National Broadband Map

Broadband Data Task Force
Federal Communications Commission

Eduard Bartholme
Senior Outreach Director

July 13, 2023

Broadband Data Collection (BDC): New Approach to Mapping Broadband Availability

- The FCC historically collected broadband deployment data using FCC Form 477.
- More reliable and consistent broadband availability data are critical to efforts to target public funds to connect unserved and underserved communities.
- Congress directed the FCC to develop processes and procedures to collect, verify, and publish more granular data in the Broadband Deployment Accuracy and Technological Availability (DATA) Act.

National Broadband Map
Looking Back

- June 23, 2022 - Fabric Version 1 made available to Governmental entities (state, local and Tribal) and ISPs with a licensing agreement.
- June 30 – September 1, 2022 - First BDC filing window (data as-of June 30, 2002).
- September 12, 2022 - Bulk Fabric challenge process opened.
- November 18, 2022 - Public launch of National Broadband Map and the FCC began accepting availability challenges.
- December 30, 2022 - Fabric Version 2 Released.
- December 31, 2022, through March 1, 2023 – Second BDC filing window (data as-of Dec. 31, 2022)
  - Fabric Version 2, and data as-of Dec. 31 was published on the map on May 30th.

WHAT'S ON THE NATIONAL BROADBAND MAP?

The National Broadband Map consists of 2 datasets, both of which can be challenged:

FABRIC LOCATIONS

- **What is it?**
  - The Fabric is a dataset of all locations in the United States and Territories where fixed broadband internet access service is or could be installed.
- **Who creates it?**
  - The Fabric is developed by CostQuest in consultation with the FCC and in accordance with FCC rules.
- **Challenges and updates timeline?**
  - The Fabric is updated twice per year.
  - For the best opportunity for challenges to be included in version 4 of the Fabric, challenges should be submitted by September 8, 2023.
- **What's on the current map?**
  - Version 2 of the Fabric is the base of the current map.

BROADBAND AVAILABILITY

- **What is it?**
  - Broadband availability data shows what broadband services, if any, are available at locations included in the Fabric, as reported by internet service providers every 6 months.
- **Who creates it?**
  - Internet service providers report their availability data to the FCC every 6 months.
- **Challenges and updates timeline?**
  - Broadband availability data is updated consistently over time as challenges are resolved.
  - Challenges are accepted and resolved on a rolling and ongoing basis.
- **What's on the current map?**
  - The map shows availability data as-of December 31, 2022 and reflects resolved availability challenges. The map will be updated regularly as additional challenges are resolved.

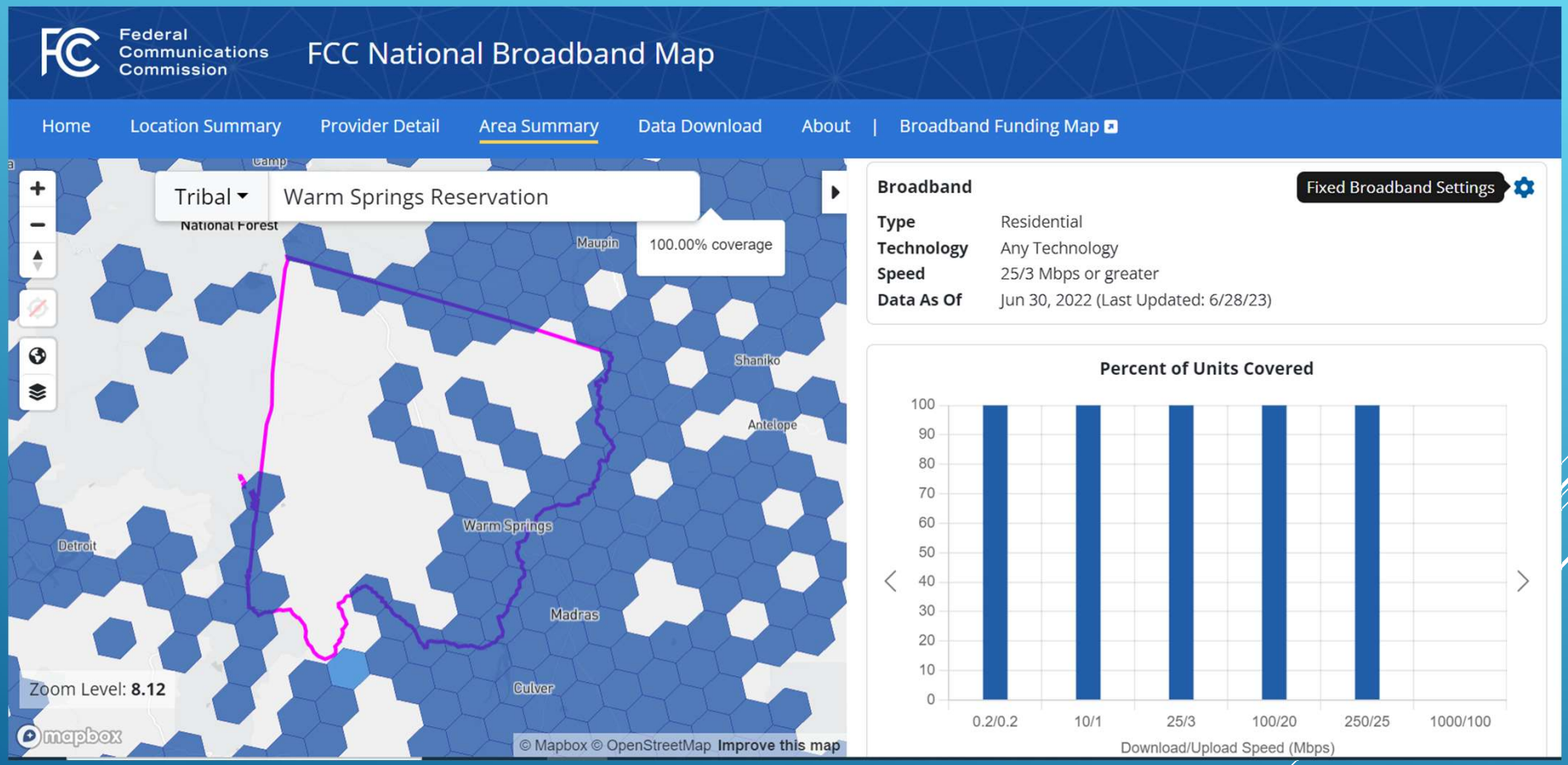
National Broadband Map: Today

- The second iteration of the map was released on May 30, 2023.
  - This version of the map shows locations from version 2 of the Fabric, and availability data as-of December 31, 2022.

- What is different on this map?
  - Includes over 1 million more broadband-serviceable locations throughout the United States than the initial version.
    - Every state and territory had some number of BSLs added in v.2.
    - Every state and territory also had BSLs removed in v.2.
  - The availability data also continues to be improved.

National Broadband Map: Improvements in Tribal Areas

- Alaska, and Tribal lands within the continental United States have seen significant increases in the number of Broadband Serviceable Locations (BSLs) between version 1 and version 2.
  - Incorporated a deep learning approach to large and extra-large parcels to more correctly identify location records
  - Targeted footprints developed in Alaska and several tribal areas.
- Nationally a net increase of nearly 75,000 locations
  - New Mexico saw 13,329 locations added on Tribal lands.
  - Both Taos and Cochiti Pueblos were almost entirely missing from version 1, in version 2 they appear to be well represented.


