, and performance, and could use that information to gain a competitive advantage over Comcast.

2. *Identification of the Commission proceeding in which the information was submitted or a description of the circumstance giving rise to the submission.* Comcast is submitting the *Ex Parte* in the FCC's Wireline Competition Bureau Docket No. 11-10.

3. *Explanation of the degree to which the information is commercial or financial, or contains a trade secret or is privileged.* The Comcast Information contains company-specific, competitively-sensitive, confidential and/or proprietary, commercial information.⁴ This information can be used to determine information about Comcast's operations that is sensitive for competitive and other reasons. This information would not customarily be made available to the public in this form and customarily would be guarded from all others, especially potential competitors, that could use the information to enhance their market position at Comcast's expense.

4. *Explanation of the degree to which the information concerns a service that is subject to competition.* The confidential information at issue relates to Comcast's network and deployment of broadband service, which is subject to vigorous competition from other providers. If the information is not protected, Comcast's competitors and potential competitors will be able to use it to their competitive advantage.

5. *Explanation of how disclosure of the information could result in substantial competitive harm.* Since the Comcast Information generally would not be subject to public inspection and would customarily be guarded from competitors, the Commission's rules recognize that release of the information is likely to produce competitive harm. Disclosure could cause substantial competitive harm, because Comcast's competitors and potential competitors

⁴ The Commission has broadly defined commercial information, stating that "[c]ommercial" is broader than information regarding basic commercial operations, such as sales and profits; it includes information about work performed for the purpose of conducting a business's commercial operations." *Southern Company Request for Waiver of Section 90.629 of the Commission's Rules*, Memorandum Opinion and Order, 14 FCC Rcd 1851, 1860 (1998) (citing *Public Citizen Health Research Group v. FDA*, 704 F.2d 1280, 1290 (D.C. Cir. 1983)).

could assess aspects of Comcast's commercial operations and could use that information to undermine Comcast's competitive position.

6.-7. *Identification of any measures taken by the submitting party to prevent unauthorized disclosure, and identification of whether the information is available to the public and the extent of any previous disclosure of the information to third parties.* The Comcast Information is not available to the public, and has not otherwise been disclosed previously to the public. Comcast takes precautions to ensure that this information is not released to the general public or obtained by its competitors and potential competitors through other means.

8. *Justification of the period during which the submitting party asserts that the material should not be available for public disclosure.* Comcast requests that the Comcast Information be treated as confidential indefinitely, as it is not possible to determine at this time any date certain by which the information could be disclosed without risk of harm.

9. *Any other information that the party seeking confidential treatment believes may be useful in assessing whether its request for confidentiality should be granted.* Where disclosure is likely to impair the government's ability to obtain necessary information in the future, it is appropriate to grant confidential treatment to that information.⁵ Failure to accord confidential treatment to this information is likely to dissuade providers from voluntarily submitting such information in the future, thus depriving the FCC of information necessary to evaluate facts and market conditions relevant to its jurisdiction.

If a request for disclosure occurs, please provide sufficient advance notice to the undersigned prior to any such disclosure to allow Comcast to pursue appropriate remedies to preserve the confidentiality of the information.

If you have any questions or require further information regarding this request, please do not hesitate to contact me.

Respectfully submitted,

/s/ Beth Choroser

Beth Choroser

Vice President

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⁵ See *National Parks and Conservation Ass'n. v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974); see also *Critical Mass Energy Project v. NRC*, 975 F.2d 871, 878 (D.C. Cir. 1992) (*en banc*) (recognizing the importance of protecting information that "for whatever reason, 'would customarily not be released to the public by the person from whom it was obtained'" (citation omitted)).

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Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Notice of *Ex Parte*: Modernizing the FCC Form 477 Data Program, WC Docket
No. 11-10

Dear Ms. Dortch:

On November 26, 2018, Jim Janco and the undersigned of Comcast Corporation (“Comcast”), along with Emily Daniels of Lawler, Metzger, Keeney & Logan, LLC, outside counsel to Comcast, met with Steven Rosenberg, Rodger Woock, John Emmett, Suzanne Mendez, and Ying Ke of the Wireline Competition Bureau. Comcast’s representatives also engaged in separate meetings with: (1) Preston Wise, Acting Special Counsel to Chairman Pai; (2) Arielle Roth, Wireline Legal Advisor to Commissioner O’Rielly, and Kagen Despain of Commissioner O’Rielly’s office; (3) Jamie Susskind, Chief of Staff to Commissioner Carr; and (4) Travis Litman, Chief of Staff and Senior Legal Advisor to Commissioner Rosenworcel.

