# CALIFORNIA BEAD CHALLENGE PROCESS: SUBMITTING INDIVIDUAL CHALLENGES

June 2024

# AGENDA

- I. BEAD overview
- II. Challenge Process overview
- III. Role of individuals
- IV. How to submit an individual challenge
- V. Next steps

# **BEAD OVERVIEW**

### **BROADBAND 101**

#### • Why internet speeds are important

- Internet speeds are measured with two numbers: download and upload
- Speeds are measured using megabits per second (Mbps)
- 100/20 Mbps means 100 megabits downloaded per second and 20 megabits uploaded per second
- Speeds are the standard by which funding needs are determined

#### Broadband technologies

- Fiber = fiber-optic cable, small tubes of glass that transmit light at high speeds, the most future-proof and high-capacity technology
- Cable = coaxial cables, originally used for cable TV transmission
- DSL = copper wiring, originally used for telephone service
- Fixed wireless = wireless signals from towers (access points) to your home

# BEAD OVERVIEW

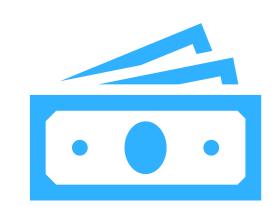
#### What is the BEAD Program?



- The Broadband Equity, Access, and Deployment (BEAD) Program was created by the bipartisan Infrastructure Investment and Jobs Act (IIJA) in 2021
- Allocates \$42.45 billion of federal funding to all 50 states, Washington D.C., and territories
- Administered by the National Telecommunications and Information Administration (NTIA)
- Goal of expanding high-speed internet access through infrastructure deployment

# FUNDING PRIORITY

How will BEAD funding be prioritized?



- 1. Top priority: Unserved areas (locations with internet speeds below 25/3 Mbps)
- 2. Second priority: Underserved areas (locations with speeds between 25/3 and 100/20 Mbps)
- 3. Third priority: Community anchor institutions\* (those with internet service under 1 Gbps symmetrical)

The BEAD Program requires the state to deliver service to all unserved and underserved areas.

\*Community anchor institutions are entities like schools, libraries, hospitals, and community support organizations that facilitate broadband use by vulnerable populations 0.0

In June 2023, California was allocated \$1.86 billion in BEAD funds that will become available following completion of the federal planning and approval cycle.

The CPUC has submitted to the federal government the Five-Year Action Plan and Initial Proposal Volumes I & II.

BEAD Planning	Challenge Process, followed by grant program	Deployment	
2023	2024	2025	

- BEAD funding is unprecedented; California is allocated \$1.86 billion for broadband infrastructure
- The Challenge Process is the only opportunity for entities to propose changes to the FCC National Broadband Map in terms of locations eligible for BEAD funding
- Once the final map is approved, only those areas identified as eligible will receive funding for last-mile infrastructure
- The ultimate goal is to get high-speed connectivity to all broadband serviceable locations

# BEAD CHALLENGE PROCESS OVERVIEW

# PURPOSE

#### What is the BEAD Challenge Process?



- The Challenge Process will determine locations and community anchor institutions within the state that are eligible for BEAD funding
- It must confirm whether existing data is correct about which areas lack adequate internet service
- Challengers offer input on whether specific locations are not accurately reported in the datasets and therefore should be eligible for BEAD funding

# RELEVANCE

Why is the BEAD Challenge Process so important?



- It will determine eligibility for BEAD funding (which totals \$1.86 billion)
- It is the single best chance to correct the FCC's Broadband Data Map
- You can advocate for your community by providing evidence that it is unserved or underserved
- The improved data will help the BEAD Program and future programs allocate funding to the areas that need it most

# WHAT CAN BE CHALLENGED?



- Internet availability and other specifications (including speed, latency, data caps, and technology)
- Community anchor institution eligibility and identification
- Enforceable commitments
- Planned service

