

Data & Mapping Sub-Committee
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Pennsylvania Broadband Development Authority
Data & Mapping Sub-Committee Meeting
November 16, 2022
9:00 AM
Virtual Meeting
Dial-In: +1 267-332-8737
Phone Conference ID: 276 981 089#

- I. Call to Order
- II. Chair Selection
- III. Approval of September 27, 2022 Meeting Minutes & October 19, 2022 Joint Meeting Minutes
- IV. Authority Updates
 - a. Status of Draft State Plan
 - b. Update on Proposed Partnership with Penn State Extension
 - c. Request for Proposal – DE and BEAD Planning
- V. Bulk Fabric and Service Availability Challenge Processes
- VI. Public Comment
- VII. Adjournment

**This meeting will be recorded, and your participation is your consent to being recorded.*

Pennsylvania Broadband Development Authority
Data & Mapping Sub-Committee Meeting Minutes
Tuesday, September 27, 2022
Desert Room – Keystone Building & Microsoft Teams Meeting

Sub-Committee members in attendance:

- Jay Summerson, Microsoft
- Bill Kiger, Pennsylvania One Call
- Ed Mooney, Communications Workers of America
- Deb Kriete on behalf of Julie Tritt Schell, PA E-Rate Coordinator
- Gary Zingaretti, Zingaretti Enterprises
- Steve Schwerbel, Wireless Internet Service Providers Association
- Chris Cap, PA State Association of Boroughs
- Melissa Gates on behalf of Lisa Schaefer, County Commissioners Association of PA
- Dr. Kyle Kopko, Board Liaison

Department of Community and Economic Development (DCED) staff in attendance:

- Brandon Carson
- Erin Wachter
- Kalie Snyder

Guests in attendance:

- Brian Kimmett
- Catharine Conner, Milliron Goodman, LLC

I. Call to Order

Brandon Carson called the meeting to order at 9:00 AM.

Kalie Snyder conducted a roll call of the sub-committee members.

II. Welcome and Introductions

Dr. Kyle Kopko welcomed the members and thanked them for their participation. Dr. Kopko briefly touched on the role of the Data & Mapping sub-committee and shared how critically important their work will be to the process. He asked members of the sub-committee to introduce themselves.

III. Housekeeping

Brandon notified members that all sub-committee meetings will be sunshined and open to the public. He discussed the role of sub-committee chairs and requested feedback from interested members. He mentioned a tentative 3-week timeline until the next meeting, at which time the sub-committee members will appoint a chairperson.

IV. Vision of Meetings and Frequency

Brandon mentioned that the timeline and frequency of meetings will be determined by the tasks and work element requirements of the respective sub-committees at any given time, and it will be a fluid process. He also reminded the members that the Authority does not currently have access to the funds we've applied for: Broadband Equity, Access, and Deployment (BEAD), Digital Equity (DE), and Capital Projects Fund (CPF). He briefly reviewed each funding stream and further explained that the Authority anticipates deploying the CPF funding first, with an allocated amount of approximately \$279 million dollars. He touched on the Authority's requirements to complete a Statewide Digital Equity Plan and the intent of the Authority to hire a consultant to assist with planning efforts.

V. State Plan

Erin Wachter presented an overview of the State Broadband Plan (Plan) and timeline for adoption of the plan. Erin asked for feedback on the Plan by Friday, October 7th, to allow for time to incorporate feedback and send a second draft to the sub-committee prior to the November 17th Board meeting.

Deb Kriete asked about the type of technology that will be considered in these efforts. Bill Kiger followed-up to state the importance of wireless and that it should be considered.

Chris Cap asked if there will be an opportunity to review all sub-committee member comments. Brandon touched on a future platform that will be available for all members to review such details and Erin offered to provide a summary of all comments received, at the next meeting.

Melissa Gates asked if the plan would have a timeline to complete each of the phases and Brandon responded by saying we'd welcome feedback and suggestions. Erin also touched on CPF funds and offered to share the applications that have been submitted, to include Digital Equity and BEAD.

Bill Kiger inquired about the FCC data that is currently available to which Brandon responded that we've requested the fabric and are working with legal to finalize the FCC/CostQuest agreement. Bill followed up with an outline of the work he's been doing to pull data and mapping information together in anticipation of the sub-committee's work.

Brandon reminded the members of an email he sent with details on the FCC Bulk Challenge webinar that was being held the following day.

Melissa Gates asked if we'll be reviewing the challenge responses, specifically, those from the public. Brandon informed the group that we're working to contract with a mapping entity who will be integral in analyzing data and responding to the challenge process.