During the meetings, Comcast’s representatives discussed the Commission’s ongoing proceeding regarding how best to ensure that FCC Form 477 submissions provide useful data about the state of communications deployment. Comcast suggested that the Commission’s work in this proceeding should be aimed at balancing the granularity, accuracy, and timeliness of the deployment data it collects. In particular, Comcast discussed the challenges associated with submitting address-level information and indicated that data could not be provided in that format in an accurate or timely fashion. Instead, Comcast urged the Commission to initiate a pilot program to explore the feasibility of submitting deployment data at the road/street segment level. This approach would provide the Commission with much more granular data than it obtains today and also could be prepared and submitted by service providers relatively quickly.

Providers Cannot Submit Accurate, Timely Address-Level Information. There are a number of practical concerns associated with measuring broadband deployment through the collection of nationwide address-level data that make this approach infeasible in the near future. As set forth below, there appear to be misconceptions about the address-level data that cable providers such as Comcast collect and maintain in the ordinary course of business, as well as confusion regarding the accuracy of the available industry resources (*e.g.*, geocoding tools).

(1) Accurate address-level speed information is not always available.

To prepare its FCC Form 477 filings today, Comcast seeks to associate each address in its serviceability tool (*i.e.*, the online marketing tool that a potential subscriber uses to determine whether Comcast can provide service to a specific address) with a maximum speed tier that is associated with the serving cable modem termination system (“CMTS”) in a head-end or hub site. Each time Comcast prepares the FCC Form 477, however, it encounters approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] addresses for which there is no current CMTS association. In these instances, Comcast must rely on default speeds in a market area to infer the speed for the impacted addresses. In addition, advertised speeds from marketing databases and CMTS data at times differ. There also are configurations in which the CMTS data alone cannot be relied upon to determine the speed available to the individual address.

Because the lack of speed data in a subset of addresses does not need to be addressed in order to file accurate information at the census block level, Comcast focuses on resolving the issues identified above as fully as possible after submitting the Form 477 in question and actively monitors for additional such discrepancies as they arise.¹ The addresses in question, however, frequently change between filings due to changes in the network, network maintenance, and network testing. As a result, it is impossible for Comcast to ever fully resolve these issues.

It would be an immense undertaking for Comcast to achieve the level of accuracy that would be necessary for a reliable address-level data submission. To resolve the speed-related issues identified above, Comcast’s FCC Form 477 team would have to contact each cable plant subject matter expert in each of its local markets across the country. In turn, each of these [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of subject matter experts would have to provide detailed information about any and all known plant variations that impact the speed available to individual addresses. These subject matter experts also would have to individually investigate the addresses for which CMTS-based information is incomplete or varies from the marketing database. After doing so, Comcast’s FCC Form 477 team would need to incorporate these variances and responses into its filing—all steps that are not required today.

¹ See, *e.g.*, Letter from Thomas Cohen and J. Bradford Currier, Counsel for the American Cable Association, to Marlene H. Dortch, FCC Secretary, WC Docket No. 11-10, at 2 (Oct. 19, 2018) (“While operators aim to have up-to-date, comprehensive lists, most operators report that their databases are far from perfect.”) (“ACA *Ex Parte*”).

Accordingly, in order to provide the Commission with accurate speed data, Comcast (and, we believe, other providers) would need substantially more time to prepare and verify address-level data each time they submit the Form 477. Even if afforded adequate preparation time, service providers also would need to expend significant resources to comply with an address-level requirement. Moreover, as others have pointed out, requiring an executive to attest that every single address, as well as the associated address-level speed and technology data, is accurate would be unreasonable.²

(2) There are established precision and accuracy concerns with latitude/longitude indicator (“LLI”) data.

Today, Comcast uses LLI data from a third-party vendor to link locations to a census block for purposes of the FCC Form 477 submission. Should the Commission decide to collect broadband deployment data on an address-level basis in the future, it would have to either rely on this LLI information to standardize and eliminate duplicate entries from the Form 477 data or require service providers to submit LLI information.