0.0

### **CHALLENGE TYPES**



## **AREA AND**

# MULTI-DWELLING UNIT (MDU)

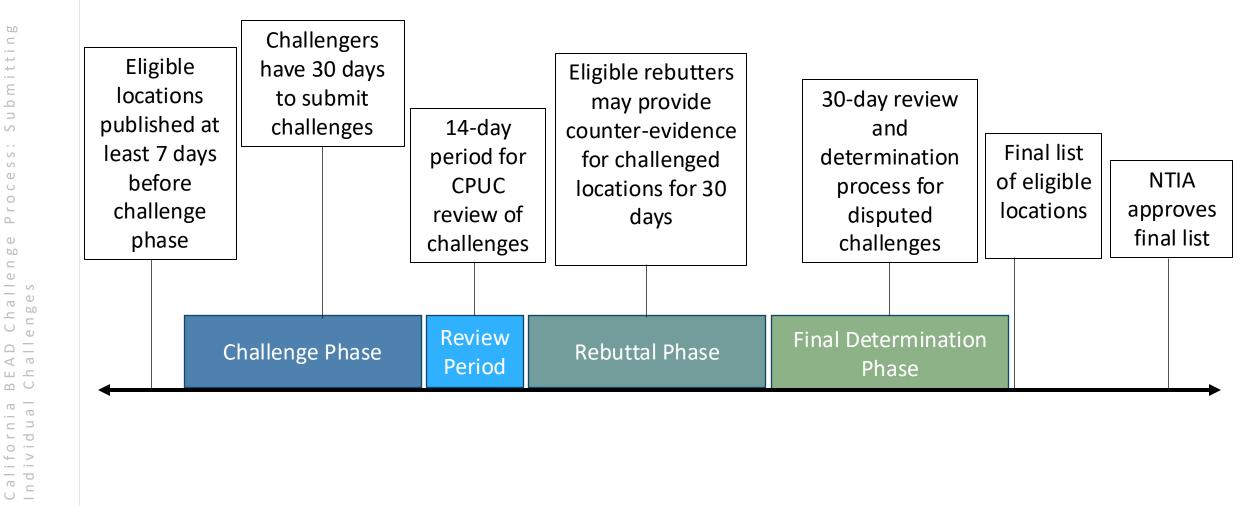
# **CHALLENGES**

Area and MDU challenges can apply for the following challenge types:

- Availability
- Speed
- Latency
- Data cap
- Technology

- If enough challenges are submitted in a particular area or building, all the locations in that area or MDU become "challenged" and the provider must show they are sufficiently served
- Area challenges are triggered if six or more broadband serviceable locations using a specific technology and reportedly served by a single broadband service provider within a census block group are challenged
- MDU challenges are triggered if challenges are submitted for one unit for MDUs with less than 15 units, two units for MDUs of between 16 and 24 units, and at least three units for larger MDUs

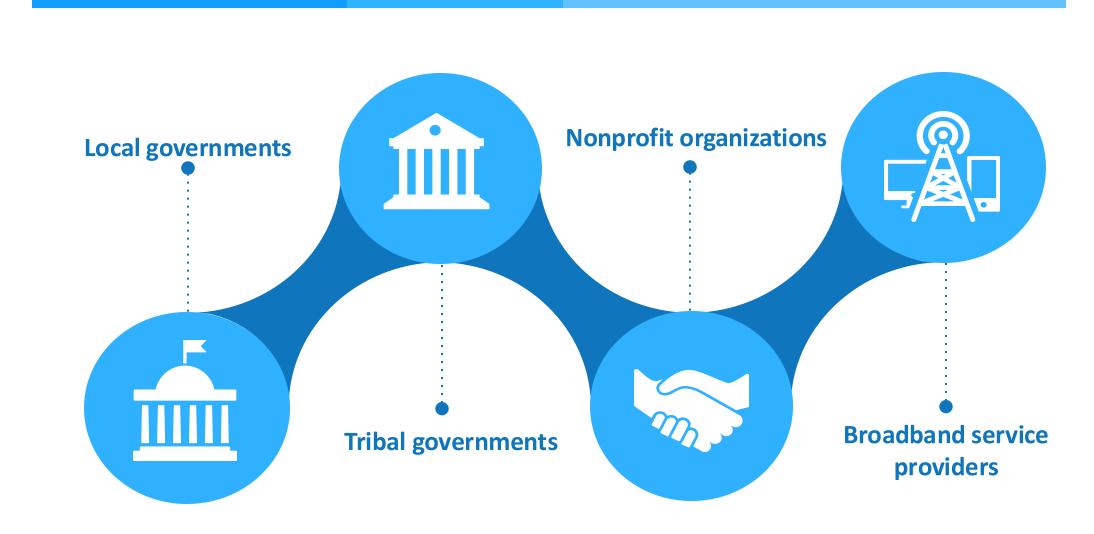
### **TIMELINE OF EVENTS**



5

۵.

### WHO CAN SUBMIT A CHALLENGE?



CAN INDIVIDUALS PARTICIPATE?



