



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Ron Wyden
United States Senate
221 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Wyden:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

Since the passage of the Broadband DATA Act, the Federal Communications Commission has worked carefully to implement the requirements of the law and to begin the iterative data collection and challenge processes envisioned by the Act through the creation of its Broadband Data Collection program. The Broadband Data Collection is a real departure from the Commission's previous Form 477 process for identifying the state of broadband deployment. The Form 477 process, which was used by the agency in various formats for decades, collected data only at the census-block level. If there was a single subscriber in a census block, the agency assumed service was available throughout. As a result, the Form 477 process systematically overstated the presence of broadband, particularly in rural areas. In addition, this process lacked a mechanism to verify that data based on the on-the-ground experience of consumers and other stakeholders.

This is no longer the case. As required by the Broadband DATA Act, the Commission has built an entirely new data-collection system for ingesting, validating, and aggregating both provider data for download and publication on the National Broadband Map. This system is also designed to incorporate data submitted by individual consumers and by State and Tribal governments and other stakeholders challenging a provider's availability submissions at particular locations. To do so, the Broadband DATA Act required the Commission to develop the Broadband Serviceable Location Fabric (Fabric). The Fabric is a common dataset of all broadband serviceable locations (BSLs) in the United States where mass market fixed broadband internet access service is available or could be installed. The Fabric dataset underpins location-by-location reporting of available fixed broadband services by internet service providers. To be clear, the Fabric itself is not a map. It is an evolving database of all BSLs nationwide that is used in the production of the map when combined with information from service providers and data from the challenge process.

Consistent with the Broadband DATA Act, the Fabric is updated continually. To this end, the Commission's vendor CostQuest is always working to improve the Fabric through the

use of new and updated data sources. That is why the Commission accepts Fabric location challenges on a rolling basis. To be clear, they can be filed at any time and we will review them no matter when they come to the agency. However, it is important to understand that while the Commission and CostQuest are at work improving the Fabric at all times, the updates to this dataset are, by statute and Commission rules, only combined with the availability data reported by providers during the Broadband Data Collections twice a year. This combination of the current Fabric with provider reported availability data is what produces the National Broadband Map. This is consistent with the Broadband DATA Act, which requires the FCC to issue final rules for “the biannual collection and dissemination of granular data,” (i.e., availability data reported by providers) and states that the Fabric shall “serve as the foundation upon which all data relating to the availability of fixed broadband internet access service collected...shall be reported and overlaid.” 47 U.S.C. § 642(b)(1)(B)(ii). Moreover, Commission rules state that “[t]he Fabric shall . . . [b]e updated every 6 months by the Commission.” 47 CFR § 1.7007(a)(4). The Commission would therefore be required to conduct a rulemaking to change the rules to publicly release the Fabric more often than once every six months—a lengthy process that would require notice and comment under the Administrative Procedure Act. Conducting such a rulemaking would require a Commission-level vote on a Notice of Proposed Rulemaking, followed by publication in the Federal Register and a public comment period. Then, another Commission-level vote would be required on a decision to adopt updated rules followed by publication in the Federal Register. Under the law, this process typically takes 12-18 months.

In the meantime, if the Commission were to pursue monthly updates to the Fabric, because the Broadband DATA Act establishes a biannual cadence for the collection of availability data, providers would be under no obligation to report availability data for Fabric locations updated outside of the biannual reporting period. This means that updating the map, with respect to location data, outside of the biannual cadence established in the law, would create anomalies in the data because the map would contain locations that have no broadband availability data (positive or negative) on the map. In other words, this would result in updates with zero data about whether or not broadband service is available.

I appreciate you sharing the concerns you have heard regarding the accuracy of both the location data and availability data shown on the current iteration of the National Broadband Map. To the extent you have specific information or examples of perceived errors in the data for any locations, I would be happy to work with your office to discuss and, where appropriate, rectify any errors or omissions in the map. In the interim, I can share some additional information in response to the points raised in your letter.