Deb Kriete asked a few clarifying questions regarding the process moving forward, to include the role of the mapping entity, timeline for the state plan, as well as final adoption date. Brandon and Erin confirmed all questions and thoughts as presented.

Brandon recapped next steps. Melissa Gates asked for clarification on the frequency of the sub-committee meetings. Erin responded and stated the frequency of meetings will be determined by the work of the group. Melissa also asked about a meeting platform moving forward, and Brandon asked for feedback from members regarding the preferred way to meet. Most members said virtual would work best for them.

Brandon suggested a hold date of 10/19 for the next sub-committee meeting and indicated that he would follow-up with details.

VI. Public Comment

Kalie Snyder called for public comment and questions.

Brian Kimmett asked if we could share a copy of the PowerPoint presentation. Kalie confirmed that we would share that with him.

VII. Adjournment

Brandon concluded the meeting at 9:48 AM.

Pennsylvania Broadband Development Authority
Joint Sub-Committee Meeting Minutes
October 19, 2022
Virtual - Microsoft Teams Meeting

Sub Committee members in attendance:

All sub-committee members were in attendance

Department of Community and Economic Development (DCED) staff in attendance:

- Brandon Carson
- Erin Wachter
- Kalie Snyder
- Lori Butler

Guests in attendance:

- Nicole Ugarte, National Telecommunications and Information Administration

I. Call to Order

Brandon Carson called the meeting to order at 1:01 PM. He outlined that this is a joint meeting and 32 members in attendance, therefore roll call was not conducted for the sub-committee members.

II. Draft State Plan - Summary of feedback

Brandon Carson briefly provided an overview of the previous sub-committee meetings and the request for review and feedback on the draft of the state plan. He concluded by stating that the comments/edits provided have been reviewed and implemented into the draft by Erin. He asked Erin to provide an update.

Erin Wachter thanked the Sub-Committee members for their feedback and mentioned that there were 18 different responses that offered comments and edits. She confirmed that most of those were incorporated into the draft and provided examples. Erin provided next steps to include reviewing the remaining feedback and look to incorporate any additional items, then she will provide an updated copy of the draft and an overview of the comments received. The Final Plan will be sent to the Board on or around November 10, 2022, for review prior to a vote at the November 17th Board meeting.

III. Penn State Extension Presentation - Broadband Availability, Access, Equity, and Utilization Proposal

Brandon Carson provided a brief overview of a proposal given to the Authority from the Penn State Extension team. He commented on the Board presentation given by Penn State Extension, the day before, and the purpose for securing their assistance in our mapping efforts.

Jim Ladlee and Harry Crissy provided an overview of their roles and the focus and goals of Penn State Extension. Jim presented and explained the four categories outlined within the proposal, 1) Broadband Availability, Access, Equity, & Utilization 2) Prioritized Projects 3) Project Timeline 4) Budget Estimation. Harry Crissy provided a broad overview of their data collection process and how it's configured into different data sets that fit strategically into the map.

Brandon Carson added that the Authority has requested the Fabric data from CostQuest, Rob Teplitz and Lori Irwin are working on how we can share this information with our counties.

Brandon Carson also touched on the timeline in the proposal aligns nicely with when we're required to submit our 5-Year Action Plan for funding. He closed by recognizing that this data will not be proprietary and will be publicly available.

Brandon opened the Q & A section of the meeting for sub-committee members only.

Todd Eachus remarked on the cost analysis process and encouraged incorporating the provider community on this for reference. Harry Crissy followed by acknowledging their ongoing engagement with providers to build out these details.

Bill Wiedenheft asked if environmental disruption, right of way, legal matters or challenges will be included in the data on the map. Jim Ladlee responded that the determination of data to be input into the map was an ongoing discussion while ensuring that too much data doesn't cloud the functionality and understanding of the map.

Mark Critz commented on the threshold for speed testing and asked what the Extension is seeing with national trends in data? What is the balance in terms of accuracy? And the path forward with speed requirements. Harry Crissy acknowledges that the national data is not flawless. The provider is required to be transparent on who they will serve at a granular level. The BEAD money is designed to address those issues. Mark Critz asked how we will determine speed moving forward. Harry responded by confirming the need for ISPs to still submit 477 data, which will be reflected in the fabric shown in the new FCC map. Speed test data will reflect on a granular level the same details of the 477 submissions.

Bill Wiedenheft asked if the data collection is the responsibility of the Extension in the proposal, and how the information will be filtered? Jim Ladlee responded by confirming that through the proposal they do not intend on providing speed test data, but, that the Authority would make the decision on including that into the map. He also mentioned that this will be an ongoing iterative process and will defer to the Authority on the varying data that will be included.

