BEAD Challenge Process with EducationSuperHighway*

Ensuring Accurate MDU Broadband Service Availability

***Note: Red text in this deck indicate updates from NTIA or FCC which were made *after* the webinar.**

ConnectHomeUSA

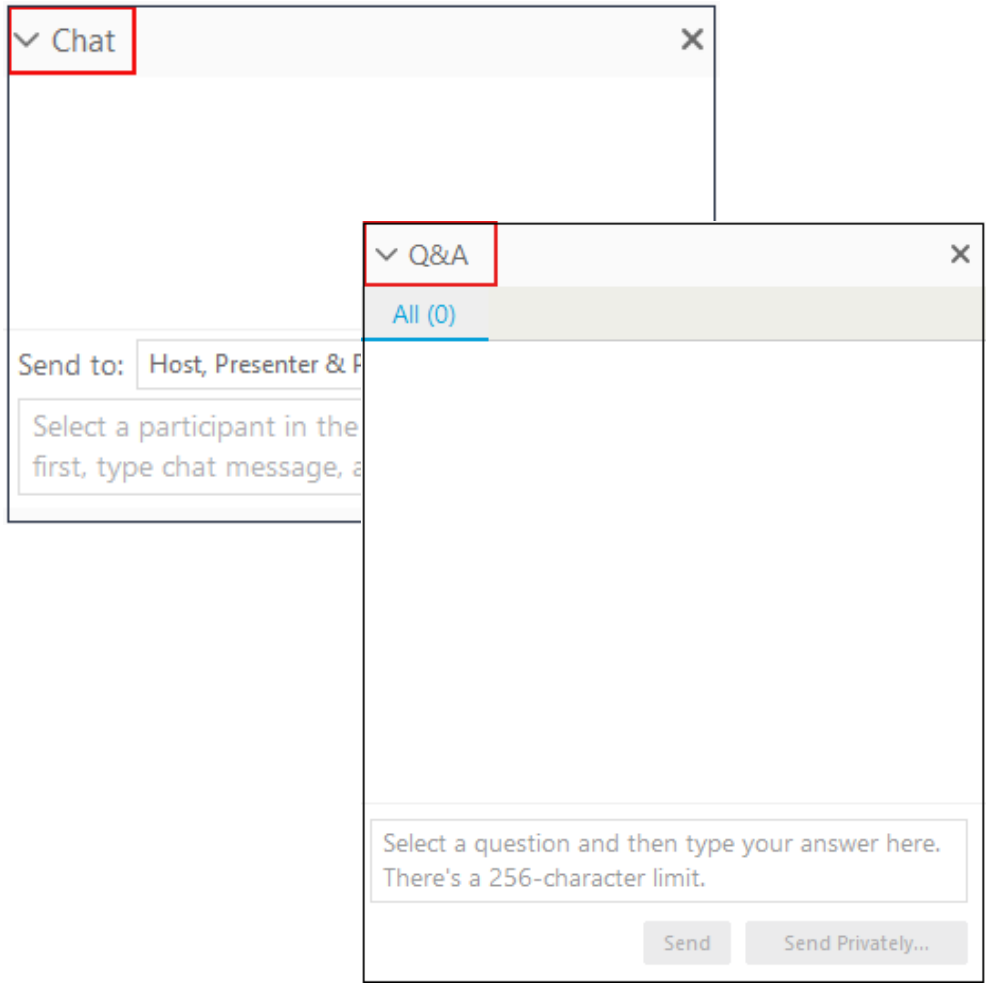
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Webinar Instructions

- PowerPoint and webinar recording will be available on the HUD Exchange
- Participants in ‘listen only’ mode
- Submit content related questions in Q&A box on right side of screen
- For technical issues, request assistance through the Chat box

Technical Issues? Questions?

- Chat
  - Please submit any technical issues via the Chat box
  - Send the message to the Host
  - Host will work directly with you to resolve those issues
- Q&A
  - Please submit any content related questions via the Q&A box
  - Send to Host, Presenter and Panelists



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Speakers

- **Sean Gerner**, Senior Program Director, EducationSuperHighway
- **Joelle Tolifero**, Community Impact Manager, EducationSuperHighway
- **Peter Paskowsky**, Principal Network Consultant, EducationSuperHighway
- **Sara Arman**, Program Lead, ConnectHomeUSA, HUD

STATE BEAD CHALLENGE PROCESS: STEP-BY-STEP GUIDE TO ENSURING ACCURATE BROADBAND SERVICE AVAILABILITY

EducationSuperHighway

Sean Gerner

Peter Paskowsky

Joelle Tolifero

Agenda

01 Our History & Mission

02 Apartment Wi-Fi Team

03 Broadband Equity, Access, and Deployment (BEAD)

04 BEAD Challenge Process

05 Close Out & Next Steps

06 Q&A

OUR HISTORY

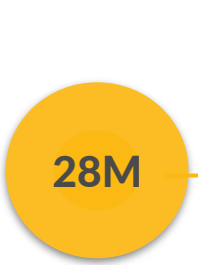
From 2013 to 2020, EducationSuperHighway led the effort to close the K-12 digital divide

2013	2020
4 M STUDENTS MEETING 100 KBPS PER STUDENT GOAL	**46.8 M** STUDENTS MEETING 100 KBPS PER STUDENT GOAL
22,958 SCHOOLS WITHOUT FIBER	**504** SCHOOLS WITHOUT FIBER
$22.00 COST PER MBPS	**$1.85** COST PER MBPS
10% of students had broadband to support digital learning	**99.6%** of students have broadband to support digital learning

OUR MISSION

Close the digital divide for the **17 million households** that have access to the Internet but can't afford to connect.

THE DIGITAL DIVIDE



28M of 123M **households** in the United States do not have high-speed broadband.

AFFORDABILITY GAP

17M **households** have access to the Internet but cannot afford to connect.

MISSION FOCUS

OUR TEAM

The Apartment Wi-Fi Team

Since EducationSuperHighway is a national nonprofit, you can think of the Apartment Wi-Fi team as pro bono network consultants.

We are not a provider and have a vendor agnostic approach to make sure we provide the best recommendations to our partners.

BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM

BEAD Basics

THE BROADBAND EQUITY, ACCESS, AND DEPLOYMENT (BEAD) PROGRAM, provides **$42.45 billion** to expand high-speed Internet access by funding planning, infrastructure deployment and adoption programs.

ELIGIBLE ENTITIES: STATES , THE DISTRICT OF COLOMBIA, AND PUERTO RICO WILL RECEIVE A MINIMUM OF $100M, WHILE, GUAM, USVI, CNMI AND AMERICAN SAMOA WILL RECEIVE $25M; Additional funding allotment was determined by each entity's % of unserved and underserved households. Total allocation of BEAD funds for each state and territory can be found here.

PROGRAM PRIORITIES

- **Unserved locations** (<25/3 Mbps)
- **Underserved locations** (<100/20 Mbps)
- **Community Anchor Institutions** (1000/1000 Mbps must be available)
- **Multi-Family Households** can be prioritized in BEAD funding

The **Infrastructure, Investment and Jobs Act** (IIJA) sets forth a **$65 billion** investment into broadband through the:

- **Broadband, Equity, Access, and Deployment**
- **Digital Equity Act**
- **Affordable Connectivity Programs**

BEAD-Eligible Uses

PLANNING FOR THE DEPLOYMENT of high-speed internet, including conducting research, collecting data, outreach, and training.