The Fabric is an evolving dataset and substantial improvements have been made to it since its first pre-production release. It is the product of integrating a wide range of data sources, including, address records, information about parcel boundaries, tax assessment records, imagery and building footprint data, Census data, land use records, and geo-spatial road and street data. In fact, to build the Fabric, more than 200 data attributes are assessed using artificial intelligence and machine learning to identify the precise geocoordinates of each BSL included in the dataset. Version 1 of the Fabric, which we released on June 23, 2022, in advance of the June 30, 2022, opening of the inaugural Broadband Data Collection filing window, contained more than 113.2 million BSL records.

On September 12, 2022, the Commission opened a challenge process for governmental

entities, broadband service providers, and other entities to submit challenges for multiple broadband-serviceable locations (i.e., “bulk” Fabric challenges) to update or correct Fabric data such as unit counts and addresses and to add missing BSLs. The Commission held a [webinar](#) on September 7, 2022, to assist bulk Fabric challengers on how to submit their challenge data and hosted a follow-up [workshop](#) on September 28, 2022, to further assist entities with preparing such challenges. Commission staff also published an [FAQ document](#), multiple articles, and other [resources](#) on its Broadband Data Collection Help Center (<https://help.bdc.fcc.gov/>) to provide technical assistance to potential bulk Fabric challengers. The Broadband Data Collection Help Center also posted a link to enable stakeholders to submit questions or requests for assistance with the challenge process. I also personally reached out to broadband leaders in all fifty states and U.S. territories during the summer to encourage them to review the Fabric and, if needed, to plan to file Fabric challenges as early as possible after the opening of the challenge window in September.

More than 20 states or other governmental entities submitted 1,114,100 location challenges to the Fabric data in Version 1 that were processed for potential inclusion in Version 2 of the Fabric. These challenges were predominately challenges to add missing locations but included challenges to correct information associated with existing locations as well. These challenges sought corrections or additions for records corresponding to less than 1% of the total number of locations identified in Version 1 of the Fabric. Of these, more than half were for locations that were either already included in Version 1 of the Fabric or that CostQuest had independently identified through its own efforts to improve the Fabric.

We also have acknowledged that there were a few discrete instances where the data in Version 1 of the Fabric did not meet our expectations. The known instances primarily corresponded to areas in the United States where the underlying datasets used to create the Fabric, including parcel data, tax assessor data, and high-resolution imagery data, are either outdated or simply not available. To improve the dataset in these areas, the Commission, working with CostQuest, invested significant resources since the release of Version 1 of the Fabric, including manual review above and beyond the baseline methodology used to identify additional BSLs in these areas.

Meaningful changes were made to the Fabric as a result of these efforts. For example, in the State of Oregon, 18,077 new BSLs were added to Version 2 of the Fabric. A number of counties in the state saw percentage gains in locations that were double the national average. Similarly, the number of BSLs in the Navajo Nation and Taos Pueblo in the State of New Mexico increased 173% and 31%, respectively, from Version 1 of the Fabric to Version 2. In fact, Version 2 of the dataset, which reflects changes like these, has addressed most, if not all, of the outstanding concerns. On top of that, any remaining issues will continue to be addressed through our continued efforts to improve and refine the data in future versions of the Fabric in addition to the challenge process that is an integral part of our efforts under the Broadband DATA Act.

Version 2 of the Fabric is currently available to states, governmental entities and all Fabric license holders and was used by providers in reporting their December 31, 2022, availability data. This iterative update to the Fabric includes 1.04 million more locations than the version currently shown on the National Broadband Map. Version 2 also incorporates millions of adjustments to the data associated with locations that were already included in the first version of the Fabric, including, for example, changes to address fields, unit counts,

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Following the release of Version 2 of the Fabric, the Commission opened the second Broadband Data Collection filing period, reporting broadband availability as of December 31, 2022, on January 3, 2023. That window closed on March 1, 2023, and Commission staff are reviewing the data in preparation for release of a new version of the National Broadband Map.