Todd Eachus added in that he understands the caution of speed test data and how it varies based on type of technology. Harry Crissy mentioned there are limitations on services.

Gary Zingaretti remarked on the FCC speed performance measuring and believes the information may be helpful but is not necessarily publicly available. He suggested looking at obtaining that information.

Steve Schwerbel mentioned adding fixed wireless access to the map, specifically for cost analysis. Harry Crissy agreed it would be helpful but mentioned that must be approved by the Authority. Brandon Carson added in that we would like to see that data to better understand the footprint.

IV. Public Comment

Lori Butler called for public comments, there were none.

IV. Adjournment

Brandon thanked everyone for their participation and the meeting adjourned 2:09 PM.

DRAFT



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 22-961

Released: September 15, 2022

BROADBAND DATA TASK FORCE PUBLISHES SPECIFICATIONS FOR BULK FIXED AVAILABILITY CHALLENGE AND CROWDSOURCE DATA

WC Docket Nos. 19-195, 11-10

By this *Public Notice*, the Broadband Data Task Force (Task Force), together with the Wireline Competition Bureau (WCB) and Office of Economics and Analytics (OEA), announce the release of *Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data*, which provides guidance as to the requirements in the Commission's rules and orders for filing bulk challenges, as well as bulk crowdsourcing information, to the fixed broadband availability data that will be published on the FCC's Broadband Maps as part of the new Broadband Data Collection (BDC). The *Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data*, which also explains how to make the required filings in the BDC system, is available at: <https://us-fcc.box.com/v/bdc-bulk-fixed-challenge-spec>. The bulk fixed availability challenge and crowdsourcing processes will open after the FCC's Broadband Maps are published.

Individuals and entities, including consumers, state, local, and Tribal governmental entities, and service providers, can submit challenges to the BDC fixed availability data published on the Broadband Map.¹ While interested parties will be able to submit *individual* challenges pertaining to availability at a single location directly from the online maps, entities can also submit "bulk" challenges to the fixed broadband availability data with respect to multiple locations by uploading a file in the BDC system that is consistent with the specifications set forth in the *Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data*.² The required bulk challenge data varies based on the methodology used by the challenger to generate its data. In all cases, the data must include: (1) the challenger's name and contact information; (2) the location of the dispute based on the Broadband Serviceable Location Fabric; (3) the category of the challenge; and (4) information supporting the challenge.

Entities such as state, local and Tribal governments may also submit bulk crowdsourcing data in the BDC system, which may be used by the Commission to verify and supplement the fixed broadband availability data published on the FCC's Broadband Maps.³ Specifications for bulk crowdsourcing data are also set forth in the *Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data*. Crowdsourcing data differs from challenge data in several ways. For example, crowdsourcing data is not

¹ 47 U.S.C. § 642(a)(1)(B)(iii), (b)(5); 47 CFR § 1.7006(d); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Third Report and Order, 36 FCC Rcd 1126, 1155-65, paras. 70-96 (2021) (*Third Report and Order*).

² Each bulk fixed availability challenge data file must include records for each location being challenged in a Comma Separated Value (CSV) format. All fields must be included in the file upload (unless otherwise indicated), and all values must conform to the descriptions, codes, or formats identified for each field in the *Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data*.

³ 47 CFR § 1.7006(b); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7487-93, paras. 62-76 (2020) (*Second Order and Third Further Notice*).

limited to availability information. Filers of bulk crowdsource data may provide information on the locations where the data indicate that the actual speed of the fixed broadband service does not match its advertised speed, including information based on the results of speed tests.⁴ Further, unlike in bulk challenge filings, information supporting the circumstances claimed in crowdsource data is optional.⁵

For more information about the BDC, please visit the Broadband Data Collection website at <https://www.fcc.gov/BroadbandData>.

– FCC –

⁴ *Second Order and Third Further Notice*, 35 FCC Rcd at 7489, para. 66 (directing OET, OEA, WCB, and WTB to develop and refine a process for entities and individuals to submit third-party fixed and mobile crowdsource data); *id.* at para. 68 (directing the Offices and Bureaus “to implement the crowdsourced data collection and to create a portal for the receipt of crowdsourced data”); *see also Third Report and Order*, 36 FCC Rcd at 1155-56, para. 72 n.230 (noting that the fixed availability challenge process “is not meant to address disputes that subscribers have with their broadband provider about quality of service issues, such as network performance [i.e., speeds] experienced at a particular location.”).

⁵ *Id.*



Broadband Data Collection

Data Specifications for Bulk Fixed Availability Challenge and Crowdsourcing Data

September 15, 2022

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Change Log

Revision	Date	Comments
1.0	2022-09-15	Initial release.