DEPLOYING OR UPGRADING INTERNET service in unserved or underserved areas or improving service to community anchor organizations.

INSTALLING INTERNET AND WI-FI INFRASTRUCTURE in eligible multi-family dwelling units (MDUs)

BEAD CHALLENGE PROCESS

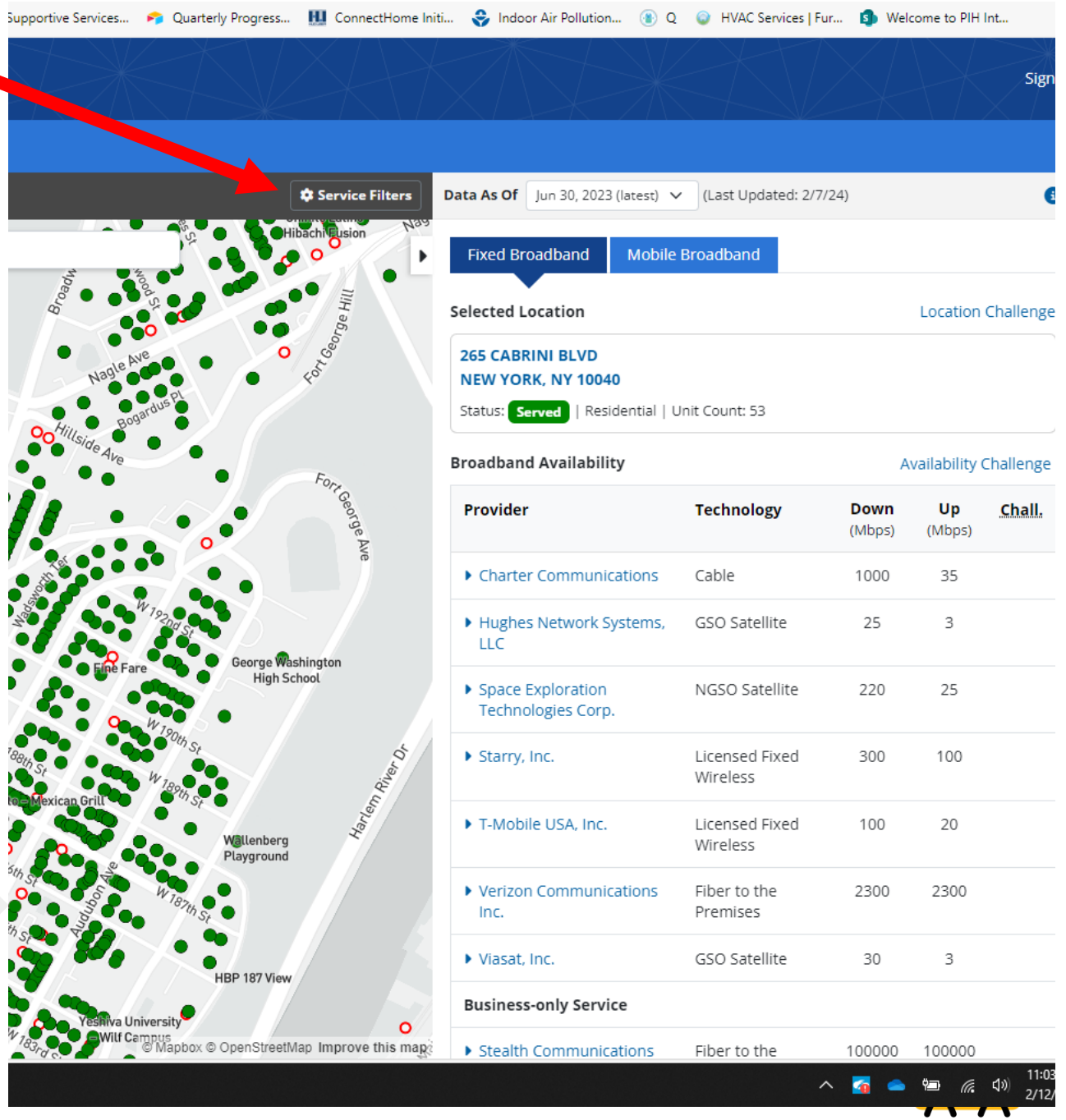
How is my building currently classified?

See your served status and which providers claim to offer service at your building on **Your State's or the FCC's National Broadband Map**

broadbandmap.fcc.gov

Important: To determine a site's BEAD eligibility, select speed and "*All Wired and Licensed Fixed Wireless*" in Service Filters [see arrow] on the FCC's National Broadband Map. [See next slide for what this filter option looks like]

As each state starts its challenge process, they may have their own map or they will choose to use the FCC map. They must publish a list of the Broadband Serviceable Locations (BSLs) on their state broadband website that are unserved or underserved and are eligible for BEAD funding.



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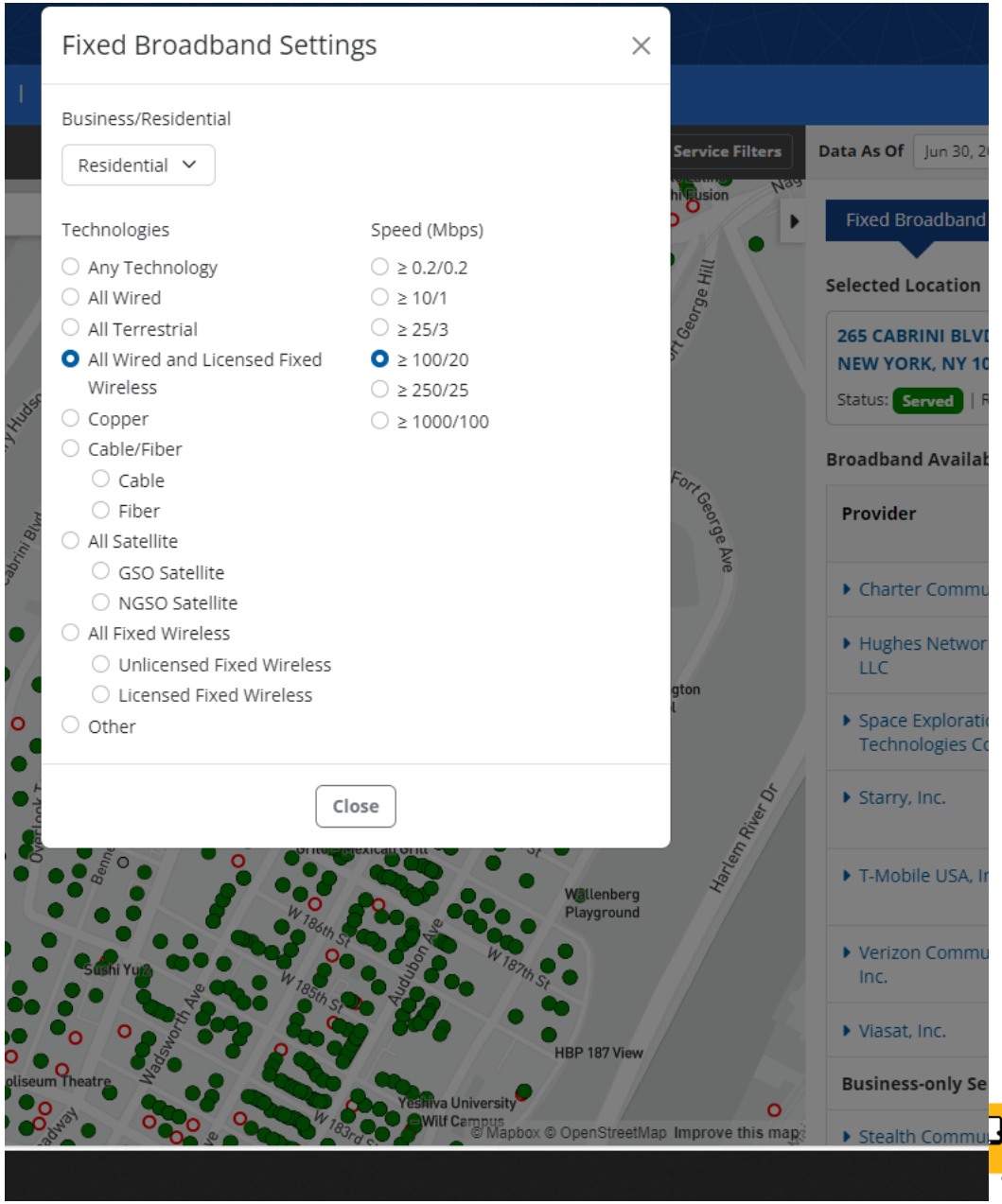