Federal Communications Commission
FCC National Broadband Map
Home
Location Summary
Provider Detail
Area Summary
Data Download
About
Broadband Funding Map
Tribal
Warm Springs Reservation
100.00% coverage
National Forest
Maupin
Shaniko
Antelope
Warm Springs
Detroit
Madras
Culver
Zoom Level: 8.12
mapbox
© Mapbox © OpenStreetMap Improve this map
Broadband
Fixed Broadband Settings
Type Residential
Technology Any Technology
Speed 25/3 Mbps or greater
Data As Of Jun 30, 2022 (Last Updated: 6/28/23)
Percent of Units Covered
100
90
80
70
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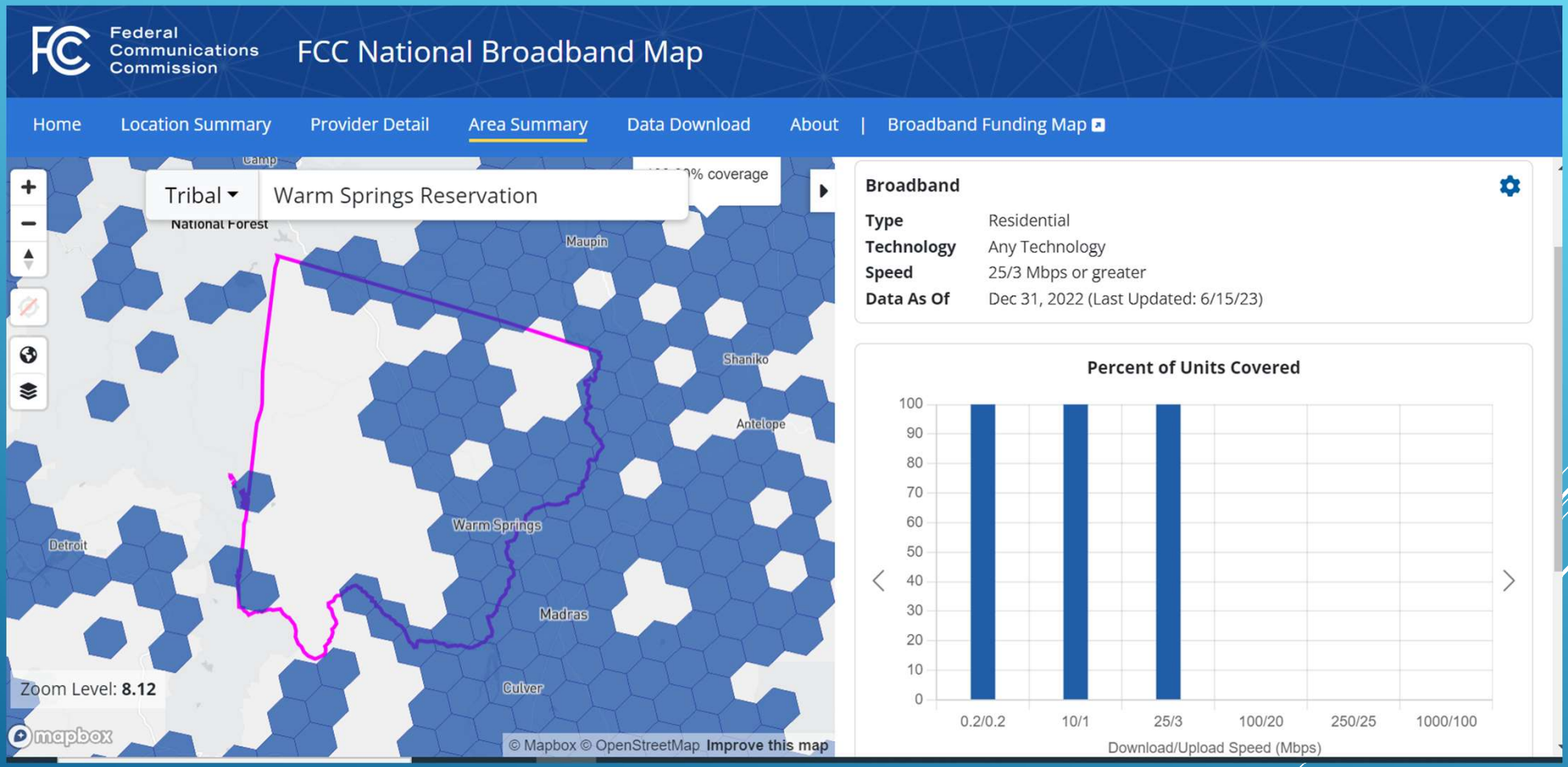
1000/100
Download/Upload Speed (Mbps)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Broadband
Type Residential
Technology Any Technology
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Percent of Units Covered
100
90
80
70
60
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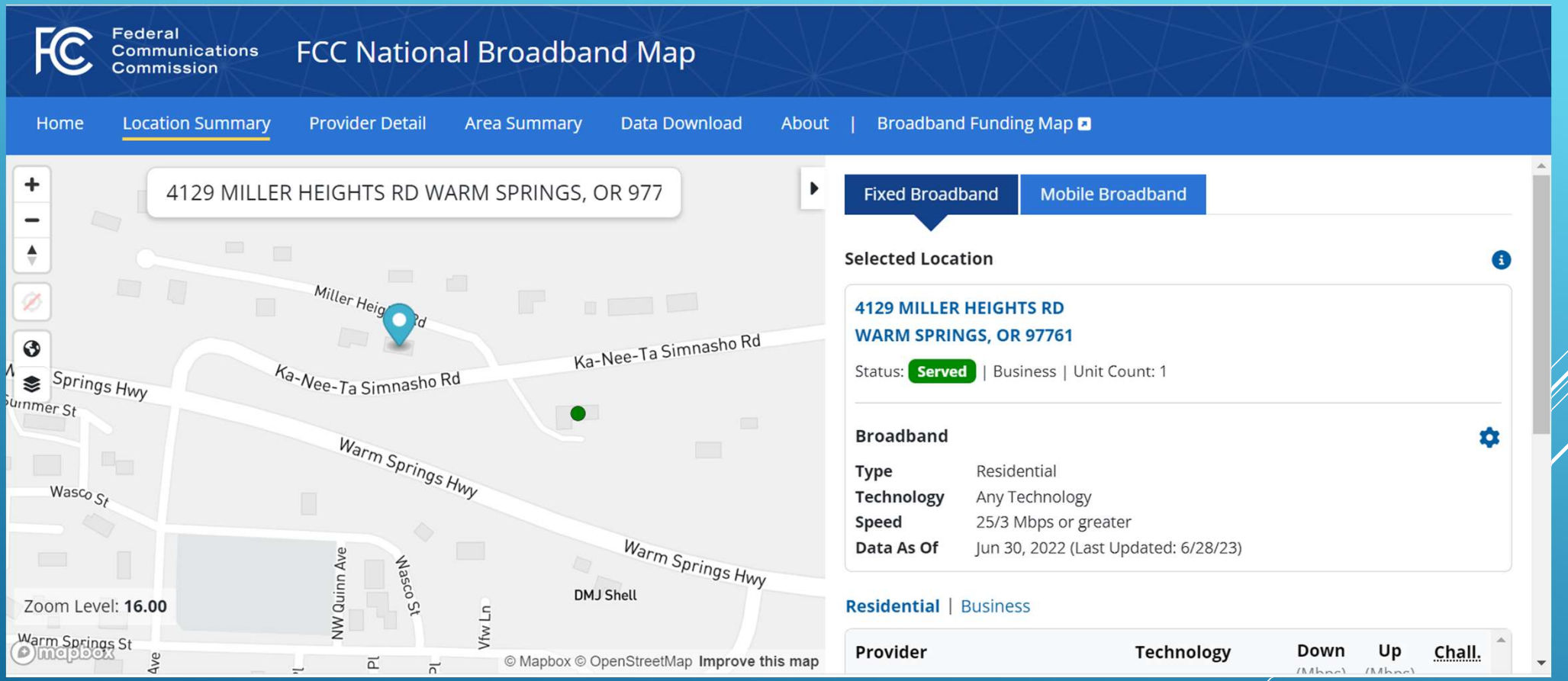
Download/Upload Speed (Mbps)