1 Overview

As part of the Federal Communication Commission's (FCC or the Commission) Broadband Data Collection (BDC), service providers, governments, and other entities and organizations can submit bulk challenges, as well as bulk crowdsource information, to the BDC fixed availability data published on the FCC's Broadband Map. Bulk fixed challenge and crowdsource data must be submitted in the BDC system via file upload and must conform to the specifications detailed below.

Individuals and entities will have the opportunity to submit single-location challenges to the BDC fixed availability data using a form provided on the FCC's Broadband Map once the Map is published.

This document provides guidance on the requirements of the Commission's rules and explains how to make the required filings in the system. The rules governing the Broadband Data Collection (formerly known as the Digital Opportunity Data Collection) can be found in 47 CFR § 1.7004 *et seq.* Additional information on the rules can be found in the FCC's BDC orders, which are available at [https://www.fcc.gov/BroadbandData/resources on the "Releases" tab](https://www.fcc.gov/BroadbandData/resources%20on%20the%20%22Releases%22%20tab).

The FCC may publish updates to this document. In addition, other materials related to the BDC generally, and the fixed availability challenge process specifically, have been and will be made available on the FCC's Broadband Data Collection Resources page of the FCC's website at <https://www.fcc.gov/BroadbandData/resources> and at the online help center at <http://www.fcc.gov/BroadbandData/help>.

2 Bulk Fixed Challenge Data

Entities may file bulk challenges to the fixed broadband availability data published on, and made available for download from, the FCC’s Broadband Map. The bulk fixed availability challenge data that must be submitted varies slightly based on the methodology used by the challenger to generate its data, as described in Section 2.1 below. In all cases, the data must include the name and contact information of the challenger, the location of the dispute based on the Broadband Serviceable Location Fabric, the category of the challenge, and evidence to support the challenge.

2.1 Bulk Fixed Challenge Methodology

All entities submitting bulk fixed availability challenges must first enter information in a web form in the BDC system about the methodology used to collect the bulk fixed challenge information. There are three options: (1) Knowledge of Infrastructure, (2) Information Collected from Individual Consumers, and (3) Other. A “Knowledge of Infrastructure” challenge could be based on knowledge of where network facilities and plant exist. This knowledge could be based on, for example, local building permit records, rights-of-way records, franchise agreements, or an on-the-ground examination of broadband infrastructure in a particular structure. The second methodology option would be based on information collected from individual consumers about the broadband services available, and not available, to them. If the bulk fixed challenge data is based on a methodology other than these two options, then the filer should choose “Other.”

The fields that must be entered in the web form are listed below.

Field	Example	Description / Notes
Methodology	Knowledge of Infrastructure	The methodology and source of the information contained within the bulk fixed challenge data. - <i>Value must be one of the following:</i> <ul style="list-style-type: none">• <i>Knowledge of Infrastructure</i>• <i>Information Collected from Individual Consumers</i>• <i>Other</i>
Methodology Description		Narrative explanation of the methodology and source of the information contained within the bulk fixed challenge data. - <i>Value may be null if the methodology value is “Knowledge of Infrastructure”.</i>
Contact Name	John Broadband	Full name of the contact associated with the bulk challenge. - <i>If methodology value is “Information Collected from Individual Consumers,” then this value is not collected via this form but will be collected in the upload file.</i>

Field	Example	Description / Notes
Contact Email	John.Broadband@company.com	Email address of the contact associated with the bulk challenge. - Value must match valid email address form if not null, e.g.: name@domain.tld . - If methodology value is "Information Collected from Individual Consumers," then this value is not collected via this form but will be collected in the upload file.
Contact Phone Number	202-555-5555	Phone number of the contact associated with the bulk challenge. - Value is optional and may be null. - Value must match valid US phone number format: 000-000-0000, if not null. - If methodology value is "Information Collected from Individual Consumers," then this value is not collected via this form but will be collected in the upload file.

2.2 Bulk Fixed Challenge Data: Knowledge of Infrastructure (Methodology 1)

If a bulk fixed challenge submission is based on the first methodology, Knowledge of Infrastructure, then the filer should upload bulk challenge data matching the specifications provided in the table below. This file must contain records of each location included in the challenge in Comma Separated Value (CSV) format. The file must include the header row specified below. Filers must upload a separate file for each provider being challenged. In addition, each location_id included in the file must match a location_id from the Broadband Serviceable Location Fabric and published on the Broadband Map. Filers must use the vintage of the Fabric associated with the fixed availability data being challenged (i.e., if challenging the fixed availability data as of June 30, 2022, filers must use the location_ids associated with version of the Fabric used and availability data as of that date). To submit more than one challenge to a particular location, enter an additional record for that location_id and enter the additional technology and/or category_code associated with that location.

