Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination	GN Docket No. 22-69

REPLY COMMENTS OF THE MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND CABLE

Commonwealth of Massachusetts
Department of Telecommunications and Cable

KAREN CHARLES PETERSON
COMMISSIONER

1000 Washington Street, Suite 600
Boston, MA 02118-6500
(617) 305-3580

Dated: June 30, 2022

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination	GN Docket No. 22-69

REPLY COMMENTS OF THE MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND CABLE

The Massachusetts Department of Telecommunications and Cable ("MDTC")[1] respectfully submits these comments in response to the Notice of Inquiry ("NOI") released by the Federal Communications Commission ("FCC") on March 17, 2022, in the above-captioned proceeding.[2] The FCC initiated the NOI to solicit comments on the requirements encompassed in § 60506 of the Infrastructure Investment and Jobs Act ("Infrastructure Act"), with the goal of ensuring that it can identify and prevent "digital discrimination of access based on income level, race, ethnicity, color, religion, or national origin."[3] In the NOI, the FCC seeks comments on several issues related to interpreting § 60506, including ways to define and measure digital discrimination. The MDTC recommends improving and expanding FCC data collection on broadband availability, adoption, affordability, and quality of service. It also suggests partnerships with state and local governments to track and ensure digital equity.

[1] The MDTC regulates telecommunications and cable services within Massachusetts and represents the Commonwealth before the FCC. MASS. GEN. LAWS ch. 25C, § 1; MASS. GEN. LAWS ch. 166A, § 16. The MDTC is also charged with helping to develop broadband policy in Massachusetts. MASS. GEN. LAWS ch. 25C, § 1.

[2] *In re Implementing the Infrastructure Investment & Jobs Act: Prevention & Elimination of Digital Discrimination*, GN Docket No. 22-69, *Notice of Inquiry*, FCC 22-21 (Mar. 17, 2022).

[3] *See* Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 60506, 135 Stat. 429 (2021) (codified at 47 U.S.C. § 1754).

I. SUMMARY

The FCC cannot prevent digital discrimination without first accurately assessing whether, where, and how discrimination is occurring in the broadband market. This analysis requires reliable and accurate data. The data currently available is insufficient to assess whether digital discrimination exists because it is too generalized, too aggregated, too inaccurate, and often outdated. Currently, there is no way of knowing what services are offered and sold in any location. We do not know how much consumers are paying for broadband services or whether similarly situated households pay different amounts. We also do not know whether differences exist in service quality across different households or different geographic locations. These knowledge gaps make it impossible to meaningfully assess whether different groups might be disparately impacted.

Because the current available data is insufficient, the FCC must gather new data to allow it to measure, identify, and address digital discrimination. Specifically, the MDTC urges the FCC to collect pricing data from internet service providers—both the "sticker price" that is advertised for services as well as the monthly amount that customers pay. The FCC should also look to improve and expand its existing data collection on physical service availability and low-income programs, such as Lifeline and the Affordable Connectivity Program. In addition, the FCC should consider expanding its crowdsourcing efforts by allowing consumers to optionally submit sociodemographic information when using the FCC Speed Test App, along with additional information about their service, such as service level and monthly service cost. Relatedly, the FCC must also collect quality-of-service metrics such as median download and upload speeds, latency, jitter, outages, and network maintenance efforts when determining whether all households are receiving equitable treatment.

II. EXISTING DATA INDICATES DISPARITIES IN BROADBAND ACCESS ACROSS INCOME AND RACE

Although the inadequacy of existing broadband data has been well documented,[4] this data nevertheless already indicates that households are disparately impacted in their broadband experiences based on socioeconomic characteristics.

For example, the MDTC found a strong link between affordability and functional availability of broadband for Massachusetts consumers by using FCC Form 477 data combined with U.S. Census household income information.[5] Specifically, the MDTC tested and found a strong correlation between median household income and subscription rates to available fixed broadband services. The MDTC's analysis indicates that Massachusetts households earning $40,000 annually are only two-thirds as likely to subscribe to fixed broadband services (60.1%) as are households earning $100,000 annually (93.2%).[6]

In another example, the City of Boston's Human Rights Commission ("BHRC") found that low-income parts of the city as well as parts of the city where the residents are predominantly communities of color "experience the digital divide disproportionately."[7] BHRC's findings also draw from FCC Form 477 and U.S. Census demographic data.