Federal Communications Commission
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Warm Springs Hwy
Wasco St
NW Quinn Ave
Vfw Ln
DMJ Shell
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© Mapbox © OpenStreetMap Improve this map
Fixed Broadband
Mobile Broadband
Selected Location
4129 MILLER HEIGHTS RD
WARM SPRINGS, OR 97761
Status: Served | Business | Unit Count: 1
Broadband
Type Residential
Technology Any Technology
Speed 25/3 Mbps or greater
Data As Of Jun 30, 2022 (Last Updated: 6/28/23)
Residential | Business
Provider
Technology
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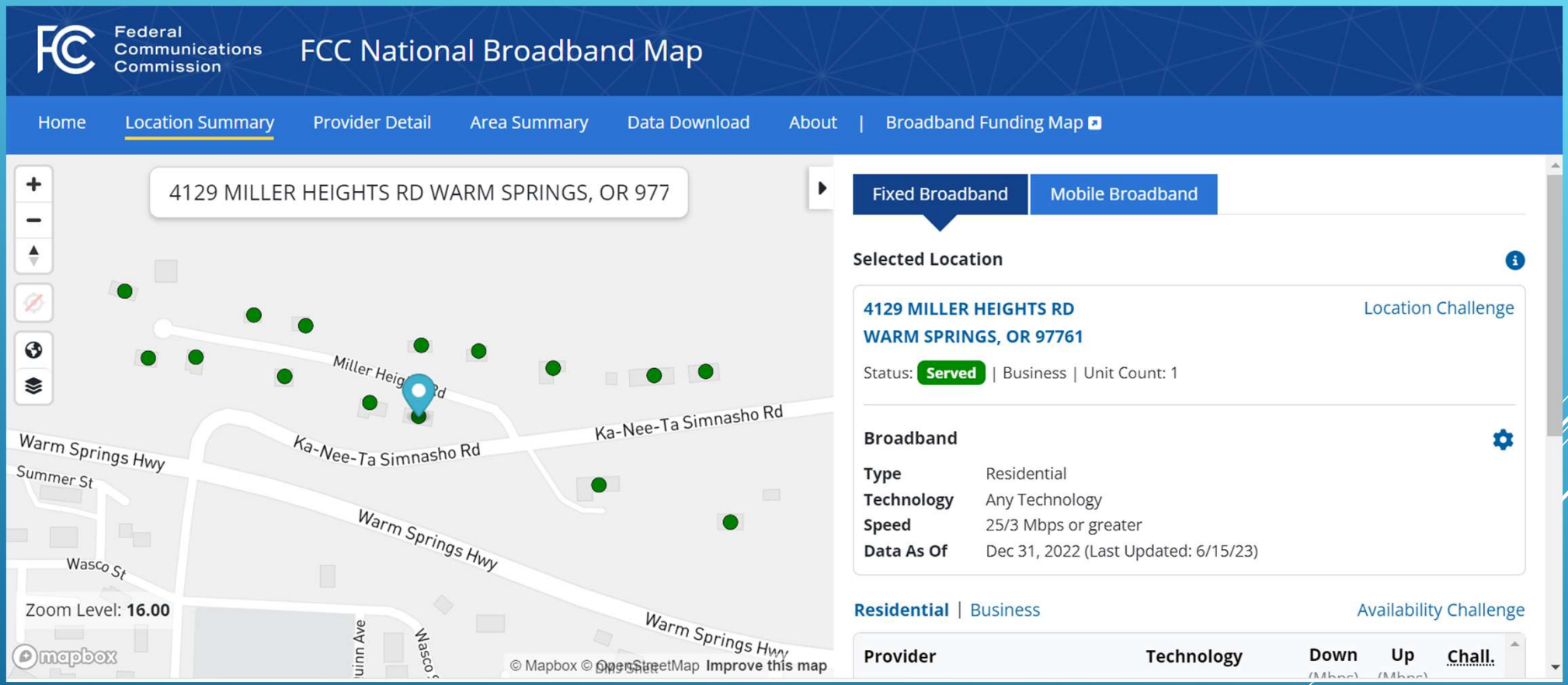
Up
Chall.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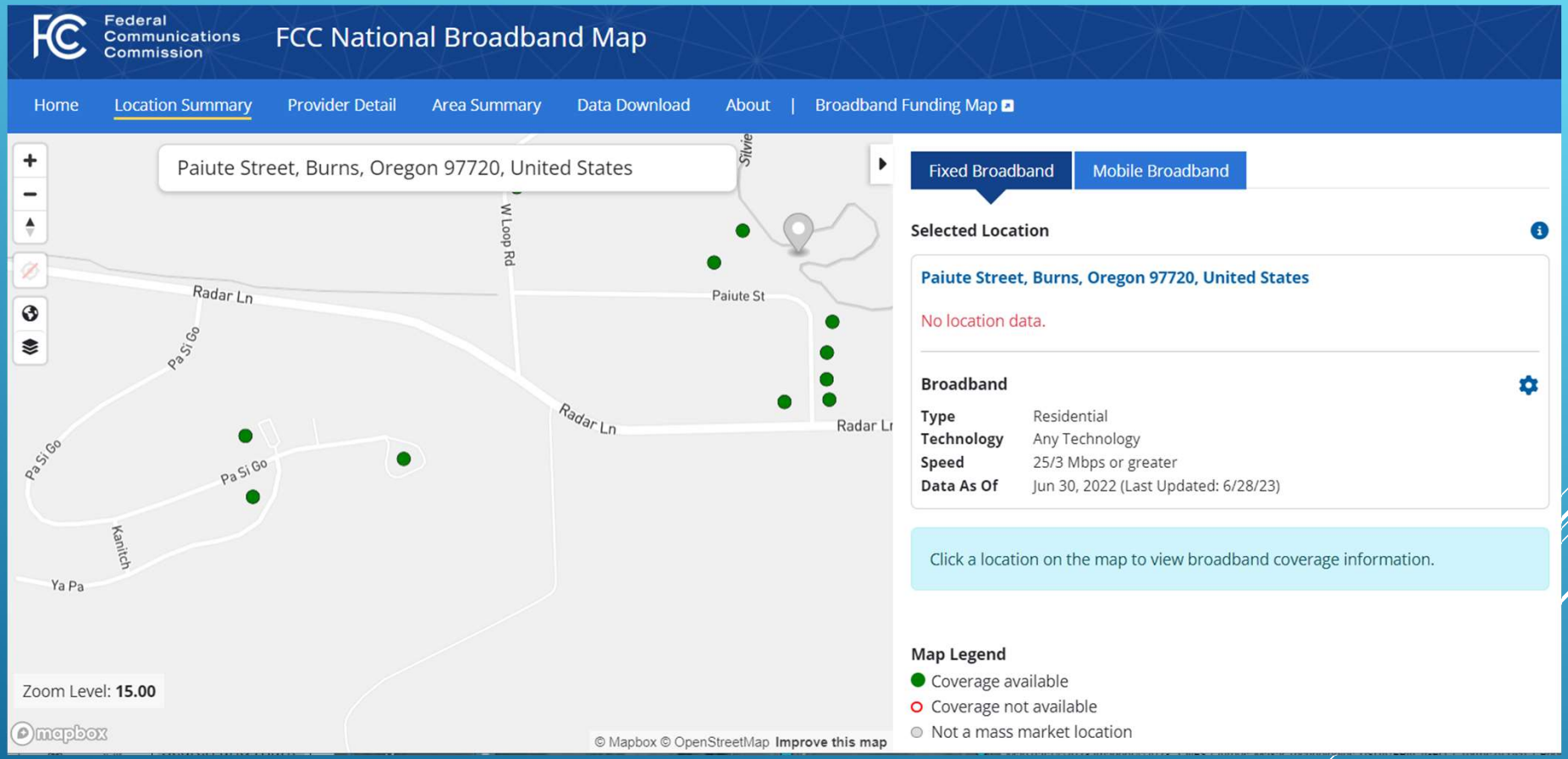
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© Mapbox © OpenStreetMap Improve this map
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Technology Any Technology
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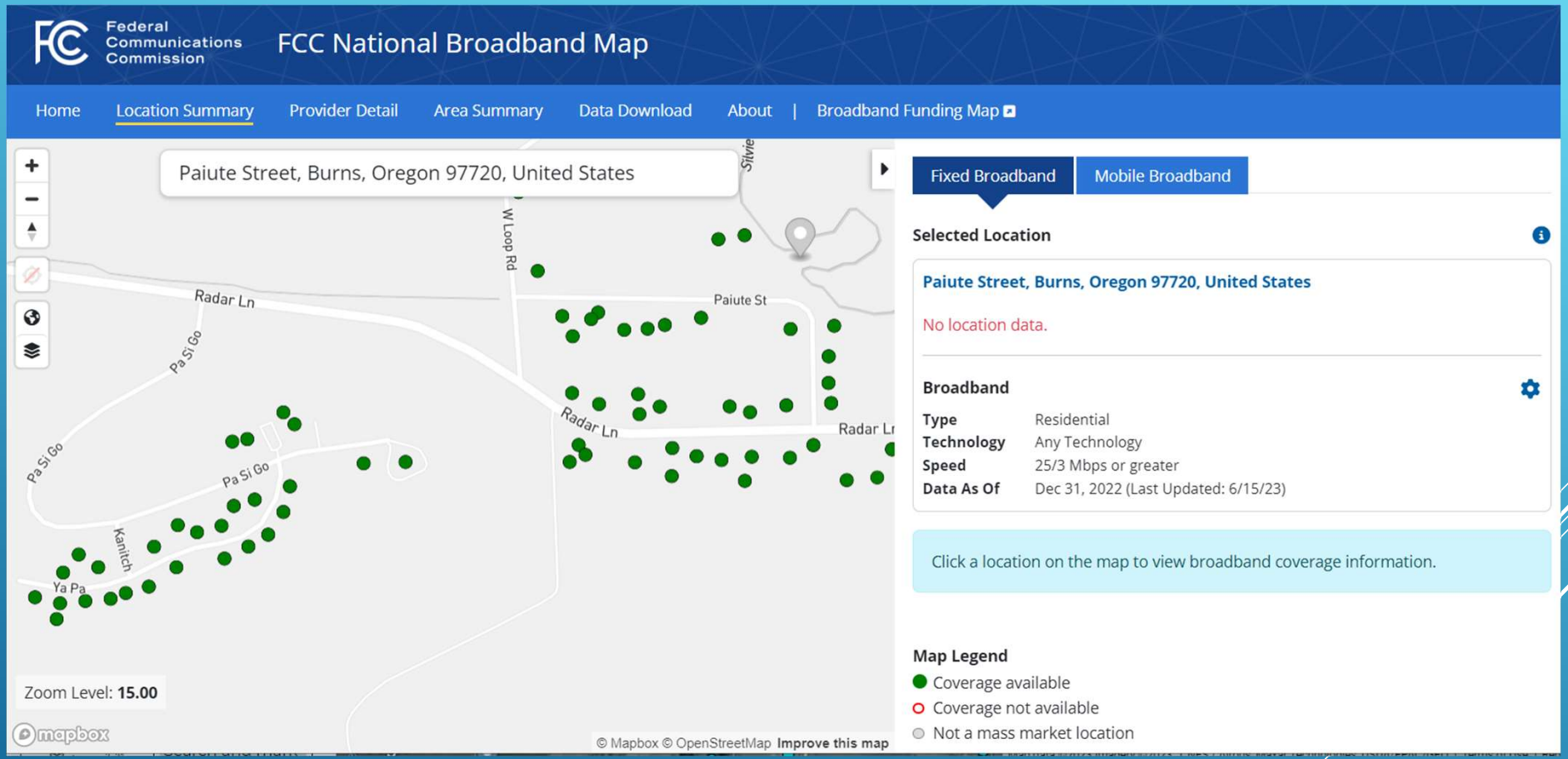
Click a location on the map to view broadband coverage information.
Map Legend
Coverage available
Coverage not available
Not a mass market location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Tribal Data and the Map