Field	Data Type	Example	Description / Notes
provider_id	Integer	900104	Unique identifier for the fixed service provider subject to the challenge.
brand_name	String	Acme Broadband	Brand name of the service being challenged, as shown on the Broadband Map.

Field	Data Type	Example	Description / Notes
technology	Integer	50	Code for the technology of the service being challenged, as shown on the Broadband Map. - Value must be one of the following codes: 10 – Copper Wire 40 – Coaxial Cable / HFC 50 – Optical Carrier / Fiber to the Premises 60 – Geostationary Satellite 61 – Non-geostationary Satellite 70 – Unlicensed Terrestrial Fixed Wireless 71 – Licensed Terrestrial Fixed Wireless 0 – Other
location_id	String	1357135307	Unique identifier for the location, from the Broadband Serviceable Location Fabric, at which the fixed availability information is being challenged.
data_vintage	Date	2022-06-30	Vintage date of fixed broadband availability data being challenged. - Value must match valid ISO-8601 date format, e.g.: YYYY-MM-DD - Value must correspond to the as-of date of published fixed broadband availability data.

Field	Data Type	Example	Description / Notes
category_code	Enumerated	5	<p>Code identifying the category or reason for the fixed availability challenge of the provider at that location.</p> <p>- Value must be one of the following codes:</p> <ul style="list-style-type: none"> 1 – Provider failed to schedule a service installation within 10 business days of a request. 2 – Provider did not install the service at the agreed-upon time. 3 – Provider requested more than the standard installation fee to connect this location. 4 – Provider denied the request for service. 5 – Provider does not offer the technology entered above at this location. 6 – Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location. 8 – No wireless or satellite signal is available at this location. 9 – New, non-standard equipment is required to connect this location. <p>- Value may not be 8 or 9 unless technology value is 60, 61, 70, or 71.</p>
request_date	Date	2022-09-01	<p>As relevant, enter the most recent date associated with the category_code above, such as the date a service request was denied or the date the challenger became aware of the circumstances.</p> <p>- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5 or 6.</p>

Field	Data Type	Example	Description / Notes
request_method_code	Enumerated	1	As relevant, enter the communication method associated with the category_code and request_date above, such as how a service request was denied or how the challenger became aware of the circumstances. - <i>Value must be one of the following codes:</i> 1 – <i>Email</i> 2 – <i>Phone</i> 3 – <i>Website</i> 0 – <i>Other</i> - <i>Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</i> - <i>Value must be null if category_code value is 5 or 6.</i>
evidence_description	String		Narrative description of the evidence in support of the challenge. - <i>Value may be null.</i>

Evidence File. Filers submitting a bulk challenge based on Methodology Code 1 must upload a separate file that provides evidence to support the fixed availability challenge. At least one evidence file must be submitted for each bulk fixed challenge file. The accepted file formats for the evidence file are: DOC, DOCX, PDF, JPEG, PNG.

2.3 Bulk Fixed Challenge Data: Information Collected from Individual Consumers; Other (Methodology Codes 2 and 3)

If a bulk fixed challenge submission is based on either the second methodology (Information Collected from Individual Consumers) or another methodology, then the filer should upload bulk challenge data matching the specifications provided in the table below. This file must contain records of each location included in the challenge in Comma Separated Value (CSV) format. The file must include the header row specified below. Filers must upload a separate file for each provider being challenged. In addition, each location_id included in the file must match a location_id from the Broadband Serviceable Location Fabric and published on the Broadband Map. Filers must use the vintage of the Fabric associated with the fixed availability data being challenged (i.e., if the challenge is the fixed availability data as of June 30, 2022,

filers must use the location_ids associated with version of the Fabric used and availability data as of that date).

To submit more than one challenge to a particular location, enter an additional record for that location_id and enter the additional technology and/or category_code associated with that location.