We have been strongly encouraging all stakeholders, especially state broadband offices to continue their efforts to help us update the Fabric. In addition to the existing resources available to inform stakeholders on how to view and interact with the Fabric, the Broadband Data Task Force stands ready to continue to work with states and other stakeholders to help them use the best tools and approaches to aligning the Fabric with other datasets that stakeholders have on locations where broadband service is needed in order to efficiently identify locations that are still not accurately reflect in our data. I recognize that every state and territory collects their own data in the same way, but we are ready, willing, and able to work with them to align our national effort.

We have taken several steps to prevent systematic overreporting of coverage by broadband service providers. First, the Commission engaged with the provider community extensively during the first two filing windows, offering unprecedented hands-on assistance and support resources to help in the preparation and submission of their data. Second, and as noted earlier, the Commission built an entirely new data collection system for purposes of the Broadband Data Collection. The new system was designed with several built-in automated data checks which report, in real time, both "hard" errors that prevent the upload and certification of data as well as "soft" warnings that suggest there may be an issue with a provider's data. For example, the system uses subscription data reported by service providers as a cross-check against the provider's availability data and produces errors in certain situations where these data do not align as expected. Third, once each of the filing windows closed, the Commission began processing and reviewing these data for anomalies, patterns, and other identifiable errors. The built-in checks and staff analysis of the data inform additional verification efforts and will continue as an ongoing part of the Broadband Data Collection. Finally, we expect as a more general matter that the existence of a challenge process mandated by the Broadband DATA Act serves as a deterrent to overreporting, especially given that providers must spend time and resources responding to challenges. We recognize also, that as providers gain familiarity with this system, efforts to intentionally misstate service may be subject to audits and enforcement action. In fact, we already have audits and investigations underway.

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Jessica Rosenworcel



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May 5, 2023

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United States Senate
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OFFICE OF THE
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May 5, 2023

The Honorable Tammy Baldwin
United States Senate
709 Hart Senate Office Building
Washington, DC 20510

Dear Senator Baldwin:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Cynthia M. Lummis
United States Senate
124 Russell Senate Office Building
Washington, DC 20510

Dear Senator Lummis:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

Since the passage of the Broadband DATA Act, the Federal Communications Commission has worked carefully to implement the requirements of the law and to begin the iterative data collection and challenge processes envisioned by the Act through the creation of its Broadband Data Collection program. The Broadband Data Collection is a real departure from the Commission's previous Form 477 process for identifying the state of broadband deployment. The Form 477 process, which was used by the agency in various formats for decades, collected data only at the census-block level. If there was a single subscriber in a census block, the agency assumed service was available throughout. As a result, the Form 477 process systematically overstated the presence of broadband, particularly in rural areas. In addition, this process lacked a mechanism to verify that data based on the on-the-ground experience of consumers and other stakeholders.

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use of new and updated data sources. That is why the Commission accepts Fabric location challenges on a rolling basis. To be clear, they can be filed at any time and we will review them no matter when they come to the agency. However, it is important to understand that while the Commission and CostQuest are at work improving the Fabric at all times, the updates to this dataset are, by statute and Commission rules, only combined with the availability data reported by providers during the Broadband Data Collections twice a year. This combination of the current Fabric with provider reported availability data is what produces the National Broadband Map. This is consistent with the Broadband DATA Act, which requires the FCC to issue final rules for “the biannual collection and dissemination of granular data,” (i.e., availability data reported by providers) and states that the Fabric shall “serve as the foundation upon which all data relating to the availability of fixed broadband internet access service collected...shall be reported and overlaid.” 47 U.S.C. § 642(b)(1)(B)(ii). Moreover, Commission rules state that “[t]he Fabric shall . . . [b]e updated every 6 months by the Commission.” 47 CFR § 1.7007(a)(4). The Commission would therefore be required to conduct a rulemaking to change the rules to publicly release the Fabric more often than once every six months—a lengthy process that would require notice and comment under the Administrative Procedure Act. Conducting such a rulemaking would require a Commission-level vote on a Notice of Proposed Rulemaking, followed by publication in the Federal Register and a public comment period. Then, another Commission-level vote would be required on a decision to adopt updated rules followed by publication in the Federal Register. Under the law, this process typically takes 12-18 months.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Raphael G. Warnock
United States Senate
388 Russell Senate Office Building
Washington, DC 20510