- While NTIA requirements don't allow individuals to submit challenges directly, they can gather and submit evidence for permissible challengers to submit on their behalf to the CPUC
- This presentation will explain exactly how individuals can submit evidence to permissible challengers

# HOW DO INDIVIDUALS SUBMIT CHALLENGES?

#### 9

#### **CONSUMER CHALLENGE PROCESS SEQUENCE: EXAMPLE 1**

An individual\* receives an email from a **broadband service provider denying a service request** to their home, but the FCC Map claims their home is served by that provider

The individual submits a screenshot of that email through the Challenge Process webpage A nonprofit receives the screenshot and submits an 'Availability' challenge in the Portal for the individual's home address with the email as evidence The broadband service provider provides rebuttal evidence that service is in fact available at that address (for example, by sending the home a service offer and using that offer as evidence)

The CPUC evaluates both pieces of evidence and **issues a final determination** of whether the location should be judged as 'served' or 'unserved'

\*Note: this example is applicable to any individual challenger

#### **CONSUMER CHALLENGE PROCESS SEQUENCE: EXAMPLE 2**

A small business owner\* takes three **speed** tests at their business that show that service is 20/5 Mbps, but the FCC Map shows the location is served by its provider at 100/20 Mbps

The small business owner submits the speed tests in the Consumer Challenge Process webpage

A local government receives the speed tests and submits a 'Speed' challenge in the Challenge **Portal** for the business address with the speed tests as evidence

The broadband service provider sees through its network system management that speeds do not exceed 25/3 Mbps at that business and does not rebut the challenge

The challenge is categorized as 'sustained' and the CPUC submits the location as 'unserved' in its final list of eligible locations to NTIA for approval

0.0  $\subseteq$ 

mitti

0

 $\supset$ 

S

S

S Φ

 $\cup$ 

0

5

۵.

Ð

0.0

 $\subseteq$ 

υ

C h a l l ( e n g e s

a v

шС

ωU

n i a u a l 5 0

Califo Indivi

Φ

60

 $\subseteq$ 

Φ

20

- Consumers use a designated page open to the public for evidence submission
- Consumers can upload files (e.g., speed tests, communications from service providers) and fill out all required evidentiary information (name, address, service provider, etc.)
  - There is also a specific "speed test" functionality in the publicly-available evidence submission page to run speed tests and download their result

## Landing page



English (English)

Map Data Download Individuals Challengers Home

#### Welcome to California's BEAD Consumer Challenge Page

We need your help! In order for future broadband funding to go where it is needed most, we want members of the public to let us know whether the current broadband map accurately depicts your home or business. Does the map show internet service is available where you know it isn't? If you have service, does the map accurately show the speeds you are receiving?

On this website you can check the Consumer Challenge Map and submit a challenge for locations where you have evidence of service not meeting the standards set forth for the BEAD Program. If your challenge is successful, that address may become eligible for funded broadband infrastructure through the program.

If the map already shows your location is unserved or underserved, that location is automatically eligible, and you don't need to submit a challenge.

Follow three easy steps to participate:

- 1. Enter your location.
- 2. Check the broadband availability data reported for your



### 1. Select location

# Enter address or select a location from the map

 1. Select Location
 2. Comment Type
 3. Comment Details
 4. Evidence & Documentation
 5. Attestation

 Select Location
 Please search for the location you would like to comment on and then select the point on the map.

Home

Please search for the location you would like to comment on and then select the point on the map. Note: If a location is already eligible for federal funding through the BEAD Program, it will not be selectable on the map and cannot be commented on. If you don't see your address, select the point that you believe nearest to your rooftop.



Performance Category ①

🛑 Unserved 🔵 Underserved 🏾 🗐 Served

Cancel

Next

0.0

E

### 2. Expand details

1. Selec	ct Location 2. Comment Type 3. Comment Details 4. Evidence & Documentation 5. Attestation						
	Selected address:						
	7031 Turlock Rd, Snelling, CA 95369 Served Expand Details						
	Select Comment Type						
	Please select which type of comment you would like to submit.						
	Availability						
	The broadband services reported as available at your location on the map are not actually available.						
	Speed						
	The actual speeds reported at your location on the map fall below the BEAD Program's eligibility thresholds.						
	Latency						
	The actual round-trip latency of services available at your location exceeds 100 milliseconds.						
	Data Cap						
	The services available at your location have a data limit below 600 GB/month.						
	Technology						
	Technology The type of technology (ex: Fiber Optic, Cable, Etc.) reported as available at your location on the map is incorrect.						
	Business Service Only						
	The services reported on the map are available to Businesses only, not Residents.						
	Other						
	Use this option to submit a general comment about the broadband options available at your location.						