A separate report, commissioned by the Essex County Community Foundation, found that cities in Essex County (MA) that struggle most with broadband access tend to be the most

[4] *See, e.g.*, *infra* Section III.c.

[5] *In re Inquiry Concerning Deployment of Advanced Telecomms. Capability to All Ams. in a Reasonable & Timely Fashion*, GN Docket No. 20-269, MDTC Reply Comments (Oct. 5, 2020) at 9-10 ("MDTC 706 Reply Comments").

[6] *Id.*

[7] BOSTON HUMAN RIGHTS COMM'N, BROADBAND ACCESS IN BOSTON PROJECT REPORT 6 (2021), *available at* https://www.boston.gov/sites/default/files/file/2022/03/Broadband-Access-in-Boston-Report-Part-1.pdf.

economically disadvantaged.[8] It also found that Latino residents in particular are disproportionately affected by the digital divide.[9] The report used U.S. Census American Community Survey data to draw these conclusions.

And in the FCC's Connecting the Disconnected Forum, one panelist remarked an observable income-based digital divide between the east and west sides of his city.[10] More specifically, the panelist noted that broadband service quality is poorer in lower-income neighborhoods, even for families that can afford broadband.[11]

Despite these examples of existing data pointing to potential problems, the data is too general, outdated, or, in some cases, inaccurate to aid in confirming whether problems exist, let alone addressing them. We cannot fix potential problems without first fully identifying and understanding them, and we cannot fully understand these problems without first being able to zoom in on them and deconstruct the underlying issues. In short, we cannot fix what we cannot measure.

III. THE FCC MUST COLLECT IMPROVED, GRANULAR DATA ON A CONSISTENT BASIS

To effectuate Congress's intent, the FCC should improve and expand its data collection efforts, beginning with developing a set of standards for measuring digital discrimination. The FCC must first define the aspects of digital discrimination that it seeks to address in order to paint a clearer picture of what kind of data is needed and how it should be collected. This set of

[8] ESSEX COUNTY CMTY. FOUND., STRIVING FOR DIGITAL EQUITY. A REPORT ON THE CHALLENGES AND OPPORTUNITIES THE DIGITAL DIVIDE PRESENTS TO ESSEX COUNTY COMMUNITIES (2020), *available at* https://www.eccf.org/wp-content/uploads/2020/10/ECCF-Digital-Divide-Report_English.pdf.

[9] *Id.*

[10] FCC, *Connecting the Disconnected Forum*, https://www.fcc.gov/news-events/events/2021/10/connecting-disconnected-forum (statement by Shreveport, LA Mayor Adrian Perkins).

[11] *Id.*

guidelines for defining and identifying digital discrimination could function as a living, adaptable document that reflects current best practices and data sources.[12] In developing these standards, the MDTC urges the FCC to consider the various ways in which equal access to broadband internet access services ought to be measured. The MDTC concurs with the recommendations provided by the National Digital Inclusion Alliance ("NDIA")[13] and specifically recommends that the FCC assess equal access through four different lenses: availability, adoption, affordability, and quality of service.

For availability, the FCC should examine whether comparable broadband deployment exists across all groups of interest.[14] For adoption, the FCC should examine whether, in areas where broadband has been deployed and is available, adoption is comparable across all groups of interest. Relatedly, the FCC should also examine whether broadband is equally affordable in areas where it is available. Finally, the FCC should examine whether broadband performance is comparable across groups of interest—that is, for households paying for the same service, whether the quality of experience (based on metrics such as median download speeds or jitter) is different for different groups.

To achieve this level of understanding and effectiveness requires acknowledgment of the important role data collection practices play in identifying and addressing disparities. Specifically, the MDTC urges the FCC to assess equal access through the four lenses identified

[12] *Cf.* U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES, *available at* https://www.justice.gov/atr/horizontal-merger-guidelines-0 (establishing a definite but adaptable set of guidelines by which to analyze horizontal mergers).