Dear Senator Warnock:

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Roger Wicker
United States Senate
555 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Wicker:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Ben Ray Lujan
United States Senate
498 Russell Senate Office Building
Washington, DC 20510

Dear Senator Lujan:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Michael D. Crapo
United States Senate
239 Dirksen Senate Office Building
Washington, DC 20510

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Jessica Rosenworcel



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Jeff Merkley
United States Senate
531 Hart Senate Office Building
Washington, DC 20510

Dear Senator Merkley:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

Since the passage of the Broadband DATA Act, the Federal Communications Commission has worked carefully to implement the requirements of the law and to begin the iterative data collection and challenge processes envisioned by the Act through the creation of its Broadband Data Collection program. The Broadband Data Collection is a real departure from the Commission's previous Form 477 process for identifying the state of broadband deployment. The Form 477 process, which was used by the agency in various formats for decades, collected data only at the census-block level. If there was a single subscriber in a census block, the agency assumed service was available throughout. As a result, the Form 477 process systematically overstated the presence of broadband, particularly in rural areas. In addition, this process lacked a mechanism to verify that data based on the on-the-ground experience of consumers and other stakeholders.

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Consistent with the Broadband DATA Act, the Fabric is updated continually. To this end, the Commission's vendor CostQuest is always working to improve the Fabric through the

use of new and updated data sources. That is why the Commission accepts Fabric location challenges on a rolling basis. To be clear, they can be filed at any time and we will review them no matter when they come to the agency. However, it is important to understand that while the Commission and CostQuest are at work improving the Fabric at all times, the updates to this dataset are, by statute and Commission rules, only combined with the availability data reported by providers during the Broadband Data Collections twice a year. This combination of the current Fabric with provider reported availability data is what produces the National Broadband Map. This is consistent with the Broadband DATA Act, which requires the FCC to issue final rules for “the biannual collection and dissemination of granular data,” (i.e., availability data reported by providers) and states that the Fabric shall “serve as the foundation upon which all data relating to the availability of fixed broadband internet access service collected...shall be reported and overlaid.” 47 U.S.C. § 642(b)(1)(B)(ii). Moreover, Commission rules state that “[t]he Fabric shall . . . [b]e updated every 6 months by the Commission.” 47 CFR § 1.7007(a)(4). The Commission would therefore be required to conduct a rulemaking to change the rules to publicly release the Fabric more often than once every six months—a lengthy process that would require notice and comment under the Administrative Procedure Act. Conducting such a rulemaking would require a Commission-level vote on a Notice of Proposed Rulemaking, followed by publication in the Federal Register and a public comment period. Then, another Commission-level vote would be required on a decision to adopt updated rules followed by publication in the Federal Register. Under the law, this process typically takes 12-18 months.