G

### 3. View details

Shows reported status of the location in this map view whether it is claimed to be served and what speeds are reported—to see if you should challenge

					En	glish (English)	5
							Home
1. Select Lo	cation 2. Comment Ty	ype 3. Comment D	etails 4. Evidence 8	& Documentation	5. Attestatio	on	
s	Selected address:						
	7031 Turlock Rd, Snellin	g, CA 95369 Served			Hide Details		
	☆ BUILDING TYPE Residential		≗ unit count 1 unit				
	© location id 1093188739						
	PROVIDER	SERVICE	SPEED (MBPS)	RANK			
	✤ Licensed Fixed Wireless AT&T	<ul> <li></li></ul>	↓ 10 mbps ↑ 1 mbps	Unserved			
	✤ Licensed Fixed Wireless Ayera Technologies	<ul> <li></li></ul>	↓ 120 mbps ↑ 40 mbps	Served			
		🗟 Business	<ul> <li>↓ 100 mbps</li> <li>↑ 4 mbps</li> </ul>	Unserved			
		Residential	<ul> <li>↓ 100 mbps</li> <li>↑ 3 mbps</li> </ul>	Unserved			
		<ul> <li></li></ul>	↓ 25 mbps ↑ 3 mbps	Unserved			
	<ul> <li>♥ Unlicensed Fixed</li> <li>Wireless</li> <li>Calnet</li> </ul>	<ul> <li></li></ul>	↓ 10 mbps ↑ 1 mbps	Unserved			
	♥ Unlicensed Fixed Wireless unWired Broadband	☆ Residential	↓ 30 mbps ↑ 8 mbps	Unserved			
	Ø NGSO Satellite Starlink		<ul> <li>↓ 220 mbps</li> <li>↑ 25 mbps</li> </ul>	Unserved			

4. Select Challenge type	English (English)
4. Select Challenge type Availability and Speed are the most common	Image: Select Location       2. Comment Type       3. Comment Details       4. Evidence & Documentation       5. Attestation         Selected address:              7031 Turlock Rd, Snelling, CA 95369 sreet              Expand Details          Select Comment Type              Please select which type of comment you would like to submit.          Availability         The broadband services reported as available at your location on the map are not actually available.
	The actual speeds reported at your location on the map fall below the BEAD Program's eligibility thresholds.          Latency         The actual round-trip latency of services available at your location exceeds 100 milliseconds.         Data Cap         The services available at your location have a data limit below 600 GB/month.         Technology
	The type of technology (ex: Fiber Optic, Cable, Etc.) reported as available at your location on the map is incorrect.          Business Service Only         The services reported on the map are available to Businesses only, not Residents.         Other         Use this option to submit a general comment about the broadband options available at your location.         Back       Next

60 ⊆

### 5. Running a speed test

						English (English)	Đ
							Home
1. Select L	ocation	2. Comment Type	3. Comment Details	4. Evidence & Documentatio	n 5. Atte	station	
1	Selected a	ddress:					
	7031 Tu	rlock Rd, Snelling, CA	95369 Served		Expand Details		
	Speed D	Details					
	performant and set up	ce tests taken on three	different days. Click here ional tests. Onse you have	d corrections to the map require to take the performance test fror e collected your tests, proceed	m your location	n	
	or are una	ble to fill out the required fi do not see your internet pro	elds below.	oose not to provide the above request to prov			
	* 1. Enter y	our name					
	* 2. Enter y	our email address					
	* 3. Select	the internet provider				<u>_</u>	
	Please sel	lect a service			~	J	
		the technology type				۰ ۱	
	Please sel	lect a technology			~	J	
		Back		Next			

Provide details		Select Location 2. Comment Type <b>3. Comment Details</b> 4. Evidence & Documentation     5. Attestation     Selected address:
1. Steed Location       2. Comment Type       3. Comment Details       4. Evidence & Documentations       5. A         Selected address:         Tot Turlock Rd, Snelling, CA 95369       Immed       Expend Details         As part of the BEAD Program's evidentiary standards, speed corrections to the map require three performance tests taken on three different days, Click here to take the performance tests from your bears and set up reminders to take additional tests. Once you have collected your tests, proceed with competing the Speed Comment below.       Immediate Speed Comment below.         Immediate test value in terequired fields below.       Immediate sequental "Other" comment in Step 2, if you choose not to provide the above requested evidence are unable to fill out the required fields below.       Immediate sequental "Other" comment in Step 2, if you chooses not to provide the above requested evidence are unable to fill out the required fields below.         Immediate your name       Immediate sequence         Immediate       Immediate sequence         Immediate your name       Immediate sequence         Immediate service       Immediate service         Immedinationate service       Immediate	ation	7031 Turtock Rd, Snelling, CA 95362       Exect 0         Appendix Comparity       Several of the BEAD Program's evidentiary standards, speed corrections to the map require three performance tests taken on three different days. Click here to take the performance test from your location and set up reminders to take additional tests. Once you have collected your tests, proceed with complexing the Speed Comment below.         If you can submit a general 'Other' comment in Step 2, if you choose not to provide the above requested evidence are unable to fill out the required fields below.         If you do not see your intermet provider or technology type in the dropdown, your service is already considered underses.         If you do not see your intermet provider or technology type in the dropdown, your service is already considered underses.         Implement@