[13] Comments of the National Digital Inclusion Alliance (filed May 16, 2022).

[14] "Groups of interest" may include groups differentiated by income level, race, ethnicity, color, religion, or national origin. *See* NOI ¶ 2.

above by considering five areas of improved and expanded data collection: pricing, low-income programs, physical service availability, crowdsourcing, and quality of service.

a. Pricing Data

The MDTC concurs with the several commenters that identified the importance of collecting pricing data.[15] One common measure of disparate impact is price; different prices charged to different groups of people for the same service. We have seen it happen with home prices,[16] mortgage rates,[17] home rentals,[18] and auto loans.[19] Services with pricing discretion often provide opportunities for discriminatory behavior. The FCC does not currently collect data on actual pricing of broadband services at a granular level. The FCC's Urban Rate Survey Data[20] is only updated annually and contains highly aggregated statewide data. This renders it ineffectual for analyzing whether, in practice, different groups of people are getting worse deals for similar service.

Most large broadband providers generally report uniform or near uniform standard rates across their served territory, even when the territory is geographically and demographically

[15] *See, e.g.*, Comments of Public Knowledge (filed May 17, 2022) at 9; Comments of NDIA at 7; Comments of Free Press (filed 17, 2022) at 7; Comments of Open MIC (filed 16, 2022) at 6-7.

[16] Brentin Mock, *Freddie Mac Finds 'Pervasive' Bias in Home Appraisal Industry*, BLOOMBERG NEWS, Sept. 28, 2021, https://www.bloomberg.com/news/articles/2021-09-28/study-finds-widespread-racial-disparities-in-appraisals.

[17] Raheem Hanifa, *High-Income Black Homeowners Receive Higher Interest Rates Than Low-Income White Homeowners*, JOINT CTR. FOR HOUS. STUDIES OF HARVARD UNIV., Feb. 16, 2021, https://www.jchs.harvard.edu/blog/high-income-black-homeowners-receive-higher-interest-rates-low-income-white-homeowners.

[18] Manny Garcia, *Renters of Color Pay Higher Security Deposits, More Application Fees*, ZILLOW, Apr. 6, 2022, https://www.zillow.com/research/renters-of-color-higher-fees-30922/.

[19] Fed. Trade Comm'n, *Auto Dealership Bronx Honda, General Manager to Pay $1.5 Million to Settle FTC Charges They Discriminated Against African-American, Hispanic Car Buyers*, May 27, 2020, https://www.ftc.gov/news-events/news/press-releases/2020/05/auto-dealership-bronx-honda-general-manager-pay-15-million-settle-ftc-charges-they-discriminated.

[20] FCC, *Urban Rate Survey Data & Resources*, https://www.fcc.gov/economics-analytics/industry-analysis-division/urban-rate-survey-data-resources.

diverse.[21] These standard rates represent a maximum rate, however, and do not necessarily reflect actual prices paid. Providers routinely use promotional pricing to attract and retain customers and rely on their sales agents to make customer-specific judgments. Similarly, some customers are often kept on older "legacy" plans when newer plans are available. While this pricing flexibility is an acceptable practice in the aggregate, it relies on distributed and subjective judgment which can lead to different groups of people paying different rates.

If a low-income or minority household is being charged more for broadband services relative to a comparable household across the street, the FCC currently has no way of knowing. Similarly, if high-income households are being charged the sticker price but systematically receiving higher discounts, the FCC has no way of knowing. It is in the interest of the FCC and every resident for the FCC to know if this is happening.

To that end, the FCC should require providers to submit pricing information—both sticker price and actual price charged. In order to allow for disparate-impact analyses, the data should be as granular as possible. The MDTC recommends requiring providers to submit median monthly advertised and actual charges at the census block level, by service tier. This level of aggregation would not contain household-level information, protecting subscriber confidentiality, but would still allow the FCC and others to draw inferences about the households based on U.S. Census demographic information. Analysis of this data could spring multiple stakeholders into action. Local governments could target specific areas for aid. The FCC could ask local providers to investigate the root cause for the differences, monitor the situation for changes over time, and prescribe solutions as appropriate.