BEAD CHALLENGE PROCESS

FCC's National Broadband Map May Not Fully Account for Connectivity within MDUs

THE MAPS UNDERCOUNT UNSERVED AND UNDERSERVED UNITS IN MDUs

- The maps count multi-family housing developments as one Broadband Serviceable Location (BSL) no matter how many units make up the community
- Therefore, every unit within a BSL is assumed to have the same service availability.

THE CHALLENGE PROCESS IS CRITICAL TO GETTING AN ACCURATE PICTURE OF CONNECTIVITY

- The burden of proof is placed on unconnected communities, where many have limited to no access to Internet or are unaware of this program and challenge process.

By submitting challenges to States, the states can fairly **put the onus back on ISPs** to provide unit-level service availability for all MDUs.

- To ensure this process functions, it is crucial that **HUD-assisted housing providers** provide the necessary information about their specific locations to their states

s

20-25%

of unconnected households nationwide live in multi-family housing

Service Provider Examples

Provider reporting to offer 1G Fiber service, but that's only available for the manager's office. They can only provide residents slow and outdated DSL service inside the apartment.

Called and she told me service was available in the area but when I told her it was an apartment she says "oh no, nevermind, we can't provide service there if it's an MDU."

The provider website doesn't offer service and instead asks us to "Please submit your interest to help us determine which area we should build out fiber next."

Called and talked to Brandi, who told us there was "no fiber, but we can get a 15/3 Mbps fixed wireless connection that would require an antenna on the roof and we would need to get permission from property owner to install it."

BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM

Your residents are depending on you to advocate on their behalf.

Only ISPs, units of local government, and nonprofits can submit challenges.

Each state has its own challenge process and timelines. Dates and instructions can be found on your state broadband office's website.

For a list of all the state broadband offices and additional state broadband resources, use this NTIA link, and click on your state.

BEAD Timeline

WE ARE HERE

Most states are still waiting for the NTIA to approve their IP. To check the status of your state, use the NTIA Proposal Progress Dashboard

States Draft BEAD Initial Proposal Volume 1

Volume 1 mostly focuses on defining the initial maps, and laying out the challenge process

Public comment period for BEAD Volume 1 documents

States Draft BEAD Initial Proposal Volume 2

Volume 2 mostly focuses on the long term objectives, and explaining the grant selection process

Public comment period for BEAD Volume 2 Documents

NTIA approves final language for each States BEAD Volume 1 document

State BEAD Challenge Processes Begin

THIS IS WHERE YOU COME IN!

Each state has its own window. The entire challenge process will be a max of 120 days, with many states starting very soon. Louisiana and Virginia have completed this process in 2023.

It is important to note that while we are at the end of the BEAD preparation timeline, funds will be issued over a period of 5 years so the implications of the challenge process will be felt for years to come.

Challenge Types Overview

Code	Challenge Type
A	**Availability**
S	**Speed**
L	**Latency**
D	Data cap
T	Technology
B	**Business service only**
E	Enforceable Commitment
P	Planned service
N	Not part of enforceable commitment
C	**Location is a CAI**
R	Location is not a CAI
G	**CAI Qualifying broadband not available**
Q	CAI Qualifying broadband available

Not all states and territories allow speed and latency challenges!

BEAD CHALLENGE PROCESS

Availability Challenges

Defined as:

"The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU)."

Includes service that is not able to be ordered at all and not being able to order the advertised speeds. For example, the broadband map claims 1000/1000 Mbps, but your residents can only order 100/10 Mbps.

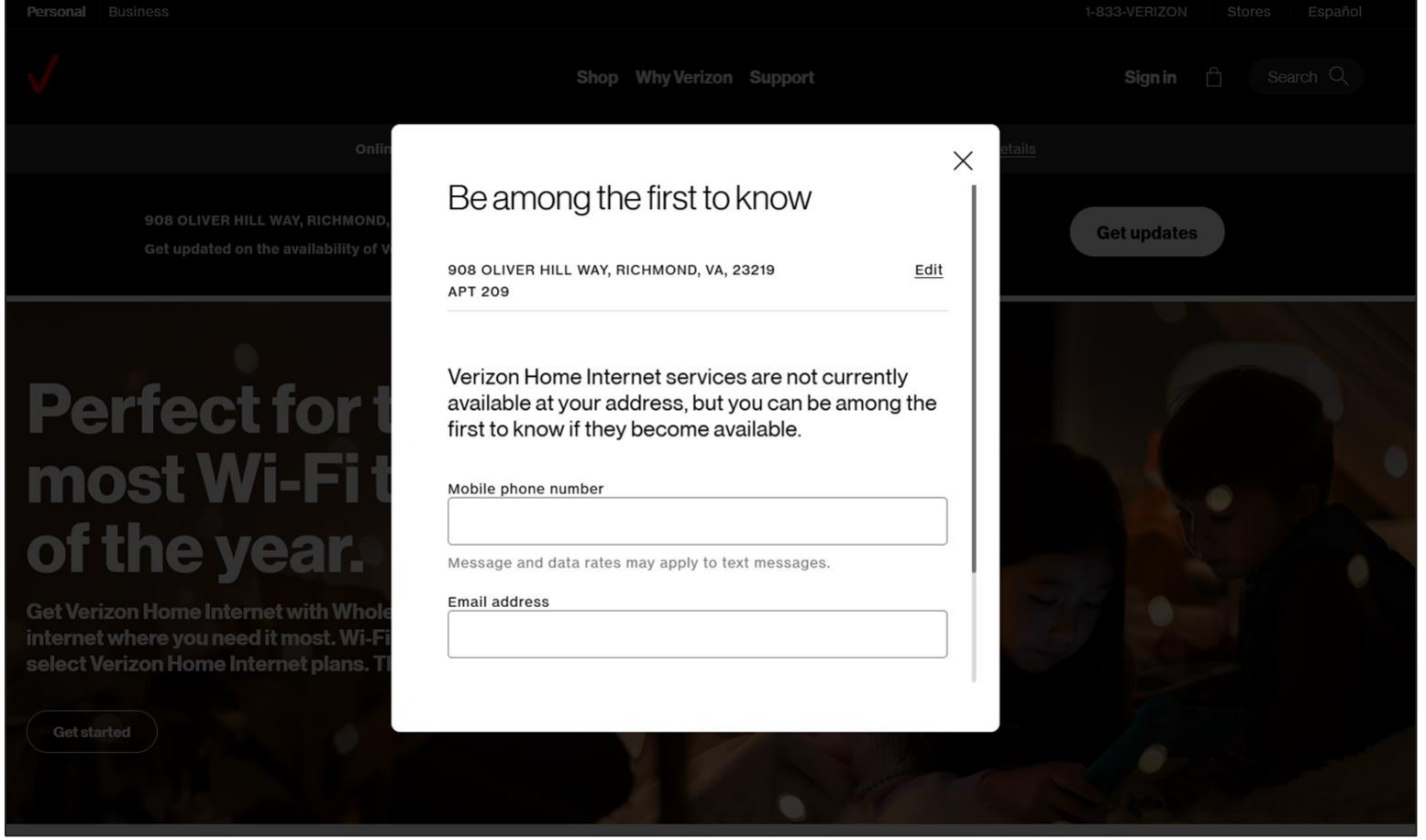
Proof: A photo of the provider's website, email, or chat showing you cannot order service.