0.0

### 7. Upload evidence

Will also be asked to submit information about the evidence (date, type, description, etc.)

This example is for a Speed Challenge

2					English (English)	Þø
9.						Home
1. Select Lo	ocation 2. Comment Type	3. Comment Details	4. Evidence & Documentati	on 5. Atte	station	
	Selected address:					
	7031 Turlock Rd, Snelling, CA	95369 Served		Expand Details		
	Provide Evidence & Docu	mentation for your	Speed Comment			
	Upload the results of your three s three different days.	peed tests below. Please	ensure that the results are from	tests taken on		
	Take the performance test					
	If you are unable to provide evide	nce, choose the "Other" con	ment type in Step 2			
	$\frown$	Click or drag files to this a Support for a single or b				
(	<ul> <li>Speed Test 1.png</li> <li>Speed Test 2.png</li> </ul>					
```	Speed Test 3.jpeg		(	Add details	)	
	Speed Test 2.png			Add details	)	
	Speed Test 3.jpeg			Add details	)	
	Back		Next			

# 8. Enter information

# This example is for a Speed Challenge

		English (English)
	Provide Evidence ×	Home
1. Select Location 2. Co	Discount of the balance of a survey download of	n 5. Attestation
Selected address:	Please enter details below based on your downloaded performance test results.	
7031 Turlock R	*1. Indicate how the speed test was conducted	Expand Details
Provide Evide	Speed test performed on this website or another speed te $\vee$	
Upload the results	* 2. Enter the date and time this speed test was taken	ests taken on
three different day	2024-06-13 14:39:15	
Take the performa	* 3. Provide your IP address	
📄 If you are unab	-	
ſ	12345	
	* 4. Enter the download speed in Mbps	
Speed Test 1.png	45.00 Mbps	
Speed Test 2.png Speed Test 3.jpe	* 5. Enter the upload speed in Mbps	
	35.00 Mbps	
Speed Test 1.p	* 6. Enter the roundtrip latency in ms	Add details
Speed Test 2.p	45.00 ms	Add details
Speed Test 3.jp	Cancel Save	Add details
	Back Next	

0

### 9. View evidence

# This example is for a Speed Challenge

		English (English)	5
			Home
1. Select Location 2. Comment Type 3. Comment Details 4. Evidence & Documentation	5. Atte	station	
Selected address:			
7031 Turlock Rd, Snelling, CA 95369 Served Expand	l Details		
Provide Evidence & Documentation for your Speed Comment Upload the results of your three speed tests below. Please ensure that the results are from tests ta three different days. Take the performance test	iken on		
If you are unable to provide evidence, choose the "Other" comment type in Step 2			
Click or drag files to this area to upload Support for a single or bulk upload.			
<ul> <li>Ø Speed Test 1.png</li> <li>Ø Speed Test 2.png</li> <li>Ø Speed Test 3.jpeg</li> </ul>			
Speed Test 1.png Speed Test Method: Speed test performed on laptop or desktop computer within immediate proximity of the residential gateway (e.g. WiFi connection in the same room as gateway) Date: 6/13/2024, 2:39:15 PM IP Address: 12345 Download Speed: 45 Mbps Upload Speed: 35 Mbps Latency: 45 ms	Edit		
Speed Test 2.png           Speed Test Method:         Speed test performed on laptop or desktop computer within immediate proximity of the residential gateway (e.g. WFI connection in the same room as gateway)           Date:         6/12/2024, 5:41:15 PM         IP Address:         12345           Download Speed:         45 Mbps         Upload Speed:         36 Mbps         Latency:         24 ms	Edit		
Speed Test 3.jpeg           Speed Test Method: Speed test performed on laptop or desktop computer within immediate proximity of the residential gateway (e.g. WiFi connection in the same room as gateway)           Date: 6/10/2024, 5:43:35 PM         IP Address: 12345           Download Speed: 45 Mbps         Upload Speed: 45 Mbps         Latency: 45 ms	Edit		
Back Next			

-

# 10. Certify attestation and submit

					(	English (English)	B
P.M.C.							Home
	1. Select Location	2. Comment Type	3. Comment Details	4. Evidence & Documentation	5. Attest	ation	
	Selected a	address:					
	7031 Tu	urlock Rd, Snelling, CA	95369 Served	Ex	pand Details		
	Please	consent to share y	our submission				
				ing my submission to be shared wit e quality of broadband services in m			