- Most changes between versions 1 and 2 of the Map come from the vendor, rather than challenges.
  - The Fabric is developed using over 200 data inputs and the work is ongoing.
  - Focusing next on Tribal areas where Census data indicates the BSL counts are still too low
- The Commission is not seeking underlying data from challengers (e.g. tax records), just latitude/longitude information.

Validating Provider Reported Data

- Challenges
  - Over 4 million sent to providers for response
  - The map is updated on a rolling basis every two weeks as challenges are resolved
- Verifications and Audits
  - FCC has contacted over 800 filers
  - Often results in corrections to reported availability

Next Steps

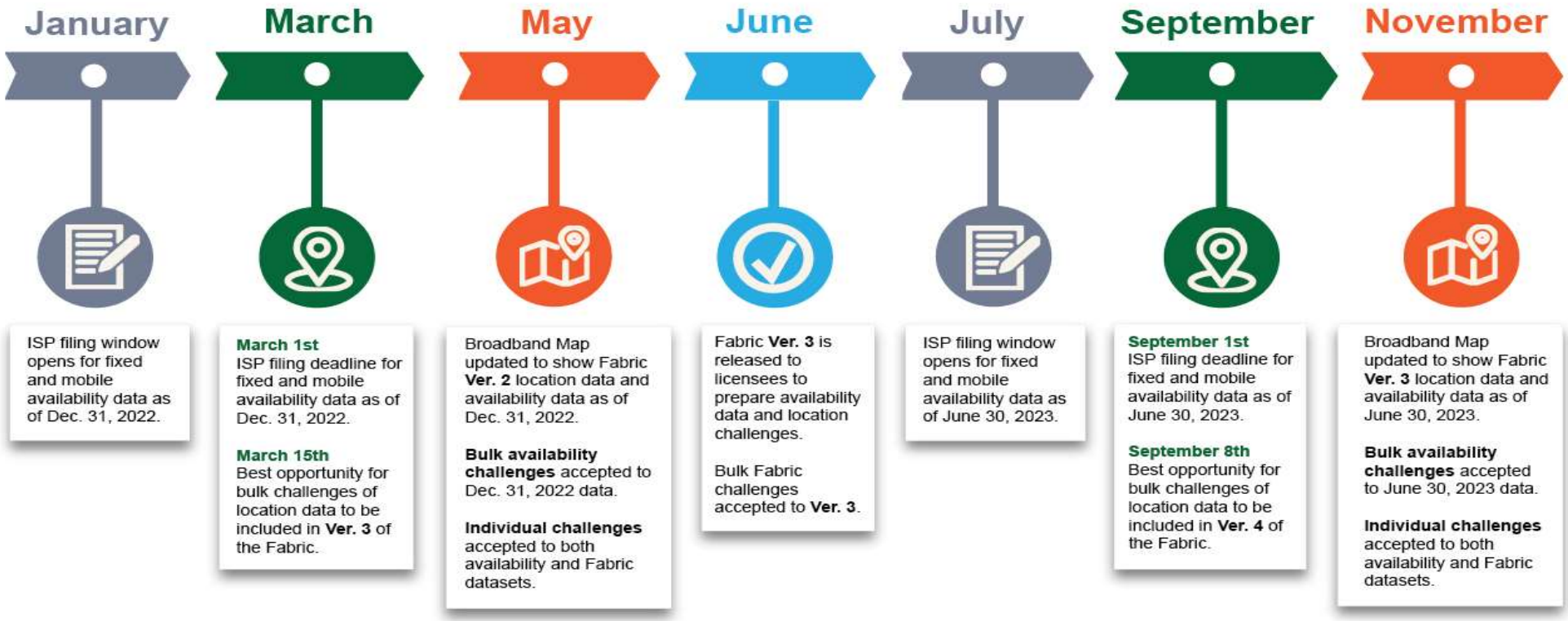
Version 3 of the Fabric has been made available to licensees.