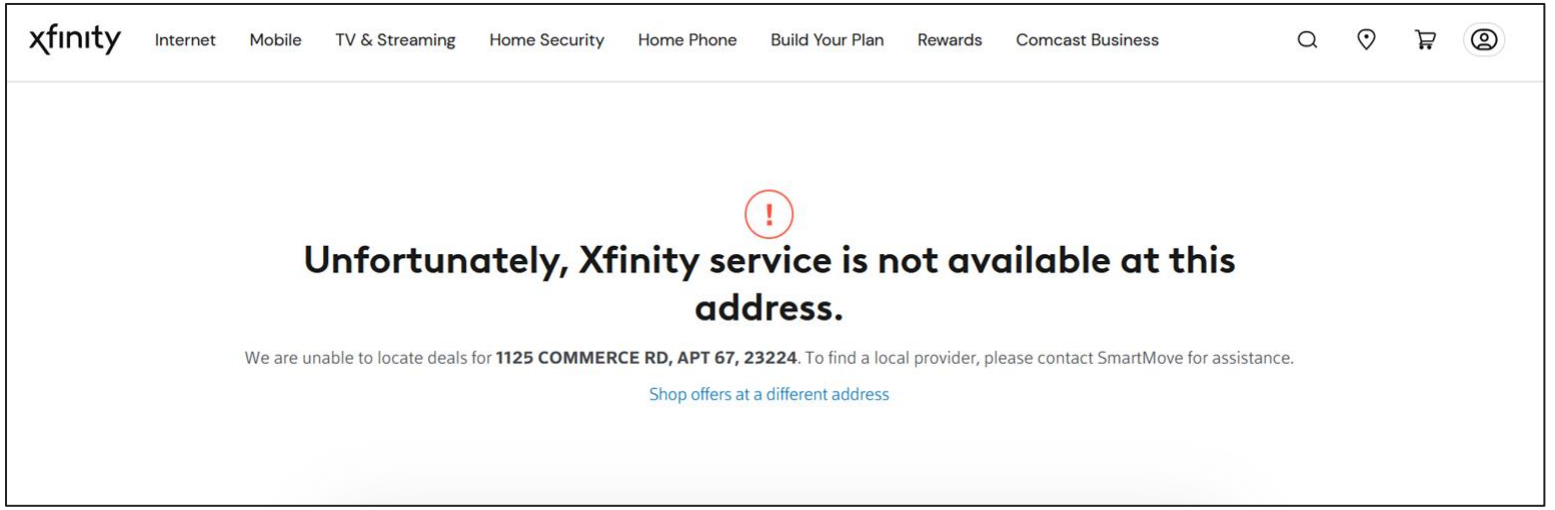
- Go to the internet service providers website and try to order service at resident units. When not possible, save a screenshot.
- If the website claims service but you know it's not available, start a support email or chat and take a screenshot of them saying they cannot deliver service to your location.

BEAD CHALLENGE PROCESS

Availability Challenge Proof Examples-

Verizon & Xfinity





BEAD CHALLENGE PROCESS

Speed and Latency Challenges

Speed Challenge:

"The actual speed of the service tier falls below the unserved or underserved thresholds."

i.e., **25/3 Mbps or 100/20 Mbps**

Latency Challenge:

Latency is the *time* it takes for data (such as a picture, message, or video) to be sent from one device to another.

"The round-trip latency of the broadband service exceeds **100 ms.**"

Both of these types of challenges are especially effective for cellular internet connections (e.g., T-Mobile) that claim speeds around the served and underserved thresholds. Not all states and territories allow these challenges.

BEAD CHALLENGE PROCESS

Speed and Latency Challenge Proof

Each Speed or Latency Test Must

- Consist of **three measurements, taken on different days**. The median (middle) value is used.
- Include the time and date it was conducted.
- Include the provider-assigned internet protocol (IP) address. This is typically shown on the test.
- Must be performed on a computer close to the router.

Proof is required of the speed tier the customer subscribes to and the name and address of the subscriber. This can be found on the customer bill.

Speed tests cannot predate the beginning of the challenge period by more than 60 days.

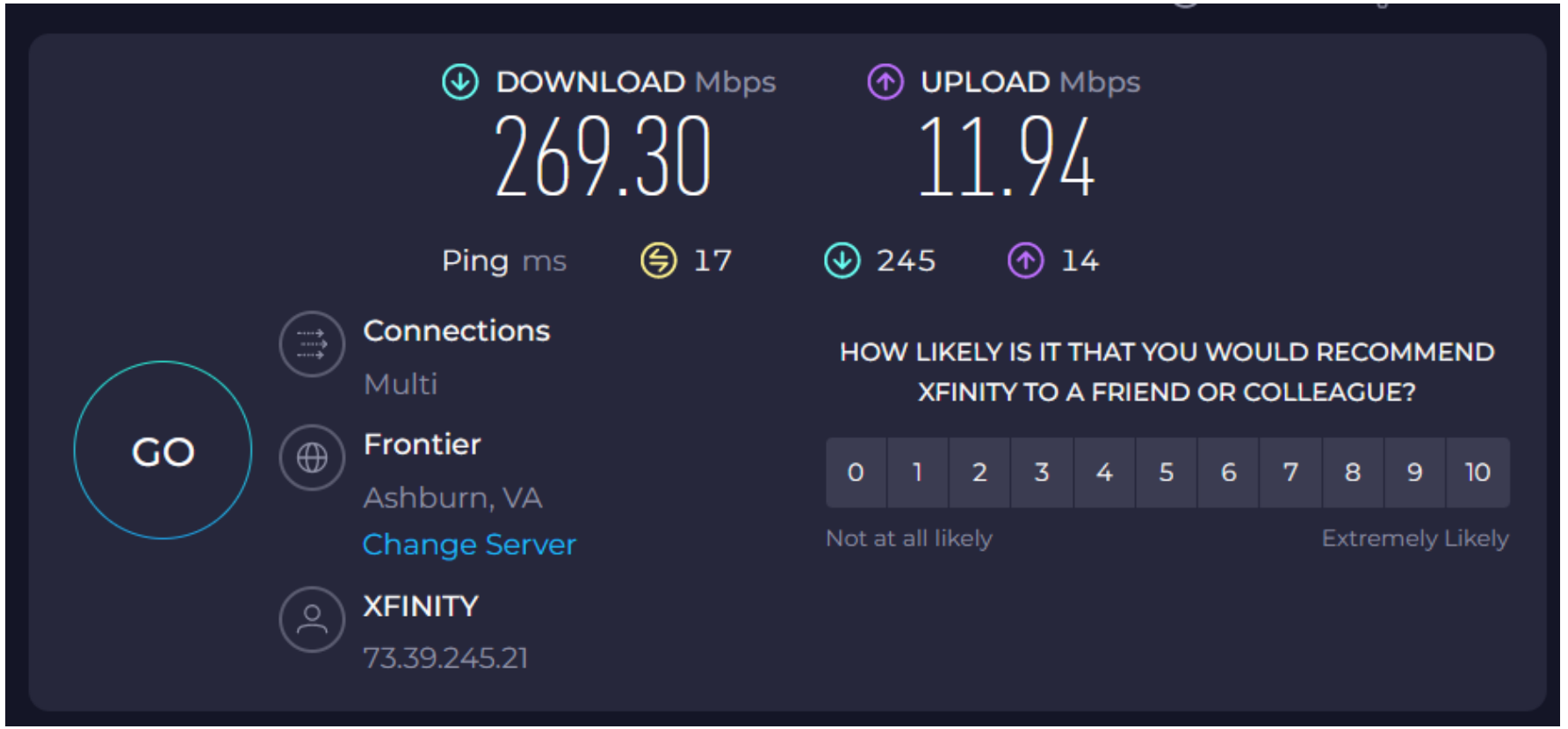
Each state & territory designates permissible speed test applications.