	I further a	gree that government ar	nd non-profit entities parti	cipating in the challenge process ha	-		
	-	n to contact me to follow	up on the information th	at i nave submitted.			
		istand and agree					
		Back		Submit Comment			

### **CONSUMER CHALLENGE SUBMISSION OF SPEED TESTS**

- An individual can run a speed test in the Consumer Challenge evidence submission webpage
- However, they need to remember to run speed tests and download results on three separate days
  - Only then should they upload those same results to the 'Speed' challenge submission and submit the challenge
  - Acceptable other speed test sites:
    - Ookla (speedtest.net)
    - M-Lab (speed.measurementlab.net)
    - Cloudflare (speed.cloudflare.com)
    - Netflix (fast.com)



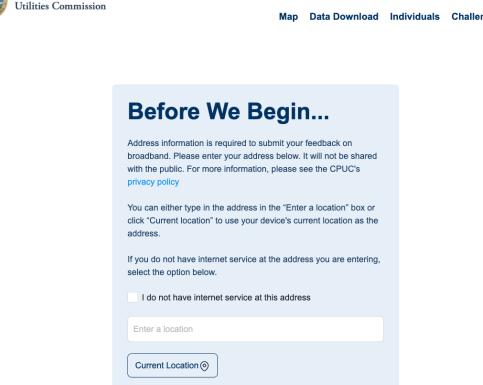
# **CONSUMER CHALLENGE SUBMISSION OF SPEED TESTS**

#### 1. Enter address



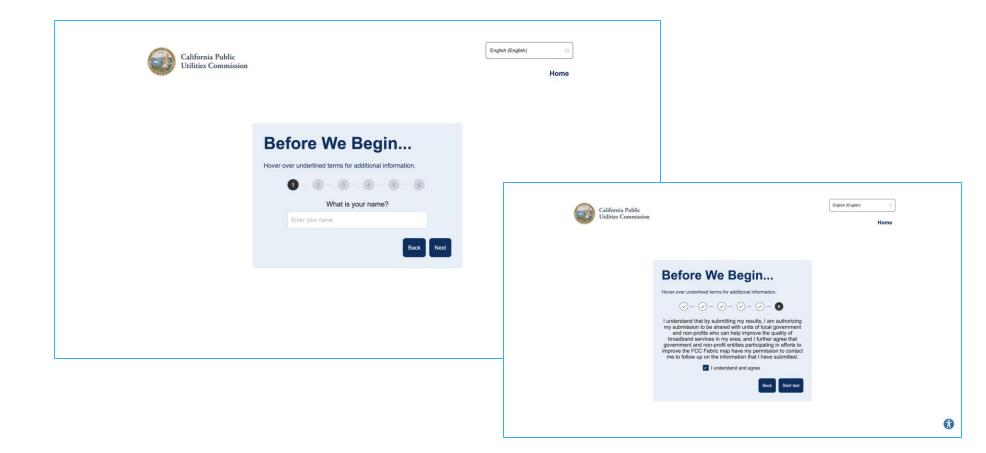
Map Data Download Individuals Challengers Home

English (English)



# CONSUMER CHALLENGE SUBMISSION OF SPEED TESTS

### 2. Enter other information and attestation



0.0

# CONSUMER CHALLENGE SUBMISSION OF SPEED TESTS

- 3. Run speed test
- 4. Download results
- 5. Run two more speed tests on other days and download those results
- 6. Submit the three speed tests to the consumer evidence submission webpage as described in earlier slides



# EVIDENCE REQUIRED FOR INDIVIDUAL CHALLENGES

- The following slides will go over the specific types of allowable challenges and examples of acceptable evidence for BEAD challenges.
- The evidence and documentation submission is the most important part of the challenge process. If your submission does not meet the minimum level of evidence sufficient to establish a valid challenge, it will not be approved to proceed to the rebuttal phase.

0.0

# Individuals may submit evidence for the following types of challenges:

- Availability
- Speed
- Latency
- Data cap
- Technology
- Business service only



The most common types for individuals are Availability and Speed



## **AVAILABILITY CHALLENGE**

- Use this challenge if: The FCC Map shows a location as served by a provider that does not provide service to that location
- Example:
  - Your address in the Portal shows that ProviderCo provides 100/20 Mbps service to your address. However, you sent a service request to ProviderCo and were refused three months ago. You can submit an 'Availability' challenge to demonstrate to the CPUC that ProviderCo's service is not actually available at that location.
- Other situations where 'Availability' challenge is appropriate:
  - A provider failed to schedule a service installation within 10 business days of request
  - A provider requested more than a standard installation fee to connect your location



### AVAILABILITY EVIDENCE: COMMUNICATIONS WITH BROADBAND SERVICE PROVIDER

- This can include an email, a letter, or other communications from provider that:
  - **Refuses a service request** (from the last 180 days)
  - Fails to schedule a service installation or fails to offer an installation date within 10 business days of request (from the last 365 days)
  - Requests or quotes a service installation fee that's more than the standard fee in order to connect service at the location (from the last 365 days)
- You can scan the letter or screenshot the email (making sure to include the date, time, and sender of the email)
- If you have received communications from more than a year ago, you can contact the broadband service provider again to receive a more recent response that you can submit as evidence



### **AVAILABILITY EVIDENCE: SCREENSHOT**

- This evidence type refers to a screenshot of the provider webpage showing that the provider does not offer service to an address
- On most provider websites, you can enter an address into their service availability search function and they will tell you which plans are available there
- If you put an address in, and it gives you a message that ([Provider service] is not available at this address,' screenshot that webpage and submit it as a challenge
- Be sure that the screenshot includes the full address on it