[21] *See, e.g.*, Verizon Fios Internet, https://www.verizon.com/home/fios-fastest-internet/ (advertising three rates ($89.99, $64.00, and $39.99), regardless of location).

b. Low-Income Program Data

As noted by NDIA and The Leadership Conference on Civil and Human Rights,[22] in order to administer the Lifeline and Affordable Connectivity Programs, the Universal Service Administrative Company ("USAC") collects a useful set of periodically updated data submitted by service providers. This includes the addresses of households applying for and participating in the programs, as well information about how a household qualifies for a program; the size of the household; the age of program subscribers; the service type; and the service provider. And because provider reimbursement depends on timely monthly filings, the data is generally up-to-date and accurate over time. However, the detailed data is not shared publicly or with governments.[23] The FCC could use USAC's data to examine whether households are being steered to different products or different prices according to their composition, age, eligibility, or address. If access to such data is granted to state governments, it will facilitate collaboration in identifying areas that are undersubscribed for discounts and targeting them with outreach.

c. Physical Service Availability

Understanding whether there are differences in broadband deployment necessitates a clear picture of where and when broadband is deployed. The FCC's current tool to measure where broadband is located is Form 477 which has long been recognized as insufficient.[24] The

[22] Comments of NDIA at 16; Comments of The Leadership Conference on Civil and Human Rights (filed May 16, 2022) at 4.

[23] The MDTC has received snapshots of Lifeline subscribers at the zip code level, but no additional information was provided beyond zip codes and total Lifeline subscribers.

[24] *See, e.g.*, *In re Inquiry Concerning Deployment of Advanced Telecomms. Capability to All Ams. in a Reasonable & Timely Fashion*, GN Docket 19-285, 2020 Broadband Deployment Report (rel. Apr. 24, 2020) ("Form 477 data is obviously extremely flawed and problematically applied as a basis for distributing USF funding, as recognized by Congress in the Broadband DATA Act.") (statement of O'Rielly, Cmm'r), ("It is a shame that we are once again relying on Form 477 data, with all its inaccuracies. At this point, Form 477's problems are well documented, acknowledged throughout the telecommunications industry, and recognized by bipartisan majorities in both houses of Congress. And they are recounted in the 2018 and 2019 iterations of this report. We are all well versed in Form 477's flaws.") (statement of Starks, Cmm'r, dissenting), ("Making matters worse, the FCC relies on information

MDTC has previously noted the problems of Form 477.[25] Availability of the public portions of Form 477 continues to be delayed to such degree as to significantly diminish its value as an indicator of current reality.[26] In recognition of this, the FCC will soon roll out an improved Broadband Data Collection program which will offer more accurate granular data of deployment and availability in the United States. The MDTC agrees with several commenters[27] that granularity is essential and thus applauds this effort, while urging the FCC to be mindful of the importance of provider accountability and quickly correcting any identified errors. It is also important that data be made available in a timely manner so that deficiencies and injustices can be identified in a manner that can lead to actionable corrective measures rather than being smoothed out by the passage of time.

d. Crowdsourcing

The FCC currently collects and makes available crowdsourced broadband data via the FCC Speed Test app which people can use through their mobile phones. The voluntary app collects data on quality-of-service metrics including download speed, upload speed, latency, jitter, packet loss, and the service provider.[28]

---

submitted by providers without a system to independently verify the data. Last year, this allowed one company overstate its service coverage by tens of millions of people. This year, one of the country's largest providers found that it too had overstated its coverage in thousands of areas. So it's no wonder the FCC's broadband data has been the subject of nonstop criticism from consumers and Congress.") (statement of Rosenworcel, Cmm'r, dissenting), *available at* https://www.fcc.gov/ecfs/file/download/DOC-5d3685dd89c00000-X.pdf?file_name=FCC-20-50A1_Rcd.pdf.

[25] *See* MDTC 706 Reply Comments at 4-6.

[26] The MDTC agrees with NDIA, which urged the FCC to "make the detailed data publicly available on a consistent and timely basis." Comments of NDIA at 15.