Speed Tests			
Test #	Download	Upload	
1	105	22	High
2	95	18	Median
3	90	16	Low

NTIA Approved Speed Test Services:

- speedtest.net
- speed.cloudflare.com
- fast.com
- speed.measurementlab.net
- Speed test sites operated or sponsored by Eligible Entities

Example Speed Test Proof - **Underserved**

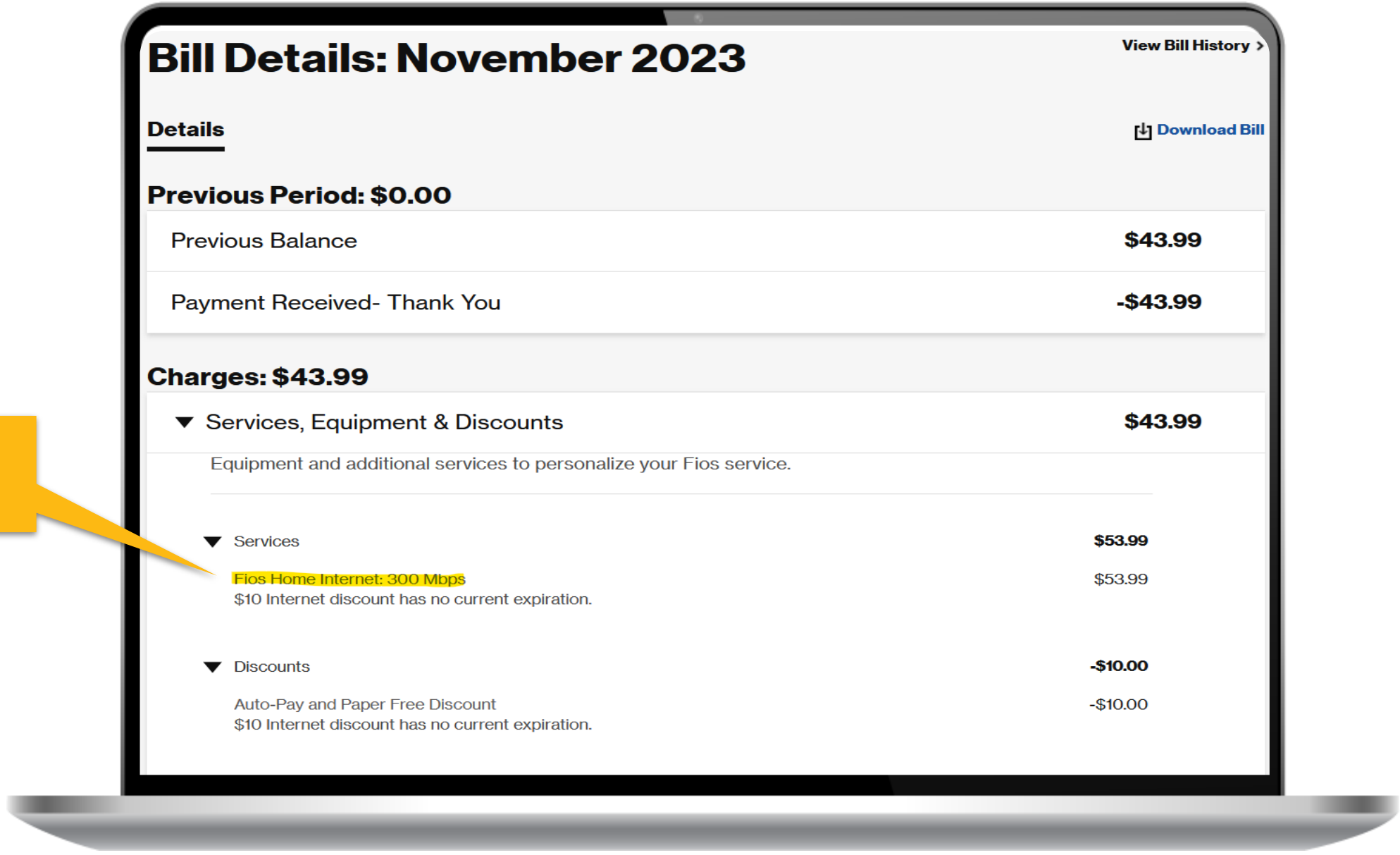


Test Performed on Dec. 8, 2023 at 12:10 p.m. by John Doe at 123 Main St, Baltimore, MD, 21201