- This version incorporates challenges made to version 2 (largely submitted by March 15, 2023)
- Tribal governments and providers may submit challenges to version 3 of the Fabric by September 8, 2023.

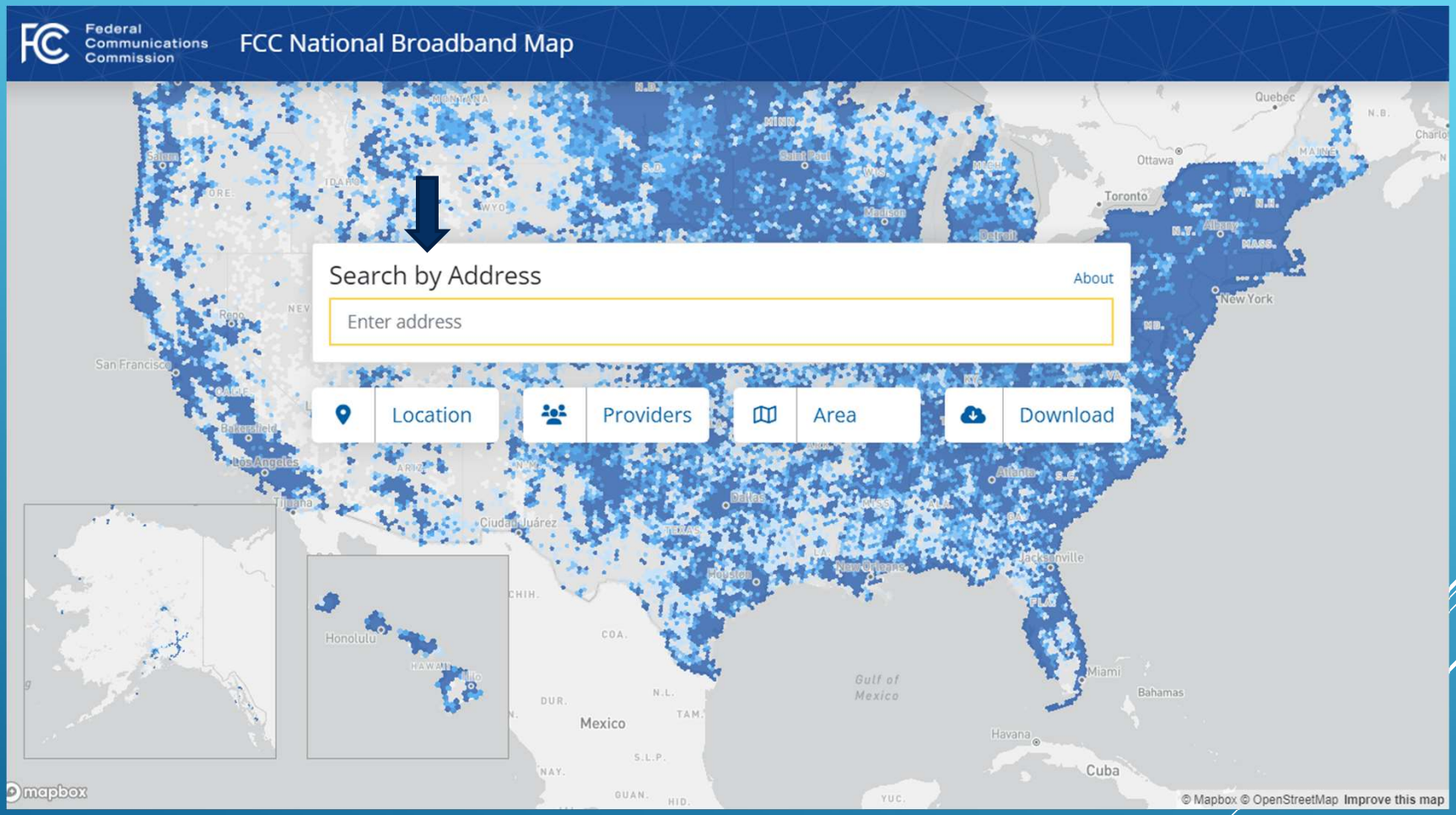
The filing window for availability data as-of June 30, 2023 opened on July 3. ISPs must submit data by September 1, 2023.

- 2.5 GHz license holders that had at least one mass market broadband service end user connection as of June 30, 2023 are also required to file their verified broadband availability data in the BDC by September 1, 2023.
- Tribal governmental entities primarily responsible for mapping or tracking broadband internet access service coverage in their areas may also file availability data.