LLI information, however, frequently is imprecise at the address level.³ For example, Comcast has almost [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] addresses where the LLI is mapped only at the center of a zip code or street rather than at a precise location. In addition, LLI geocoding precision is slightly lower in rural census blocks where accuracy is of key importance to the Commission’s objectives. Approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of geocodes in Comcast’s rural census blocks are mapped at the center of a zip code or street segment. LLI precision also is lower for the approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] new addresses that Comcast encounters annually.

This concern plainly is not limited to Comcast. To the contrary, there is widespread industry recognition that geocoding tools are not fully accurate. For example, USTelecom correctly indicated that the “geocoding process, while mostly accurate in urban and suburban

² Letter from Julie A. Veach, Counsel to GCI Communication Corp., to Marlene H. Dortch, FCC Secretary, WC Docket No. 11-10, at 3 (Oct. 25, 2018) (“requiring providers to certify that their data accurately reflect the serviceability of every location (or other unit of reporting) . . . would place a phenomenal burden on filers, particularly in remote areas”) (“GCI *Ex Parte*”).

³ The imprecisions inherent in LLI data are not problematic for purposes of submitting census block-level data to the Commission. Comcast believes the same would be true for submission of road/street segment-level data.

areas, does not work well for rural America because the available data is less robust.”⁴ Similarly, CostQuest noted that “geocoders . . . [r]ely on datasets that are incomplete, not focused on rural America, and not necessarily built for the georeferencing of potential broadband demand locations.”⁵

Given the inherent limitation on the accuracy of any database or map the FCC could create using address-level information, the Commission presumably would need to develop some form of a challenge process to address inaccuracies on a case-by-case basis. Such a process would be difficult, costly, and time-consuming to administer. As a result, it is doubtful that an address-level data collection could produce consistently reliable broadband location information that would be helpful for purposes of upcoming Commission programs (*e.g.*, the Remote Areas Fund).

(3) Recent proposals in the record do not eliminate concerns about address-level accuracy.

The record makes clear that there is no existing nationwide database available to the Commission that contains complete address or location information for purposes of assessing broadband service availability.⁶ To the contrary, the record reflects that a number of rural locations may not have any valid street addresses.⁷

Notwithstanding recent proposals that the Commission create such a database, the concerns regarding data accuracy that are identified above remain. These proposals suggest that the Commission create a database of all locations in the United States by requiring providers to submit all known addresses they serve or previously have served in whatever format the

⁴ Letter from B. Lynn Follansbee, Vice President – Law & Policy of USTelecom, to Marlene H. Dortch, FCC Secretary, WC Docket No. 11-10, at 1 (Oct. 17, 2018) (“USTelecom *Ex Parte*”).

⁵ Letter from James W. Stegeman, President and CEO of CostQuest Associates, Inc., to Marlene H. Dortch, FCC Secretary, WC Docket Nos. 11-10 and 10-90, Attach. at 12 (Nov. 16, 2018) (“CostQuest *Ex Parte*”); *see also* Letter from Ola Oyefusi, Director of Federal Regulatory at AT&T, to Marlene H. Dortch, FCC Secretary, WC Docket Nos. 11-10 and 10-90, at 3 (Oct. 12, 2018) (“geocoding resources and methods are of varying quality and almost universally weak in rural areas”) (“AT&T *Ex Parte*”).

⁶ *See, e.g.*, ACA *Ex Parte* at 7 (“there is no national database of street addresses and for good reason”); CostQuest *Ex Parte*, Attach. at 9 (“A national georeferenced location dataset . . . does not currently exist[.]”); USTelecom *Ex Parte* at 1 (“a single, public nationwide database of addressable structures does not exist”).

⁷ For example, GCI Communication Corp. recently indicated to the Commission that this may be the case for 75% of locations in Alaska outside of larger towns. GCI *Ex Parte* at 1.

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addresses are maintained.⁸ The Commission then would augment this data with additional sources and internally geocode those addresses.⁹ Once geocoding is complete, the Commission would require carriers to identify which of the geocoded locations they can serve and to provide technology and speed information.¹⁰

As an initial matter, it is unclear how the Commission could quickly process and combine such disparate and voluminous information.¹¹ Even assuming *arguendo* that this step could be accomplished, the resulting database or list would be woefully incomplete. By focusing only on current and former service addresses, the many locations to which a service provider could provide service within 7 to 10 business days would not be included.