Speedtest.net

Example Speed Test Proof - **Invoice**

Flos Home Internet: 300 Mbps



Bill Details: November 2023

View Bill History >

Details

Download Bill

Previous Period: $0.00

Previous Balance	**$43.99**
Payment Received- Thank You	**-$43.99**

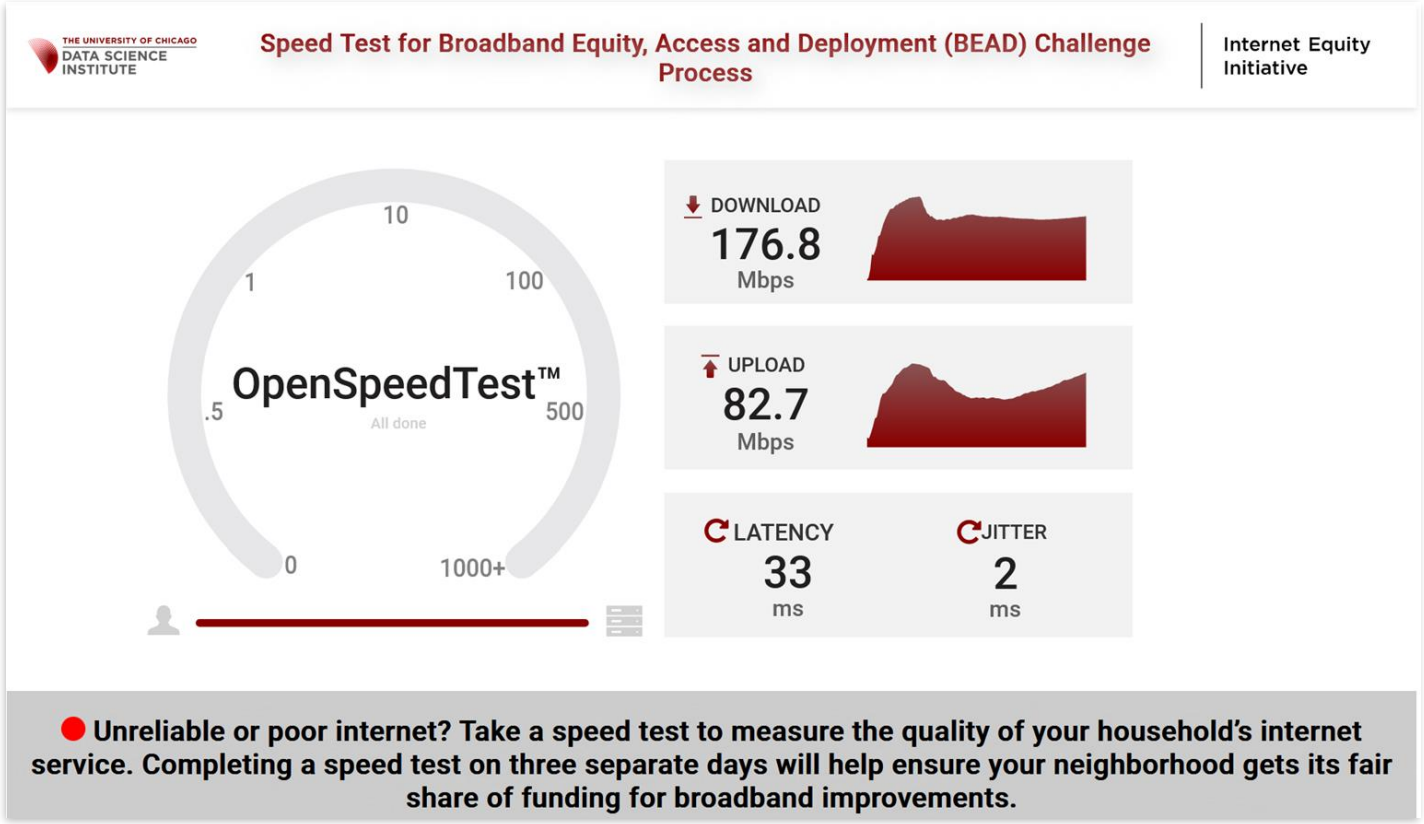
Charges: $43.99

▼ Services, Equipment & Discounts	**$43.99**

Equipment and additional services to personalize your Fios service.

▼ Services	**$53.99**
Fios Home Internet: 300 Mbps $10 Internet discount has no current expiration.	$53.99
▼ Discounts	**-$10.00**
Auto-Pay and Paper Free Discount $10 Internet discount has no current expiration.	-$10.00

Example Speed Test Proof - **Illinois**



Illinois in partnership with the University of Chicago has created a speedtest portal that can make the speed test challenge process much easier for Illinois residents.

The portal will submit challenges on behalf of users who have speeds below 100/20 or 25/3. Users can agree to be emailed to perform 3 tests and enter the required information for the challenge.

Check if your state is doing something similar!

beadchallenge.org

BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM

Business Service Only Challenges

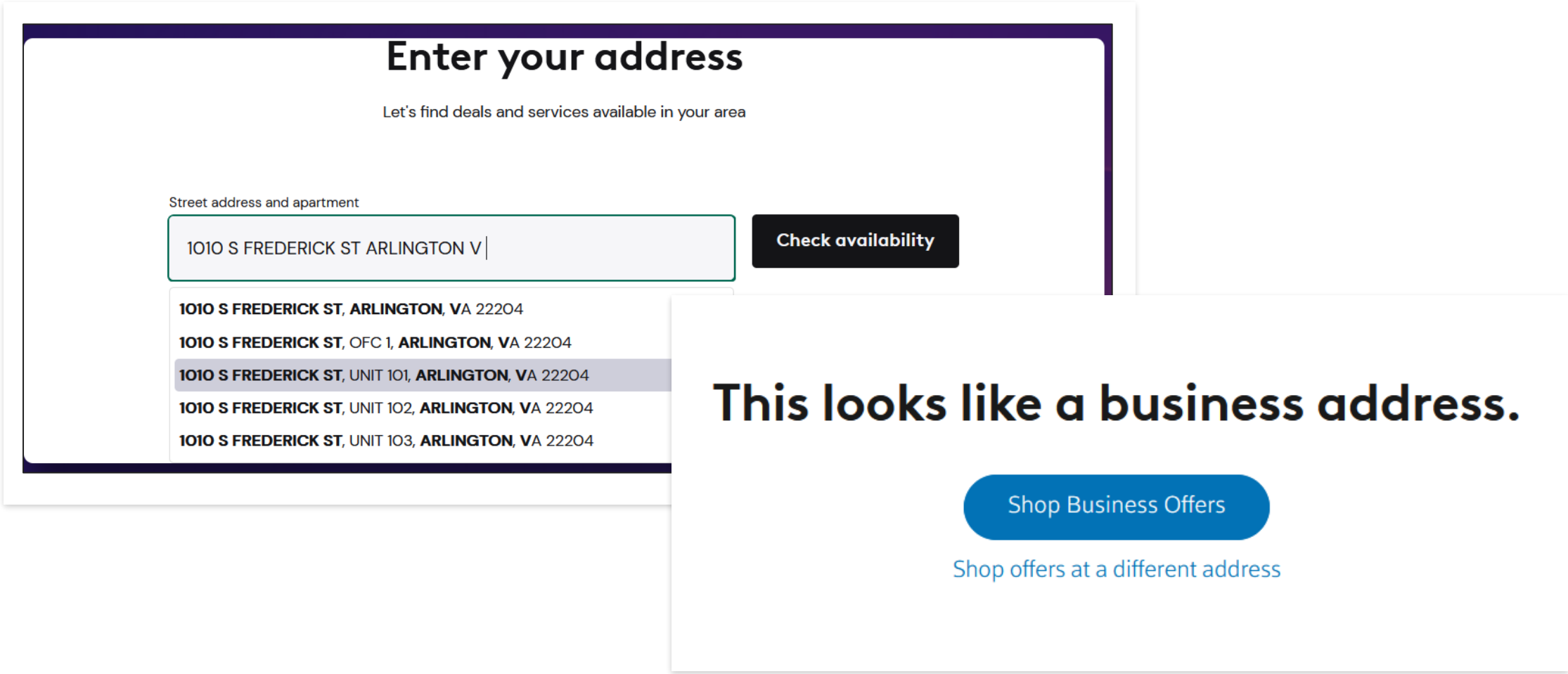
Defined as:

"The location is residential, but the service offered is marketed or available only to businesses."

Proof:

A photo of the providers website, email, or chat showing you cannot order residential service.

Example Proof Business Service Only Challenge - **Xfinity**



Community Anchor Institution Challenges

CAIs are defined to “Facilitate greater use of broadband service by vulnerable populations."

CAIs must have a 1000/1000 Mbps connection available.