National Broadband Map: 2023 Key Dates



fcc.gov/broadbanddata



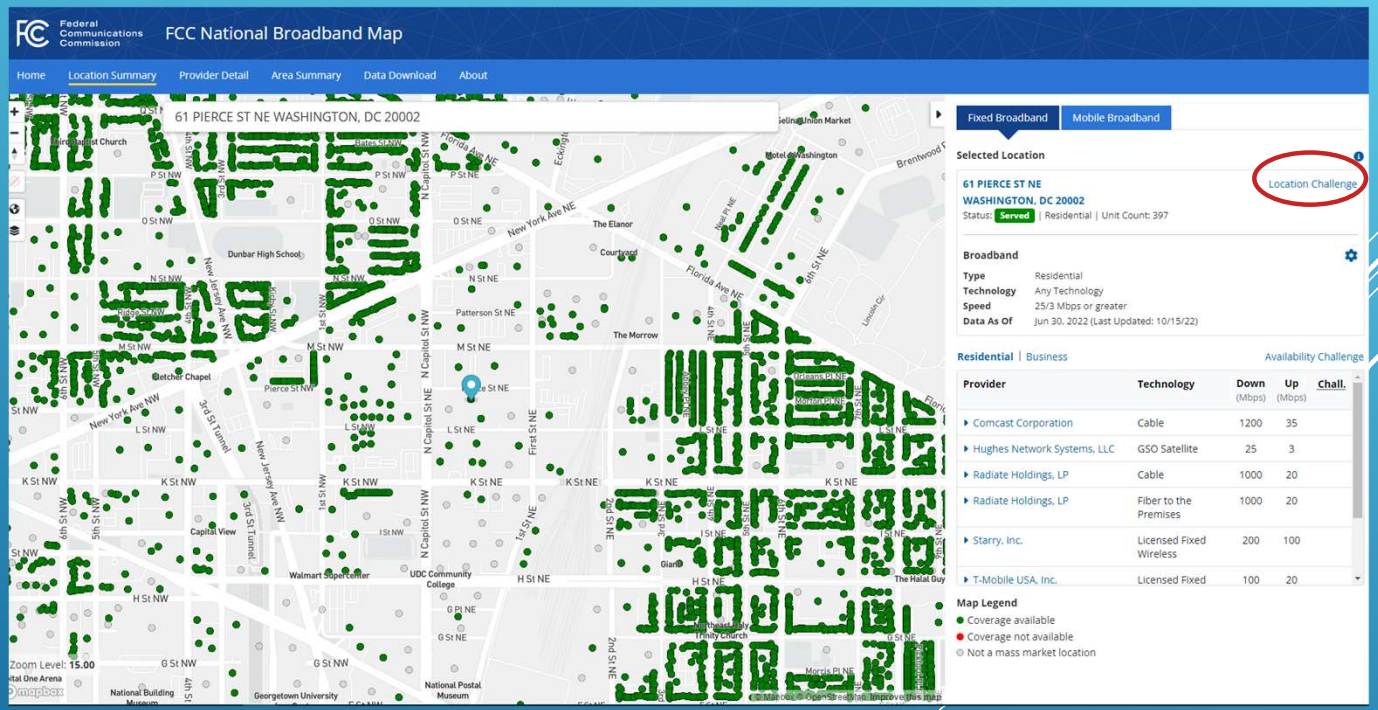
BroadbandMap.gov

National Broadband Map: Location Challenges

Location points are part of a dataset called the Broadband Serviceable Location Fabric.

What can be challenged?

- Wrong address
- Wrong unit count
- Wrong placement on the map
- Misidentified as non-Broadband-Serviceable
- Missing location



Broadband Data Collection: Getting Access to the Fabric

1. If you do not already have one, obtain an FCC username and password, and an FCC Registration Number (FRN) for your entity, in CORES (Commission Registration System). When creating your FRN, you must select the Entity Type that matches your government type (federal, state/local, or Tribal).

2. Log in to the BDC system at bdc.fcc.gov using your CORES username and password.

3. After logging in, you should see any FRNs associated with your username. Click on the FRN for the governmental entity that is seeking access to the Fabric dataset.

Broadband Data Collection: Getting Access to the Fabric

4. That will take you to the Entity Information page in the BDC system. Enter the required information. Note that the government entity type selected on that page must match the government entity type selected when registering the FRN in CORES in step 1.

5. Once you complete the licensing process with CostQuest, the FCC's Fabric contractor, they will send you a link to download the Fabric data file.

Broadband Data Collection: Working with the Fabric

- Review the tutorial videos on what the Fabric is and how to open and work with the file.
- Develop a strategy for analyzing and validating the Fabric data for your jurisdiction to determine whether a challenge is warranted.
  - Put the data on a map using QGIS or other GIS programs

Broadband Data Collection: Working with the Fabric

- If you discover that there are locations not included in the Fabric, confirm that these locations align with FCC's definition of a BSL, or broadband serviceable location, before including in a challenge.
- Prepare to submit your challenge data into the BDC system by formatting the data according to the requirements laid out in the Fabric bulk challenge data specification.

www.fcc.gov/broadbanddata/fabrichelp

Successful Fabric Challenges: Does it fall on a road?

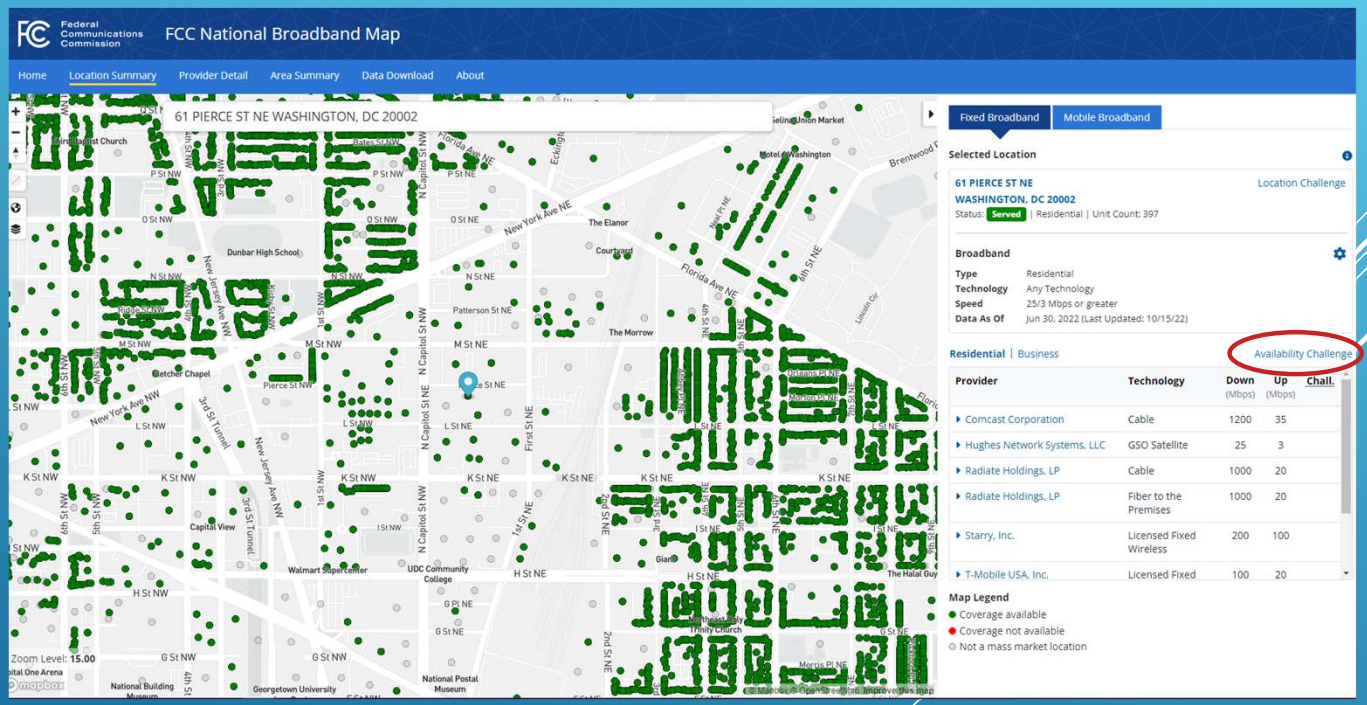
Successful Fabric Challenges: Does it fall on a building?

Successful Fabric Challenges: What is the goal?

National Broadband Map: Availability Challenges

Service is "available" if the:

- provider has, or previously had, a connection in service to the location.
- provider could initiate service through a routine installation within 10 business days of a request with no extraordinary charges or delays attributable to the extension of the provider's network.