## AVAILABILITY EVIDENCE REQUIREMENTS

- Address provided for the location must be found in the Fabric dataset
- The challenged service must meet the definition of reliable broadband service (accessible via fiber, cable, DSL, or fixed wireless)
- Must use a verifiable email address
- Scanned images must be high-quality to permit image-to-text conversion; recommend using a scanner rather than a phone camera picture
- Screenshots should include all important information for the challenge evidence type (including the date, time, broadband service provider, web address, and residential address, as applicable)
- Must date from the specified time frame (in the last 180 or 365 days)



### CHALLENGE TYPE: SPEED



### Description

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

#### Example

Speed test from customer showing the insufficient speed and meeting the requirements for speed tests

#### Provide Evidence & Documentation for your Service Speed Challenge

Please submit evidence to support your challenge. The state broadband office reserves the right to request more information at any point in the challenge process. For questions that require file upload, please compress all files over 100MB in size to a .zip file. Total file upload size is capped at 500MB.

#### 1. Speed test metadata

Please download the .csv file below and fill in the following details for each of the three speed tests taken:

- Test method: How the Speed Test was performed. Select from the following options:
  - Measurement from wired connection to provider gateway, ONT or fixed wireless subscriber module
  - Speed test available within the residential gateway interface
  - Speed test on providers web page
  - Speed test performed on laptop or desktop computer within immediate proximity of the residential gateway (e.g. WiFi connection in the same room as gateway)
- Date: Date the speed test was taken
- Time: Time the speed test was taken
- IP address
- · Download speed (in Mbps)
- Upload speed (in Mbps)

#### Download Speed Test CSV 🗄

#### \* Please reupload the completed spreadsheet as a .csv file here

Click or drag file to this area to upload Support for a single or bulk upload.

\* 2. Upload files for the three speed tests taken at this location, as well as evidence of the subscription speed tier (eg. a bill).

Click or drag file to this area to upload Support for a single or bulk upload.

\* 3. Input the median download speed across the provided speed tests in Mbps

\* 4. Input the median upload speed across the provided speed tests in Mbps

#### \* 5. Please provide the customer's name

\* 6. By submitting this challenge, I hereby grant access to these information elements to the Eligible Entity, any contractors supporting the challenge process, and the service provider.

60 ⊆

### **SPEED CHALLENGE**

- Use this challenge if: The speed at a location is lower than what the FCC Map shows (for download or upload or both), taking it below 100/20 Mbps
- Example:
  - The Portal shows that ProviderCo serves all the homes in your neighborhood at 100/20 Mbps, but speed tests consistently demonstrate that it is only served at 30/5 Mbps.
  - You submit speed tests for a 'Speed' challenge to reclassify the addresses from 'served' to 'underserved' (since they fall between 25/3 Mbps and 100/20 Mbps)

### **SPEED EVIDENCE: SPEED TESTS**

- Can be in the form of:
  - A reading of physical line speed from residential gateway
  - A reading from residential gateway web interface or broadband service provider's web page
  - A speed test performed on personal computer within immediate proximity of residential gateway using NTIAapproved speed test application
- Must include name, time, date, IP address, street address, certification of speed tier subscription
- Must subscribe to at least 100/20 Mbps, but it is best to be subscriber of highest-speed plan
- See NTIA <u>Speed Test Requirements Checklist</u> for more information

#### Approved applications:

- Ookla (speedtest.net)
- M-Lab
  - (speed.measurementlab.net)
- Cloudflare
   (speed.cloudflare.com)
- Netflix (fast.com)
- There will be a speed test module on the webpage used to submit individual challenges