[27] *See* Comments of Public Knowledge at 20; Comments of Multicultural Media, Telecom and Internet Council (filed May 16, 2022) at 19-20; Comments of City and County of San Francisco (filed May 17, 2022) at 8; Comments of NDIA at 7; Comments of Microsoft (filed May 16, 2022) at 6.

[28] FCC, 2021 FCC SPEED TEST APP TECHNICAL DESCRIPTION, *available at* https://www.fcc.gov/sites/default/files/2021_fcc_speed_test_app_technical_description.pdf.

The MDTC encourages the FCC to go further with this app and allow users to optionally submit more data as part of their tests. For example, the app could allow users to include sociodemographic information such as their gender, race/ethnicity, and income. It could also invite users to self-report their monthly broadband service level and price. Finally, the FCC could make the raw data more accessible to researchers and governments by allowing certain stakeholders to obtain geographic information about where the tests are conducted and by releasing data more regularly.

An expanded version of the Speed Test app could offer an avenue for consumers to participate in the fight against digital discrimination by volunteering their information to the cause. The FCC, governments, and researchers could use this data to see who is paying for what and compare price and service quality across different areas. App-reported performance metrics could offer a much-needed window into the service consumers experience and would help the FCC understand whether different people paying for the same service are getting the same speeds with comparable consistency.

e. Quality of Service

Beyond self-reported data, the MDTC joins other commenters[29] to urge the FCC to pay close attention to performance metrics. In order to verify that discrimination is not happening at the quality-of-service level, the FCC must have insight into and access to quality-of-service metrics that are measured routinely by service providers. This will necessitate collecting additional periodic service quality information across multiple providers, geographies, and

[29] *See* Comments of Public Knowledge at 7; Comments of the National Broadband Mapping Coalition (filed May 17, 2022) at 4.

service levels.[30] For example, the FCC could explore ways to ascertain whether different households paying for the same service levels from a provider are consistently getting the same speeds and performance. The importance of consistency as a quality-of-experience metric was recently brought to light in the FCC's Broadband Consumer Labels 2nd Virtual Public Hearing, where various consumers expressed a divide between the service they paid for and the service they received in terms of both speed and reliability. To that end, it is important for the FCC to consider ways to compare a household's experience with service latency, jitter, outages, and network maintenance.

IV. STATES CAN AND SHOULD PLAY A ROLE IN DATA ANALYSIS AND INVESTIGATION

The Infrastructure Act requires the FCC to "develop model policies and best practices that can be adopted by States and localities to ensure that broadband internet access service providers do not engage in digital discrimination."[31] With the role of state and local government in the fight against digital discrimination explicitly declared by Congress, the FCC should recognize as much with its policies and partnerships moving forward. Specifically, the FCC should invite states to receive any data it collects that can aid in identifying and remediating any instances of digital discrimination. This will enable states to partner with the FCC to thoroughly monitor and investigate that data for incidences of disparate impact. Further, states can use their own data collection to amplify partnerships with the FCC and maximize their impact.

Broadband access varies in different geographic areas; in other words, the FCC cannot create a one-size-fits-all approach because the national panorama will not match the on-the-

[30] One way to accomplish this would be by expanding the scope and granularity of the Measuring Broadband America (MBA) program. *See* FCC, *Measuring Broadband America*, https://www.fcc.gov/general/measuring-broadband-america.

[31] 47 U.S.C. § 1754(d).

ground, local picture in most cases. Instead, the FCC should consider the differences between a national vision and a local vision. States should be given the option and tools to partner with the FCC and pursue investigations and involvement. The FCC must commit to states that want to help prevent digital discrimination by providing the data and federal authority to investigate and combat digital discrimination.

V. CONCLUSION

For the FCC to successfully identify, correct, and prevent digital discrimination, as directed by Congress, it must improve and expand its data collection to allow it to identify the problems it seeks to address. Throughout this process, states must be allowed to participate and provide their data-analysis expertise where appropriate.

Respectfully submitted,

KAREN CHARLES PETERSON, COMMISSIONER

By: */s/ Marina Levy*
Marina Levy
Competition Data Analyst

Massachusetts Department of
Telecommunications and Cable
1000 Washington Street, Suite 600
Boston, MA 02118-6500
(617) 305-3580

June 30, 2022