If your location is already Served, it **is worth challenging** your locations as CAIs if you are served by anything less than 1000/1000 Mbps connections.

If your location is already Unserved or Underserved, or if you will be making an availability challenge, it’s **best to not make a CAI challenge**.

States can propose additional types of CAIs. MDUs are unlikely to be CAIs unless they contain a community center or housing authority organization, for example. States must publish proposed lists of CAIs.

CAI Examples Include:

- **Public Housing Agency, HUD-Assisted Housing Organization or Tribal Housing Organization**
- **Schools**
- **Libraries**
- **Medical Providers**
- **Public Safety Entities**
- **Institutions of Higher Education**

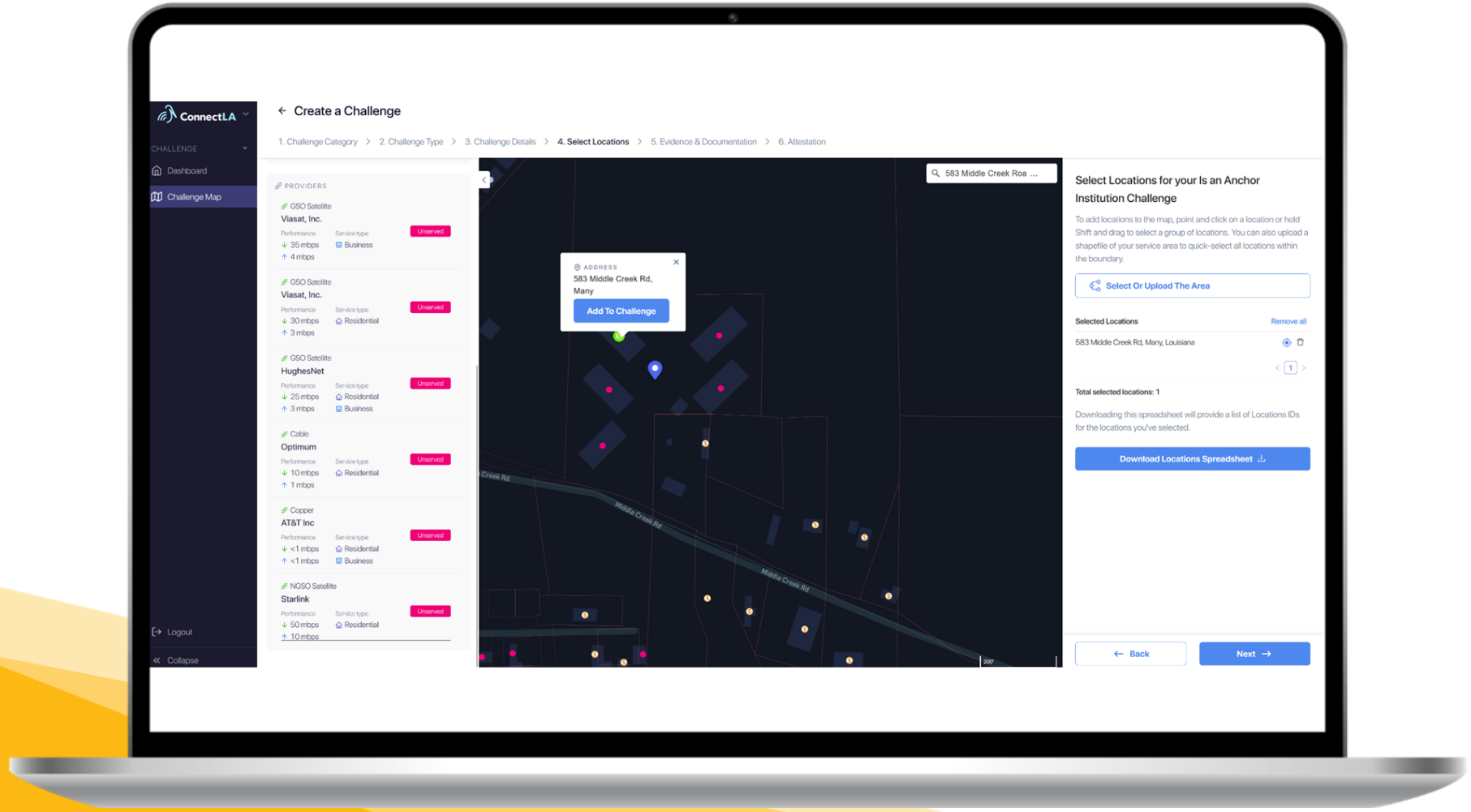
Community Anchor Institution Challenges

If a CAI challenge is right for you - Include the most relevant evidence as part of your challenge, showing how you're “Facilitating greater use of broadband service by vulnerable populations” which is how BEAD defines a CAI.

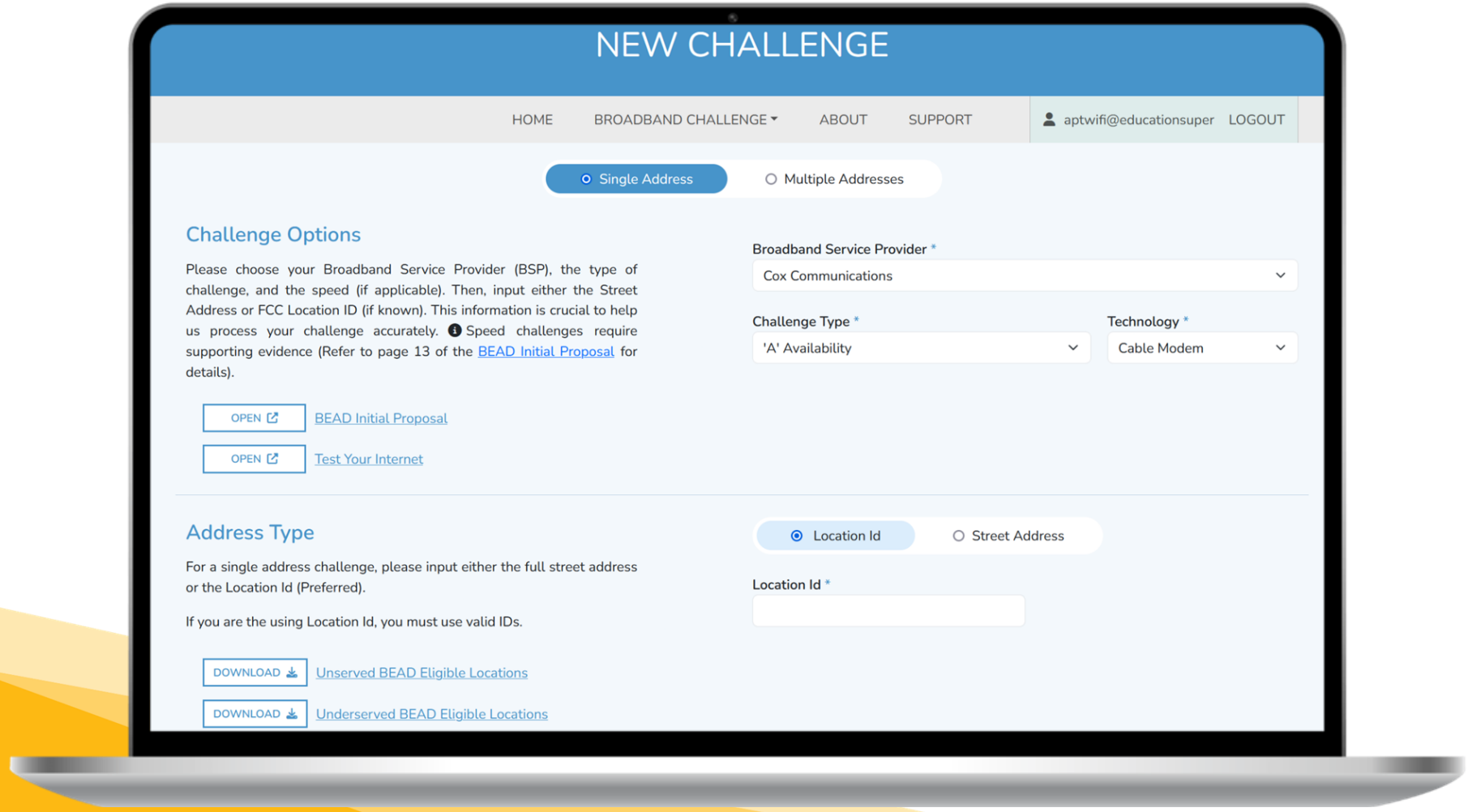
Examples could include pictures, your website, and/or flyers showing:

- Digital literacy trainings
- Device giveaways
- Computer labs
- Community Wi-Fi
- Any partnerships with digital equity organizations

Example Broadband Portal - **Louisiana**



Example Broadband Portal - **Virginia**



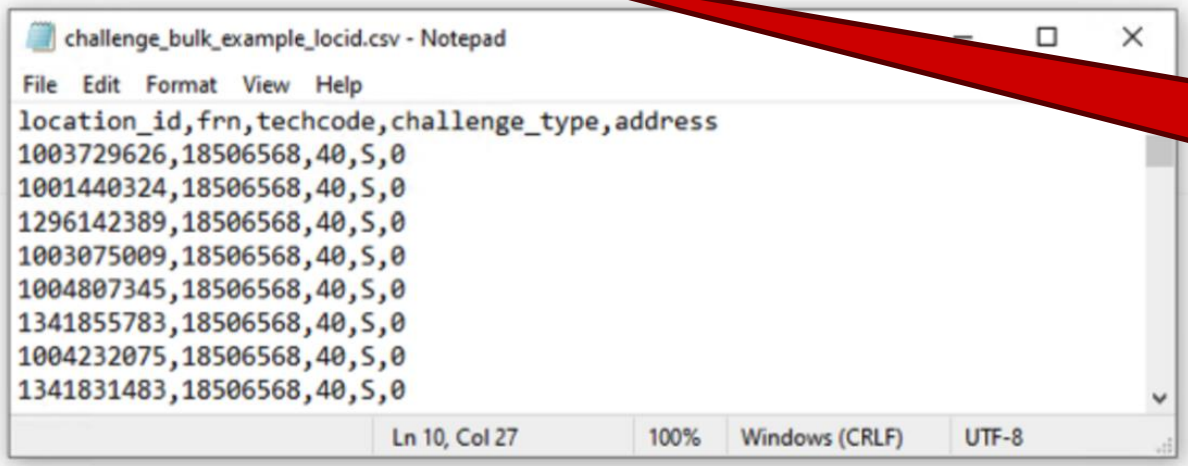
Example Bulk Challenge - **Virginia**

If you have many properties to challenge, we expect most states to have a bulk upload tool to make it easier, like this one from Virginia.

CSV Standards

When viewed in Notepad or similar text editors, your CSV file should resemble the examples given below. The required headers/fields are: **location_id, frn, techcode, challenge_type**, and **address**. The address field is optional if you are unable to provide the **location_id**. Please use a '0' for **location_id** if using **address**.

Image 1: Sample CSV featuring the FCC's Fabric Location IDs (Preferred) with **address** left either blank or **0.**



Eligible challengers may need to convert street addresses to location IDs via the FCC Fabric. Contact NTIA for details.

BEAD CHALLENGE PROCESS

MDU Challenges

- This challenge type reverses the burden of proof onto the service provider, who must prove they offer connectivity to **all units in the MDU**.
- To challenge an entire MDU, more than one challenge may be required. Amount of challenges needed are shown to the right. We recommend submitting more than the minimum required!
- All of the challenges need to be of the same type. For example, all Availability Challenges, or all Speed Challenges.
- Check your State's BEAD Volume 1 document to check whether your state supports MDU challenges and make sure how many challenges are required. You can find those on your state's broadband website, which can be found here.

Original NTIA Guidance
(Minimum 3 or 10%)

Total Number of Units in MDU	Number of Challenges Required
20	3
40	4
100	10

Updated NTIA Guidance
(Maximum 3)

Total Number of Units MDU	Number of Challenges Required
<15	1
16-24	2
25+	3

Area Challenges

An area challenge is ***automatically triggered*** *(no action needed on your behalf)* if **6 or more Broadband Service Locations (BSLs)** using:

- a particular technology and;
- a single service provider

within a ***census block group*** are challenged.

This is a very powerful tool for reversing the burden of proof onto the ISP rather than the residents.

- When receiving a MDU challenge, the internet service provider must show evidence that **all locations (BSLs)** within that census block group are served.

Not all states and territories allow area challenges

APARTMENT BUILDING CONNECTIVITY SOLUTIONS

Wi-Fi Connectivity solutions to bring broadband to your properties with competition and affordability in mind

Building Wide Wi-Fi

You can leverage cost-effective Wi-Fi to make broadband as ubiquitous in your buildings as it is in airports, hotels, or coffee shops.

Fiber to the Unit

In order for a building to truly be served, one way is to ensure that ISPs bring **fiber to the unit (FTTU),** as opposed to just dropping one fiber connection into the building

Neutral Wiring

Another way to connect the entire property and **increase competition** is by requiring that each unit have a wired connection that is owned by the property owner, ie. the Housing Authority, rather than by the ISP

Bulk Internet

Bulk internet for apartment buildings is when the building owner or management contracts with an ISP for high-speed internet access for all residents. Instead of individual sign-ups and payments, the service is managed collectively.

Next Steps

1. Review your property status on your state map first. If your state map is not yet available, you can also check your status on FCC Broadband Map . Be sure to check you state map once it is ready!

2. Connect with Joelle for Apartment Wi-Fi support: We provide technical assistance and DIY resources!

3. For questions related to the challenge process, please reach out to Peter or your State Broadband Office which can be found on this NTIA website.

nohomeleftoffline.org/apartment-wifi

Joelle Tolifero
Community Impact Manager
joelle@educationsuperhighway.org

Peter Paskowsky
Principal Network Consultant
peter@educationsuperhighway.org

Q&A

Send additional questions to:
ConnectHome@hud.gov
Contact state/territory broadband office – see page at BroadbandUSA (doc.gov)
Challenge process questions can be sent to BEAD@ntia.gov

ConnectHomeUSA Expansion Webinar Tomorrow!

- ConnectHomeUSA is HUD's signature digital inclusion program that aims to bridge the digital divide for HUD-assisted residents by addressing the three legs of the digital inclusion stool: digital skills building, devices, and internet connection.
- Join us tomorrow, **January 11th from 1:00-2:00 p.m. EST** to learn about the ConnectHomeUSA Program and how to apply to join the expansion!
- Scan QR code to register, or use this link: https://www.hudexchange.info/trainings/courses/steps-for-applying-to-join-the-connecthomeusa-expansion/

ConnectHomeUSA

Thank you for Attending!

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