National Broadband Map: Fixed Availability Challenges

Codes identifying the category of or reason for a bulk fixed availability challenge:

1 – Provider Failure to Schedule Install Within 10 Days of Request for Service

2 – Provider Failure to Perform Install Within 10 Days of Request for Service

3 – Provider Demand for Connection Charges That Exceed Its Standard Installation Charge

4 – Provider Denial of Request for Service

5 – Reported Service Type Not Offered

6 – Reported Speed Not Available for Purchase

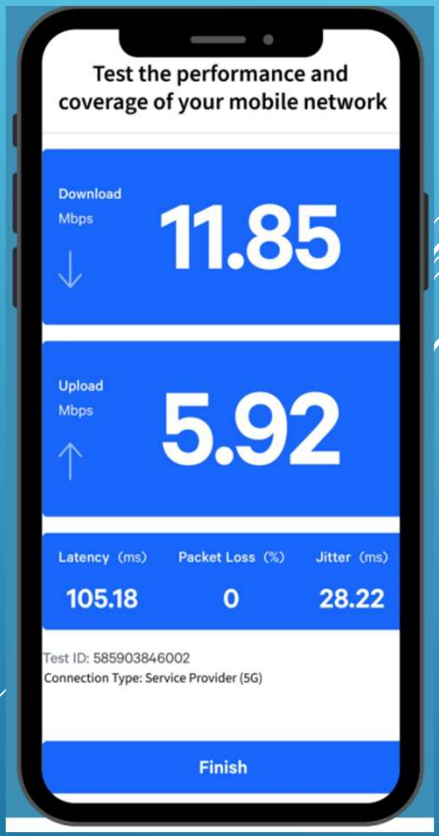
7 – Subscribed Speed Not Achievable [Individuals only can select this option (on the map), but it won't create a challenge]

8 – Signal Not Available (Satellite / Fixed Wireless only)

9 – Provider Demand for Additional Construction (Satellite / Fixed Wireless only)

National Broadband Map: Mobile Availability Challenges

- Challengers may dispute the availability of mobile broadband service using on-the-ground speed test data.
- Speed test data may be submitted using the FCC's Speed Test app (or another third-party speed test app approved by the FCC's Office of Engineering and Technology).
- Alternatively, bulk availability challengers may submit speed test data collected using their own hardware and software provided it meets the requirements set forth in the FCC's mobile speed test data specification and they disclose.



BroadbandMap.gov

For More Information:
www.fcc.gov/BroadbandData

Working with the FCC

Lloyd Collier, Attorney Advisor

Office of Native Affairs and Policy
Consumer and Governmental Affairs Bureau
Federal Communications Commission

Agenda

- How and why the FCC makes rules
- Types of rulemaking
- Why Tribal Nations should file comments
- What type of filing and when
- What to say
- How to file

How and Why the FCC Makes Rules

- The FCC makes rules based on authority from the Communications Act
- Rulemaking can lead to:
  - A new rule; an amendment to a rule; or the repeal of a rule
- Three main reasons for rulemaking:
  - Mandated by Congress; fixing a problem within delegated authority; or public petition

Types of Rulemakings

- Open proceedings where the FCC considers policies and adopts rules
- Can be initiated by these notices:
  - Notice of Inquiry (NOI) – general questions about issues; no final rules proposed
  - Notice of Proposed Rulemaking (NPRM) – specific questions and proposals for final rules
  - Further Notice of Proposed Rulemaking (FNPRM) – specific questions and proposals for modifying or adopting additional rules
  - Public Notice (PN) – used to announce certain actions.

Why Should Tribal Nations File Comments?

FCC's notice and comment rulemaking process

- Rules Based on Record Evidence
- Depends on Public Comment
- Transparency
- Different Perspectives

Tribal comments are important

- Help shape policies and rules
- Tribal perspectives
- Appeal rights

What Type of Filing and When?

Formal Comments

Two rounds: Initial & Reply

Dates are announced in public notice

- Comment cycles can be extended
- Be on ONAP's email list to stay informed

Letter format or more structured

Ex Parte Letters

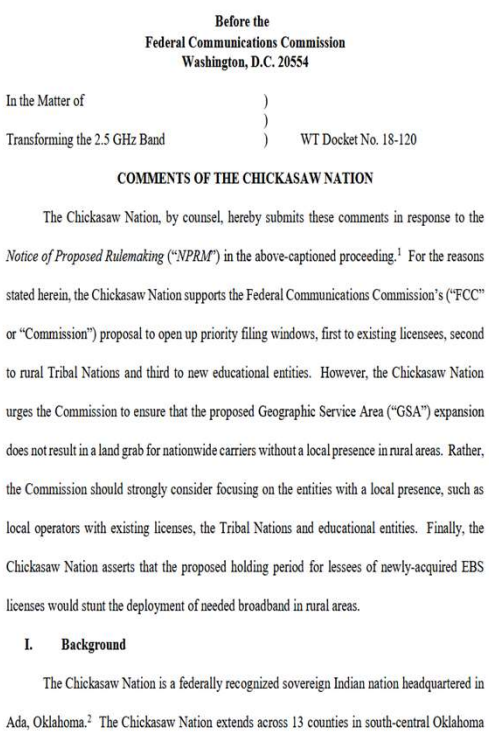
Anytime during open proceeding

Mandatory after meetings with FCC staff

- File w/in two business days.
- Summarize anything needed for decision record.

What Type of Filing and When?

Examples:
*** Structured Comment**
*** Letter Style Comment**



Before the
Federal Communications Commission
Washington, D.C. 20554

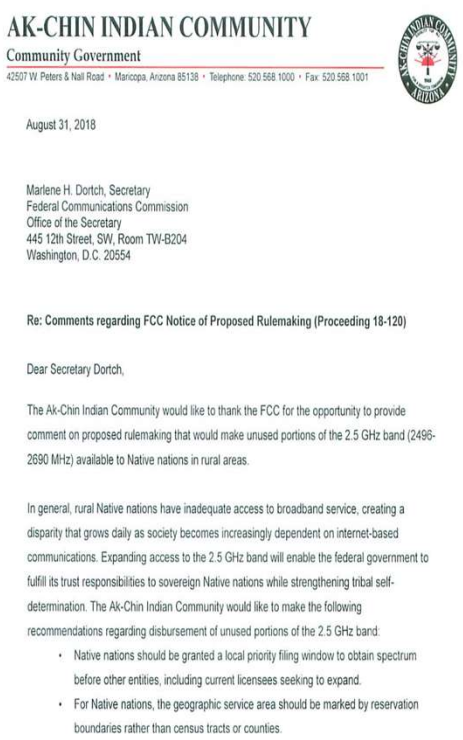
In the Matter of)
)
Transforming the 2.5 GHz Band) WT Docket No. 18-120

COMMENTS OF THE CHICKASAW NATION

The Chickasaw Nation, by counsel, hereby submits these comments in response to the *Notice of Proposed Rulemaking* ("*NPRM*") in the above-captioned proceeding.[1] For the reasons stated herein, the Chickasaw Nation supports the Federal Communications Commission's ("FCC" or "Commission") proposal to open up priority filing windows, first to existing licensees, second to rural Tribal Nations and third to new educational entities. However, the Chickasaw Nation urges the Commission to ensure that the proposed Geographic Service Area ("GSA") expansion does not result in a land grab for nationwide carriers without a local presence in rural areas. Rather, the Commission should strongly consider focusing on the entities with a local presence, such as local operators with existing licenses, the Tribal Nations and educational entities. Finally, the Chickasaw Nation asserts that the proposed holding period for lessees of newly-acquired EBS licenses would stunt the deployment of needed broadband in rural areas.

I. Background

The Chickasaw Nation is a federally recognized sovereign Indian nation headquartered in Ada, Oklahoma.[2] The Chickasaw Nation extends across 13 counties in south-central Oklahoma



AK-CHIN INDIAN COMMUNITY
Community Government
42507 W. Peters & Nall Road • Maricopa, Arizona 85138 • Telephone: 520.568.1000 • Fax: 520.568.1001

August 31, 2018

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW, Room TW-B204
Washington, D.C. 20554

Re: Comments regarding FCC Notice of Proposed Rulemaking (Proceeding 18-120)

Dear Secretary Dortch,

The Ak-Chin Indian Community would like to thank the FCC for the opportunity to provide comment on proposed rulemaking that would make unused portions of the 2.5 GHz band (2496-2690 MHz) available to Native nations in rural areas.