In the meantime, if the Commission were to pursue monthly updates to the Fabric, because the Broadband DATA Act establishes a biannual cadence for the collection of availability data, providers would be under no obligation to report availability data for Fabric locations updated outside of the biannual reporting period. This means that updating the map, with respect to location data, outside of the biannual cadence established in the law, would create anomalies in the data because the map would contain locations that have no broadband availability data (positive or negative) on the map. In other words, this would result in updates with zero data about whether or not broadband service is available.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Jim Risch
United States Senate
483 Russell Senate Office Building
Washington, DC 20510

Dear Senator Risch:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Martin Heinrich
United States Senate
303 Hart Senate Office Building
Washington, DC 20510

Dear Senator Heinrich:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Lisa Murkowski
United States Senate
522 Hart Senate Office Building
Washington, DC 20510

Dear Senator Murkowski:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Jon Ossoff
United States Senate
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Jessica Rosenworcel



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF THE
CHAIRWOMAN

May 5, 2023

The Honorable Cindy Hyde-Smith
United States Senate
702 Hart Senate Office Building
Washington, DC 20510

Dear Senator Hyde-Smith:

Thank you for your letter regarding the effort to develop the iterative National Broadband Map envisioned by the Broadband DATA Act. I share your commitment to making sure that broadband connectivity is available across the country. Broadband service has become vital for school, work, healthcare, and much more, and connecting consumers and businesses across the country to high-speed service is essential for everyone to have access to the full range of opportunities made possible by the digital age.

Since the passage of the Broadband DATA Act, the Federal Communications Commission has worked carefully to implement the requirements of the law and to begin the iterative data collection and challenge processes envisioned by the Act through the creation of its Broadband Data Collection program. The Broadband Data Collection is a real departure from the Commission's previous Form 477 process for identifying the state of broadband deployment. The Form 477 process, which was used by the agency in various formats for decades, collected data only at the census-block level. If there was a single subscriber in a census block, the agency assumed service was available throughout. As a result, the Form 477 process systematically overstated the presence of broadband, particularly in rural areas. In addition, this process lacked a mechanism to verify that data based on the on-the-ground experience of consumers and other stakeholders.

This is no longer the case. As required by the Broadband DATA Act, the Commission has built an entirely new data-collection system for ingesting, validating, and aggregating both provider data for download and publication on the National Broadband Map. This system is also designed to incorporate data submitted by individual consumers and by State and Tribal governments and other stakeholders challenging a provider's availability submissions at particular locations. To do so, the Broadband DATA Act required the Commission to develop the Broadband Serviceable Location Fabric (Fabric). The Fabric is a common dataset of all broadband serviceable locations (BSLs) in the United States where mass market fixed broadband internet access service is available or could be installed. The Fabric dataset underpins location-by-location reporting of available fixed broadband services by internet service providers. To be clear, the Fabric itself is not a map. It is an evolving database of all BSLs nationwide that is used in the production of the map when combined with information from service providers and data from the challenge process.

Consistent with the Broadband DATA Act, the Fabric is updated continually. To this end, the Commission's vendor CostQuest is always working to improve the Fabric through the

use of new and updated data sources. That is why the Commission accepts Fabric location challenges on a rolling basis. To be clear, they can be filed at any time and we will review them no matter when they come to the agency. However, it is important to understand that while the Commission and CostQuest are at work improving the Fabric at all times, the updates to this dataset are, by statute and Commission rules, only combined with the availability data reported by providers during the Broadband Data Collections twice a year. This combination of the current Fabric with provider reported availability data is what produces the National Broadband Map. This is consistent with the Broadband DATA Act, which requires the FCC to issue final rules for “the biannual collection and dissemination of granular data,” (i.e., availability data reported by providers) and states that the Fabric shall “serve as the foundation upon which all data relating to the availability of fixed broadband internet access service collected...shall be reported and overlaid.” 47 U.S.C. § 642(b)(1)(B)(ii). Moreover, Commission rules state that “[t]he Fabric shall . . . [b]e updated every 6 months by the Commission.” 47 CFR § 1.7007(a)(4). The Commission would therefore be required to conduct a rulemaking to change the rules to publicly release the Fabric more often than once every six months—a lengthy process that would require notice and comment under the Administrative Procedure Act. Conducting such a rulemaking would require a Commission-level vote on a Notice of Proposed Rulemaking, followed by publication in the Federal Register and a public comment period. Then, another Commission-level vote would be required on a decision to adopt updated rules followed by publication in the Federal Register. Under the law, this process typically takes 12-18 months.