Field	Data Type	Example	Description / Notes
contact_name	String	Jane Broadband	Full name of the individual contact associated with the challenge at the location.
contact_email	String	jane.broadband@fcc.gov	Email address of the individual contact associated with the challenge at the location. - Value must match valid email address format, e.g.: atom@domain.tld .
contact_phone	String	888-225-5322	Phone number of the individual contact associated with the challenge at the location. - Value is optional and may be null. - Value must match valid US phone number format: 000-000-0000, if not null.
provider_id	Integer	900104	Unique identifier for the fixed service provider subject to the challenge.
brand_name	String	Acme Broadband	Brand name of the service being challenged, as shown on the Broadband Map.
technology	Integer	50	Code for the technology of the service being challenged, as shown on the Broadband Map. - Value must be one of the following codes: 10 – Copper Wire 40 – Coaxial Cable / HFC 50 – Optical Carrier / Fiber to the Premises 60 – Geostationary Satellite 61 – Non-geostationary Satellite 70 – Unlicensed Terrestrial Fixed Wireless 71 – Licensed Terrestrial Fixed Wireless 0 – Other
location_id	String	1357135307	Unique identifier for the location, from the Broadband Serviceable Location Fabric, at which the fixed availability information is being challenged.

Field	Data Type	Example	Description / Notes
data_vintage	Date	2022-06-30	<p>Vintage date of fixed broadband availability data being challenged.</p> <p>- Value must match valid ISO-8601 date format, e.g.: YYYY-MM-DD</p> <p>- Value must correspond to the as-of date of the fixed broadband availability data published on the Broadband Map.</p>
category_code	Enumerable	1	<p>Code identifying the category or reason for fixed availability challenge of the provider at the location.</p> <p>- Value must be one of the following codes:</p> <ul style="list-style-type: none"> 1 – Provider failed to schedule a service installation within 10 business days of a request. 2 – Provider did not install the service at the agreed-upon time. 3 – Provider requested more than the standard installation fee to connect the location. 4 – Provider denied the request for service. 5 – Provider does not offer the technology entered above at this location. 6 – Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location. 8 – No wireless or satellite signal is available at this location. 9 – New, non-standard equipment is required to connect this location. <p>- Value may not be 8 or 9 unless technology value is 60, 61, 70, or 71.</p>
request_date	Date	2022-09-01	<p>As relevant, enter the most recent date associated with the category_code above, such as the date a service request was denied or the date the challenger became aware of the circumstances.- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5 or 6.</p>

Field	Data Type	Example	Description / Notes
request_method_code	String	1	<p>As relevant, enter the communication method associated with the category_code and request_date above, such as how a service request was denied or how the challenger became aware of the circumstances. - <i>Value must be one of the following codes:</i></p> <ul style="list-style-type: none"> 1 – Email 2 – Phone 3 – Website 0 – Other <p>- <i>Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</i></p> <p>- <i>Value must be null if category_code value is 5 or 6.</i></p>
evidence_description	String		Narrative description of the evidence in support of the challenge.

Evidence File. Filers submitting a bulk challenge based on Methodology Codes 2 or 3 have the option to upload a separate file (or files) that provides evidence to support the fixed availability challenge. The accepted file formats for the evidence file are: DOC, DOCX, PDF, JPEG, PNG.

3 Bulk Fixed Crowdsourcing Data

Entities may file bulk crowdsourcing data in response to the fixed broadband availability data published on the FCC’s Broadband Map. Crowdsourcing data differs from the challenge data several ways. First, while the data is shared with the relevant provider, unlike for a challenge the provider is not required to respond to the crowdsourcing information. Second, filers of bulk crowdsourcing data can provide information on locations where the performance of the fixed broadband service does not match its advertised speed. Third, providing evidence to support the circumstances claimed in crowdsourcing data is optional. Finally, filers of crowdsourcing data do not need certify that they “own or reside at the location or are otherwise authorized to request broadband service there,” which filers of challenge data are required to do.

The bulk crowdsourcing data that must be submitted varies slightly based on the methodology used to generate the data, as described in Section 3.1 below.

3.1 Bulk Fixed Crowdsourcing Methodology

All entities submitting bulk fixed availability crowdsourcing information must first enter information in a web form in the BDC system about the methodology used to collect the bulk crowdsourcing information. There are three options: (1) Knowledge of Infrastructure, (2) Information Collected from Individual Consumers, and (3) Other. “Knowledge of Infrastructure” information could be based on knowledge or observations of where network facilities and plant exist, such as on-the-ground examination of broadband infrastructure, building permits, or rights-of-way. The second option would be based on information collected from individual consumers about their broadband service, including the broadband services available, and not available, to them. If the bulk fixed crowdsourcing information is based on a methodology other than these two options, then the filer should choose “Other.”

The fields that must be entered in the web form are listed below.

Field	Example	Description / Notes
Methodology	Knowledge of Infrastructure	The methodology and source of the information contained within the bulk fixed crowdsourcing data. - Value must be one of the following: <ul style="list-style-type: none">• Knowledge of Infrastructure• Information Collected from Individual Consumers• Other
Description		Narrative explanation of how the information contained within the bulk fixed crowdsourcing data was gathered. - Value may be null if the methodology value is “Knowledge of Infrastructure”.