Worse yet, the geocoding process would introduce a significant number of errors, particularly in rural areas, given the accuracy limitations of LLI data.¹² Indeed, the Commission's location list or database likely would be inaccurate in *tens of millions* of instances nationwide.

Being forced to rely on an incomplete and inaccurate location list or database would make it virtually impossible for providers to determine whether they can serve the underlying addresses in question. In the likely event that the FCC's list would be formatted differently than Comcast's internal list, Comcast would be required to create proximity logic to map two close but unmatched LLI points. Comcast then would be required to undertake a case-by-case review to determine whether unmatched LLI points relate to the same service address. This process easily could take ten times the current amount of work involved in preparing an FCC Form 477 filing today.¹³

In addition, because the proposed "solution" does not address the concern identified above that accurate speed information is not always available at the address or location level,¹⁴ Comcast also would be required to undertake additional work to provide speed data. Even where

⁸ USTelecom *Ex Parte* at 2; AT&T *Ex Parte* at 2-3 ("Carriers would be asked to submit, on a best efforts basis, only the street addresses of all current and if possible former service addresses.")

⁹ USTelecom *Ex Parte* at 2; AT&T *Ex Parte* at 3-4.

¹⁰ USTelecom *Ex Parte* at 2; AT&T *Ex Parte* at 4

¹¹ See, e.g., CostQuest *Ex Parte*, Attach. at 12 (noting that "which addresses are valid is subjective" and that "validity may differ among service providers and [the] FCC").

¹² See discussion *supra* at 3-4.

¹³ Assuming *arguendo* that Comcast's internal list of geocoded addresses is formatted in the same way as the FCC's list (*i.e.*, the same LLI vendor is used), it would take Comcast more than twice as long as it does today to prepare the FCC Form 477 submission.

¹⁴ See discussion *supra* at 2-3.

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speed information is available, it is entirely unclear how service providers could possibly associate speed tiers with addresses that have been standardized in a manner that does not match the formats used in providers' internal systems.

As a result, even after expending significant effort and resources, Comcast's submission would include a significant number of inaccuracies, as would the filings by each and every other service provider. It is simply unreasonable to expect that different address and/or LLI formats could be reconciled in a manner that is accurate for each and every address across the nation. In turn, any broadband availability service map and database produced by the Commission would reflect all such inaccuracies, thereby creating a flawed overall picture of service availability.

The FCC Should Proceed with a Pilot Program that Gathers Road/Street Segment-Level Deployment Data. As CostQuest recently proposed, the FCC may be best served by moving forward with a pilot program as its next step.¹⁵ Given the variety and seriousness of the problems that currently undermine any effort to collect accurate address-level data, Comcast proposes that the Commission focus the pilot program on directing service providers to submit deployment data based on street segments. In doing so, providers should be required to use an agreed upon methodology, such as the Census Bureau TIGER/LINE® Shapefiles, and to provide the highest advertised speed for each street segment. The Commission initially should limit the pilot program to a subset of locations, such as locations in the lowest density rural census blocks or locations in a sample of both rural and urban census blocks.

Obtaining street segment data would dramatically increase the granularity of the information available to the Commission within a reasonable period after the data has been collected. Further, a street segment approach would provide the Commission with the information needed to better direct subsidies to areas where there currently is no broadband service. For example, this approach specifically addresses the most significant problem with the Commission's current reliance on census block-level data collection – *i.e.*, partially-served census blocks in high-cost areas.

In addition, as the American Cable Association has indicated:

[W]hile collecting and reporting broadband deployment information on a street segment basis will impose additional burdens on all providers reporting broadband deployment information, it can be implemented relatively quickly and would be far less burdensome than other options to obtain more granular data, such as requiring reporting on an individual address basis.¹⁶

¹⁵ CostQuest *Ex Parte*, Attach. at 33.

¹⁶ See, *e.g.*, ACA *Ex Parte* at 1.

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As a result, this approach “adequately balances [the Commission’s] competing interests.”¹⁷

Moreover, by undertaking this approach as a pilot program to start, the Commission would be able to work with a manageable amount of data to study the practicalities of converting the data submitted into a format suitable to its needs. After completing the pilot program, the Commission should be well-positioned to make any modifications that may be needed before undertaking a nationwide data collection. As a result, the Commission would be much more likely to obtain accurate and usable broadband deployment data than it would by pursuing an address-level data collection program.

Respectfully submitted,

/s/ Beth Choroser

Beth Choroser

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¹⁷

Id.