In the meantime, if the Commission were to pursue monthly updates to the Fabric, because the Broadband DATA Act establishes a biannual cadence for the collection of availability data, providers would be under no obligation to report availability data for Fabric locations updated outside of the biannual reporting period. This means that updating the map, with respect to location data, outside of the biannual cadence established in the law, would create anomalies in the data because the map would contain locations that have no broadband availability data (positive or negative) on the map. In other words, this would result in updates with zero data about whether or not broadband service is available.

I appreciate you sharing the concerns you have heard regarding the accuracy of both the location data and availability data shown on the current iteration of the National Broadband Map. To the extent you have specific information or examples of perceived errors in the data for any locations, I would be happy to work with your office to discuss and, where appropriate, rectify any errors or omissions in the map. In the interim, I can share some additional information in response to the points raised in your letter.

The Fabric is an evolving dataset and substantial improvements have been made to it since its first pre-production release. It is the product of integrating a wide range of data sources, including, address records, information about parcel boundaries, tax assessment records, imagery and building footprint data, Census data, land use records, and geo-spatial road and street data. In fact, to build the Fabric, more than 200 data attributes are assessed using artificial intelligence and machine learning to identify the precise geocoordinates of each BSL included in the dataset. Version 1 of the Fabric, which we released on June 23, 2022, in advance of the June 30, 2022, opening of the inaugural Broadband Data Collection filing window, contained more than 113.2 million BSL records.

On September 12, 2022, the Commission opened a challenge process for governmental

entities, broadband service providers, and other entities to submit challenges for multiple broadband-serviceable locations (i.e., “bulk” Fabric challenges) to update or correct Fabric data such as unit counts and addresses and to add missing BSLs. The Commission held a [webinar](#) on September 7, 2022, to assist bulk Fabric challengers on how to submit their challenge data and hosted a follow-up [workshop](#) on September 28, 2022, to further assist entities with preparing such challenges. Commission staff also published an [FAQ document](#), multiple articles, and other [resources](#) on its Broadband Data Collection Help Center (<https://help.bdc.fcc.gov/>) to provide technical assistance to potential bulk Fabric challengers. The Broadband Data Collection Help Center also posted a link to enable stakeholders to submit questions or requests for assistance with the challenge process. I also personally reached out to broadband leaders in all fifty states and U.S. territories during the summer to encourage them to review the Fabric and, if needed, to plan to file Fabric challenges as early as possible after the opening of the challenge window in September.

More than 20 states or other governmental entities submitted 1,114,100 location challenges to the Fabric data in Version 1 that were processed for potential inclusion in Version 2 of the Fabric. These challenges were predominately challenges to add missing locations but included challenges to correct information associated with existing locations as well. These challenges sought corrections or additions for records corresponding to less than 1% of the total number of locations identified in Version 1 of the Fabric. Of these, more than half were for locations that were either already included in Version 1 of the Fabric or that CostQuest had independently identified through its own efforts to improve the Fabric.

We also have acknowledged that there were a few discrete instances where the data in Version 1 of the Fabric did not meet our expectations. The known instances primarily corresponded to areas in the United States where the underlying datasets used to create the Fabric, including parcel data, tax assessor data, and high-resolution imagery data, are either outdated or simply not available. To improve the dataset in these areas, the Commission, working with CostQuest, invested significant resources since the release of Version 1 of the Fabric, including manual review above and beyond the baseline methodology used to identify additional BSLs in these areas.