Field	Example	Description / Notes
Contact Name	John Broadband	Full name of the contact associated with the bulk crowdsource data. - If methodology value is "Information Collected from Individual Consumers," then this value is not collected via this form but will be collected in the upload file.
Contact Email	John.Broadband@company.com	Email address of the contact associated with the bulk crowdsource data. - Value must match valid email address form if not null, e.g.: atom@domain.tld . - If methodology value is "Information Collected from Individual Consumers" then this value is not collected via this form but will be collected in the upload file.
Contact Phone Number	202-555-5555	Phone number of the contact associated with the bulk crowdsource data. - Value is optional and may be null. - Value must match valid US phone number format: 000-000-0000, if not null. - If methodology value is "Information Collected from Individual Consumers," then this value is not collected via this form but will be collected in the upload file.

3.2 Bulk Fixed Crowdsource Data: Knowledge of Infrastructure (Methodology 1)

If a bulk fixed challenge submission is based on the first methodology, Knowledge of Infrastructure, the filer should upload bulk challenge data matching the specification provided in the table below. This file must contain records of each location about which crowdsource information is being submitted in Comma Separated Value (CSV) format. The file must include the header row specified below. The location_ids in the file must match those from the Broadband Serviceable Location Fabric and published on the Broadband Map. Filers must use the vintage of the Fabric associated with the fixed availability data about which crowdsource information is being submitted (i.e., if submitting crowdsource information about the fixed availability data as of June 30, 2022, filers must use the location_ids associated with version of the Fabric used and availability data as of that date.)

To submit crowdsource data about a particular location for more than one reason, enter an additional record for that location_id and enter the additional category_code associated with that location.

Field	Data Type	Example	Description / Notes
provider_id	Integer	900104	Unique identifier for the fixed service provider subject to the crowdsource submission.

Field	Data Type	Example	Description / Notes
brand_name	String	Acme Broadband	Brand name of the service subject to the crowdsourcing submission, as shown on the Broadband Map.
technology	Integer	50	Code for the technology of the service subject to the crowdsourcing submission, as shown on the Broadband Map. - Value must be one of the following codes: 10 – Copper Wire 40 – Coaxial Cable / HFC 50 – Optical Carrier / Fiber to the Premises 60 – Geostationary Satellite 61 – Non-geostationary Satellite 70 – Unlicensed Terrestrial Fixed Wireless 71 – Licensed Terrestrial Fixed Wireless 0 – Other
location_id	String	1357135307	Unique identifier for the location, from the Broadband Serviceable Location Fabric, about which crowdsourcing information on fixed broadband availability is being submitted.
data_vintage	Date	2022-06-30	Vintage date of fixed broadband availability data about which crowdsourcing information is being submitted. - Value must match valid ISO-8601 date format, e.g.: YYYY-MM-DD - Value must correspond to the as-of date of the fixed broadband availability data published on the Broadband Map.

Field	Data Type	Example	Description / Notes
category_code	Enumerated	5	<p>Code identifying the category of fixed service provider crowdsource submission.</p> <p>- Value must be one of the following codes:</p> <ul style="list-style-type: none"> 1 – Provider failed to schedule a service installation within 10 business days of a request. 2 – Provider did not install the service at the agreed-upon time. 3 – Provider requested more than the standard installation fee to connect the location. 4 – Provider denied the request for service. 5 – Provider does not offer the technology entered above at this location. 6 – Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location. 7 – The actual speed of the service does not match its advertised speed. 8 – No wireless or satellite signal is available at this location. 9 – New, non-standard equipment had to be constructed at this location. <p>- Value may not be 8 or 9 unless technology value is 60, 61, 70, or 71.</p>
request_date	Date	2022-09-01	<p>As relevant, enter the most recent date associated with the category_code above, such as the date a service request was denied or the date the filer became aware of the circumstances.</p> <p>- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5, 6, or 7.</p>

Field	Data Type	Example	Description / Notes
request_method_code	Enumerated	1	<p>As relevant, enter the communication method associated with the category_code and request_date above, such as how a service request was denied or how the filer became aware of the circumstances.</p> <p>- Value must be one of the following codes:</p> <p>1 – Email 2 – Phone 3 – Website 0 – Other</p> <p>- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5, 6, or 7.</p>
evidence_description	String		<p>Narrative description of the evidence in support of the crowdsourcing submission.</p> <p>- Value may be null.</p>

Additional Information. Filers of bulk crowdsourcing data have the option to upload a separate file (or files) that provides additional information related to the data in the bulk fixed crowdsourcing data. The accepted file formats for the evidence file are: DOC, DOCX, PDF, JPEG, PNG.