### **SPEED EVIDENCE: SPEED TESTS**

#### • NTIA has set strict guidelines on speed test requirements

Like availability challenges, the location has to be in the Fabric and meet definition of reliable broadband (accessible via fiber, cable, DSL, or fixed wireless)

• For each address, you must submit three speed tests taken on three different days

They can be taken anytime between 60 days before the Challenge Process and the end of the Challenge Process

• Then, you take the median value of both the upload and the download speeds to determine the basis of the challenge

If the median value for either upload or download qualifies as unserved (under 25/3 Mbps) or underserved (between 25/3 Mbps and 100/20 Mbps) the speed tests justify a challenge

 $\subseteq$ 

### **SPEED EVIDENCE: CALCULATING THE MEDIAN**

• Median = middle value

• Example:	Three speed tests:	Three download speeds:	Three upload speeds	Median speeds for each:
	103/24 Mbps 92/18 Mbps 101/17 Mbps	<ul><li>103 (highest)</li><li>92 (lowest)</li><li>101 (median)</li></ul>	<ul><li>24 (highest)</li><li>18 (median)</li><li>17 (lowest)</li></ul>	101 Mbps download 18 Mbps upload

- Median download: 101 Mbps qualifies as 'served' (over 100 Mbps) and does not qualify for a • challenge
- Median upload: 18 Mbps qualifies as 'underserved' (under 20 Mbps) and qualifies for a challenge
- The three speed tests above justify a 'Speed' challenge to change it to 'underserved' due to the median upload speed

Challen lenges 60 Φ  $\Box \equiv$ с С В California Individual

### CHALLENGE TYPE: DATA CAP

### Description

The only service plans marketed to consumers impose an unreasonable capacity allowance

#### Examples

- Screenshot of broadband service provider webpage
- Service description provided
   to customer

### CHALLENGE TYPE: LATENCY

#### Description

Round-trip latency of broadband service exceeds 100 milliseconds

#### Example

Speed test from customer showing excessive latency

Y

## CHALLENGE TYPE: BUSINESS SERVICE ONLY

#### Description

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

### Example Screenshot of provider webpage



## CHALLENGE TYPE: TECHNOLOGY

Description

The technology indicated for the location is incorrect

#### Example

Manufacturer and model number of residential gateway (customer premises equipment) showing the service is delivered via a specific technology



### IMPORTANT FACTORS FOR INDIVIDUALS TO REMEMBER

#### Submitting evidence that fits with NTIA requirements:

- Availability
  - Evidence must be from the right timeframe (either the last 365 days or 180 days)
  - Scans and screenshots should be high resolution
  - Must include relevant information (date, time, broadband service provider, web address, and residential address)
- Speed
  - Three speed tests on three different days
  - Approved speed test websites (Ookla, M-Lab, Cloudflare, Netflix)
  - Speed tests taken from correct location (within immediate proximity of residential gateway)
  - All necessary information (name, date, residential address, IP address, subscription information)

#### Evidence will be rejected if it does not meet requirements

The CPUC will post all submitted challenges and rebuttals before final challenge determinations are made including:

- The unit of local or Tribal government, nonprofit or broadband service provider that submitted the challenge
- The census block group containing the challenged broadband serviceable location(s)
- The challenged party
- The type of challenge
- A summary of the challenge (including if the challenged party submitted a rebuttal)

Note: CPUC will not post any personally identifiable information about individuals providing evidence

# **NEXT STEPS**

- Check the reported speeds and availability for your addresses, including your home or small business, in the evidence submission website
- Take speed tests at areas with slower-than-promised internet and submit them through the challenge evidence submission website
- Submit other evidence, including evidence a provider has refused service to an address, not scheduled installation, or quoted too much for installation

# THANK YOU!