Meaningful changes were made to the Fabric as a result of these efforts. For example, in the State of Oregon, 18,077 new BSLs were added to Version 2 of the Fabric. A number of counties in the state saw percentage gains in locations that were double the national average. Similarly, the number of BSLs in the Navajo Nation and Taos Pueblo in the State of New Mexico increased 173% and 31%, respectively, from Version 1 of the Fabric to Version 2. In fact, Version 2 of the dataset, which reflects changes like these, has addressed most, if not all, of the outstanding concerns. On top of that, any remaining issues will continue to be addressed through our continued efforts to improve and refine the data in future versions of the Fabric in addition to the challenge process that is an integral part of our efforts under the Broadband DATA Act.

Version 2 of the Fabric is currently available to states, governmental entities and all Fabric license holders and was used by providers in reporting their December 31, 2022, availability data. This iterative update to the Fabric includes 1.04 million more locations than the version currently shown on the National Broadband Map. Version 2 also incorporates millions of adjustments to the data associated with locations that were already included in the first version of the Fabric, including, for example, changes to address fields, unit counts,

secondary addresses, BSL status, building and land use codes, etc. Location challenges from state governments led to nearly 122,000 of the new location additions. However, the majority of location additions and other adjustments resulted from CostQuest's ongoing efforts to update and improve the Fabric by refining the models and processes for creating the Fabric and using updated and improved input data sources such as new and more granular parcel data. These ongoing efforts to improve the Fabric outside of the challenge process are ongoing and will remain an important tool for the improvement of the National Broadband Map.

Following the release of Version 2 of the Fabric, the Commission opened the second Broadband Data Collection filing period, reporting broadband availability as of December 31, 2022, on January 3, 2023. That window closed on March 1, 2023, and Commission staff are reviewing the data in preparation for release of a new version of the National Broadband Map.

We have been strongly encouraging all stakeholders, especially state broadband offices to continue their efforts to help us update the Fabric. In addition to the existing resources available to inform stakeholders on how to view and interact with the Fabric, the Broadband Data Task Force stands ready to continue to work with states and other stakeholders to help them use the best tools and approaches to aligning the Fabric with other datasets that stakeholders have on locations where broadband service is needed in order to efficiently identify locations that are still not accurately reflect in our data. I recognize that every state and territory collects their own data in the same way, but we are ready, willing, and able to work with them to align our national effort.

We have taken several steps to prevent systematic overreporting of coverage by broadband service providers. First, the Commission engaged with the provider community extensively during the first two filing windows, offering unprecedented hands-on assistance and support resources to help in the preparation and submission of their data. Second, and as noted earlier, the Commission built an entirely new data collection system for purposes of the Broadband Data Collection. The new system was designed with several built-in automated data checks which report, in real time, both "hard" errors that prevent the upload and certification of data as well as "soft" warnings that suggest there may be an issue with a provider's data. For example, the system uses subscription data reported by service providers as a cross-check against the provider's availability data and produces errors in certain situations where these data do not align as expected. Third, once each of the filing windows closed, the Commission began processing and reviewing these data for anomalies, patterns, and other identifiable errors. The built-in checks and staff analysis of the data inform additional verification efforts and will continue as an ongoing part of the Broadband Data Collection. Finally, we expect as a more general matter that the existence of a challenge process mandated by the Broadband DATA Act serves as a deterrent to overreporting, especially given that providers must spend time and resources responding to challenges. We recognize also, that as providers gain familiarity with this system, efforts to intentionally misstate service may be subject to audits and enforcement action. In fact, we already have audits and investigations underway.

It is more important than ever for us to know where broadband is, and is not, available throughout the nation. Far too many households remain unconnected, and accurately showing where they are located is an important part of directing funding into the communities that need it the most. The map we have is a work that is always in progress, just as Congress designed it to be in the Broadband DATA Act. I am confident that the Broadband Data Collection process we have established will help improve the map just as Congress envisioned. I also will

continue to ensure that the Broadband Data Task Force makes itself available to all stakeholders interested in offering challenges to the current iteration of our data.

I hope the above is helpful. Please let me know if you have any further questions. I look forward to continuing to work with you to help close the digital divide.

Sincerely,

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