3.3 Bulk Fixed Challenge Data: Information Collected from Individual Consumers; Other (Methodology Codes 2 and 3)

If a bulk fixed crowdsourcing submission is based on the second methodology, Information Collected from Individual Consumers, or another methodology, the filer should upload bulk crowdsourcing data matching the specifications provided in the table below. This file must contain records of each location about which crowdsourcing information is being submitted in Comma Separated Value (CSV) format. The file must include the header row specified below. The location_ids in the file must match those from the Broadband Serviceable Location Fabric and published on the Broadband Map. Filers must use the vintage of the Fabric associated with the fixed availability data about which crowdsourcing information is being submitted (i.e., if submitting crowdsourcing information about the fixed availability data as of June 30, 2022, filers

must use the location_ids associated with version of the Fabric used and availability data as of that date).

To submit crowdsourcing data about a particular location for more than one reason, enter an additional record for that location_id and enter the additional category_code associated with that location.

Field	Data Type	Example	Description / Notes
contact_name	String	Jane Broadband	Full name of the individual contact associated with the crowdsourcing submission.
contact_email	String	jane.broadband@fcc.gov	Email address of the individual contact associated with the crowdsourcing submission. - Value must match valid email address format, e.g.: atom@domain.tld .
contact_phone	String	888-225-5322	Phone number of the individual contact associated with the crowdsourcing submission. - Value is optional and may be null. - Value must match valid US phone number format: 000-000-0000, if not null.
provider_id	Integer	900104	Unique identifier for the fixed service provider subject to the crowdsourcing submission.
brand_name	String	Acme Broadband	Brand name of the service subject to the crowdsourcing submission, as shown on the Broadband Map.
technology	Integer	50	Code for the technology of the service subject to the crowdsourcing submission, as shown on the Broadband Map. - Value must be one of the following codes: 10 – Copper Wire 40 – Coaxial Cable / HFC 50 – Optical Carrier / Fiber to the Premises 60 – Geostationary Satellite 61 – Non-geostationary Satellite 70 – Unlicensed Terrestrial Fixed Wireless 71 – Licensed Terrestrial Fixed Wireless 0 – Other
location_id	String	1357135307	Unique identifier for the location, from the Broadband Serviceable Location Fabric, about which crowdsourcing information on fixed broadband availability is being submitted.

Field	Data Type	Example	Description / Notes
data_vintage	Date	2022-06-30	<p>Vintage date of fixed broadband availability data about which crowdsource information is being submitted.</p> <p>- Value must match valid ISO-8601 date format, e.g.: YYYY-MM-DD</p> <p>- Value must correspond to the as-of date of the fixed broadband availability data published on the Broadband Map.</p>
category_code	Enumerable	1	<p>Code identifying the category of fixed service provider crowdsource submission.</p> <p>- Value must be one of the following codes:</p> <ol style="list-style-type: none"> 1 – Provider failed to schedule a service installation within 10 business days of a request. 2 – Provider did not install the service at the agreed-upon time. 3 – Provider requested more than the standard installation fee to connect the location. 4 – Provider denied the request for service. 5 – Provider does not offer the technology entered above at this location. 6 – Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location. 7 – The actual speed of the service does not match its advertised speed. 8 – No wireless or satellite signal is available at this location. 9 – New, non-standard equipment had to be constructed at this location. <p>- Value may not be 8 or 9 unless technology value is 60, 61, 70, or 71.</p>
request_date	Date	2022-09-01	<p>As relevant, enter the most recent date associated with the category_code above, such as the date a service request was denied or the date the filer became aware of the circumstances.</p> <p>- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5, 6, or 7.</p>

Field	Data Type	Example	Description / Notes
request_method_code	String	1	<p>As relevant, enter the communication method associated with the category_code and request_date above, such as how a service request was denied or how the filer became aware of the circumstances.</p> <p>- Value must be one of the following codes:</p> <p>1 – Email 2 – Phone 3 – Website 0 – Other</p> <p>- Value is required if category_code value is 1, 2, 3, 4, 8, or 9.</p> <p>- Value must be null if category_code value is 5, 6, or 7.</p>
evidence_description	String		<p>Narrative description of the evidence in support of the crowdsourcing submission.</p> <p>- Value may be null.</p>

Additional Information. Filers of bulk crowdsourcing data have the option to upload a separate file (or files) that provides additional information related to the data in the bulk fixed crowdsourcing data. The accepted file formats for the evidence file are: DOC, DOCX, PDF, JPEG, PNG.