In general, rural Native nations have inadequate access to broadband service, creating a disparity that grows daily as society becomes increasingly dependent on internet-based communications. Expanding access to the 2.5 GHz band will enable the federal government to fulfill its trust responsibilities to sovereign Native nations while strengthening tribal self-determination. The Ak-Chin Indian Community would like to make the following recommendations regarding disbursement of unused portions of the 2.5 GHz band:

- Native nations should be granted a local priority filing window to obtain spectrum before other entities, including current licensees seeking to expand.
- For Native nations, the geographic service area should be marked by reservation boundaries rather than census tracts or counties.

What Type of Filing and When? *continued*

Example *Ex parte* letter

HERMAN & WHITEAKER, LLC

DONALD L. HERMAN, JR
GREGORY W. WHITEAKER
ROBIN E. TUTTLE†
CARRIE L. DEVIER††
CLARE C. LIEDQUIST
MOLLY O'CONOR
KENNETH C. JOHNSON†††, of counsel

† Admitted in DC, SC and FL only
†† Admitted in SC only
††† Admitted in DC and VA only

TEL 202-600-7272
FAX 202-706-6056
6720 B Rockledge Drive, Suite 150
Bethesda, MD 20817

October 5, 2018

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, D.C. 20554

Re: Notice of Ex Parte, *Transforming the 2.5 GHz Band,* WT Docket No. 18-120

Dear Ms. Dortch:

On Wednesday, October 3, 2018, Clifford Agee and Josh Snow of Trace Fiber Networks, wholly-owned subsidiary of the Chickasaw Nation, and their counsel, Clare Liedquist, Molly O'Conor and the undersigned with Herman & Whiteaker, LLC, met with John Schauble, Catherine Schroeder,[1] Nancy Zaczek, Nadja Sodos-Wallace, Blaise Scinto and Jonathan Campbell with the Wireless Telecommunications Bureau and Matthew Duchesne, Sayuri Rajapakse, and Janet Sievert with the Office of Native Affairs and Policy of the Federal Communications Commission ("FCC" or "Commission"). During the meeting, the parties discussed the importance of the *Transforming the 2.5 GHz Band* proceeding, particularly for Tribal Nations such as the Chickasaw Nation.

Mr. Agee described the lack of broadband access to many Chickasaw Nation citizens and

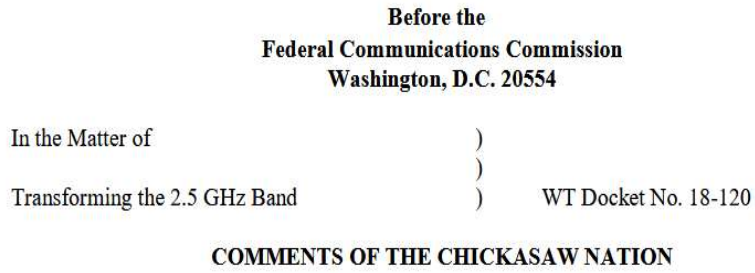
What to Say?

- Anything you want the FCC to rely on in its decision-making process
  - Initial comments respond to the NOI/NPRM/FNPRM
  - Reply comments respond to initial comments
  - *Ex parte* filings supplement the record OR must detail non-public meetings or presentations
- Specific examples, evidence, and data are helpful
  - Illustrative stories demonstrating the real-world impacts
  - Confidential treatment is possible

What to Say? *continued*

List and file in all relevant docket numbers

- From the first page of NOI/NPRM/FNPRM
- Also online at https://www.fcc.gov/ecfs/browse-popular-proceedings
- ONAP can help



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In the Matter of	)	
	)	
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COMMENTS OF THE CHICKASAW NATION

How to File?

FCC's Electronic Comment Filing System (ECFS):

https://www.fcc.gov/ecfs/filings

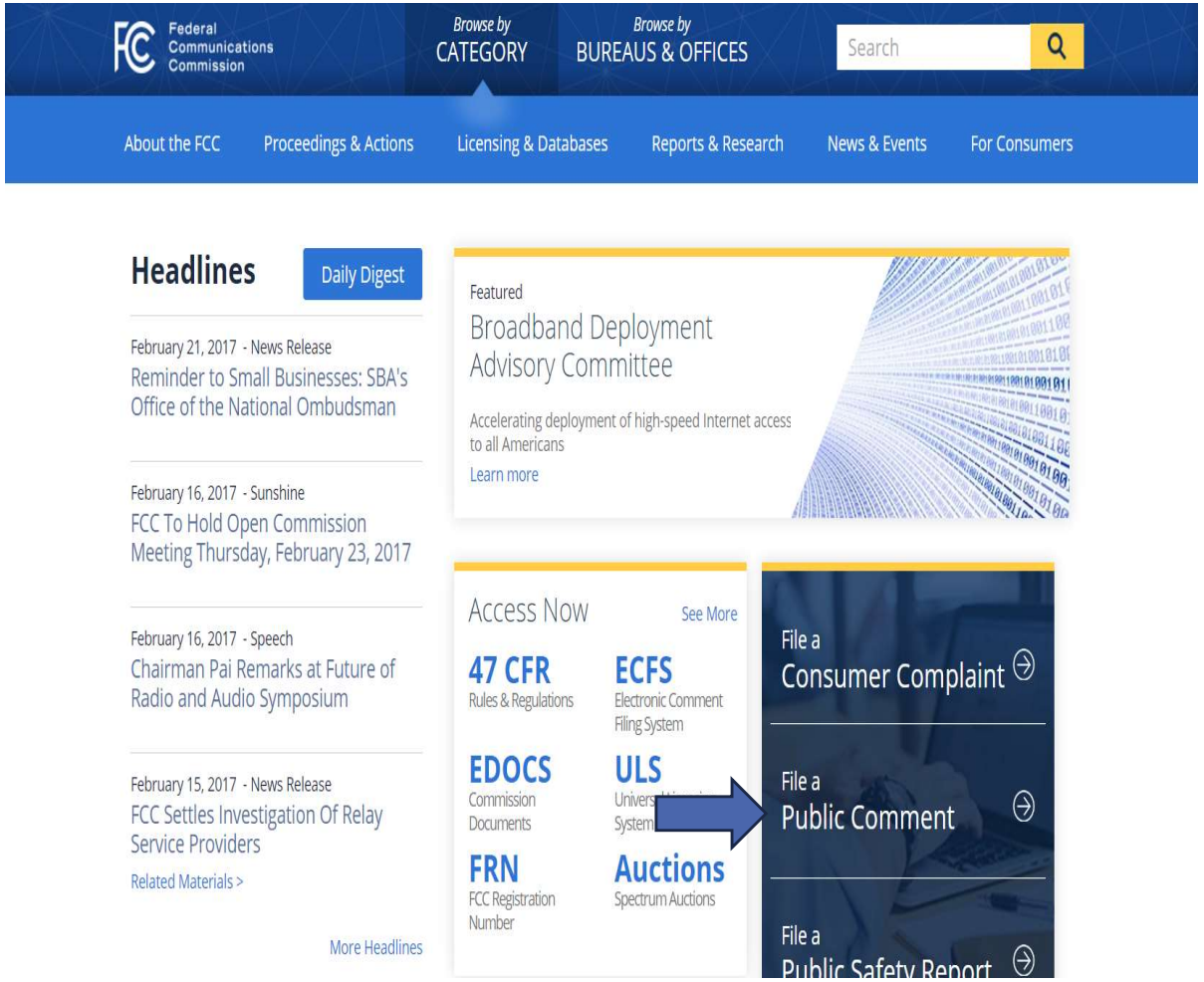
Paper filings are still possible

- Must include signed original comment and four copies
- More details here: https://www.fcc.gov/consumers/guides/how-comment#paper

Public access for all filings.

- All public filings are searchable & can be downloaded through ECFS

How to File? *continued*



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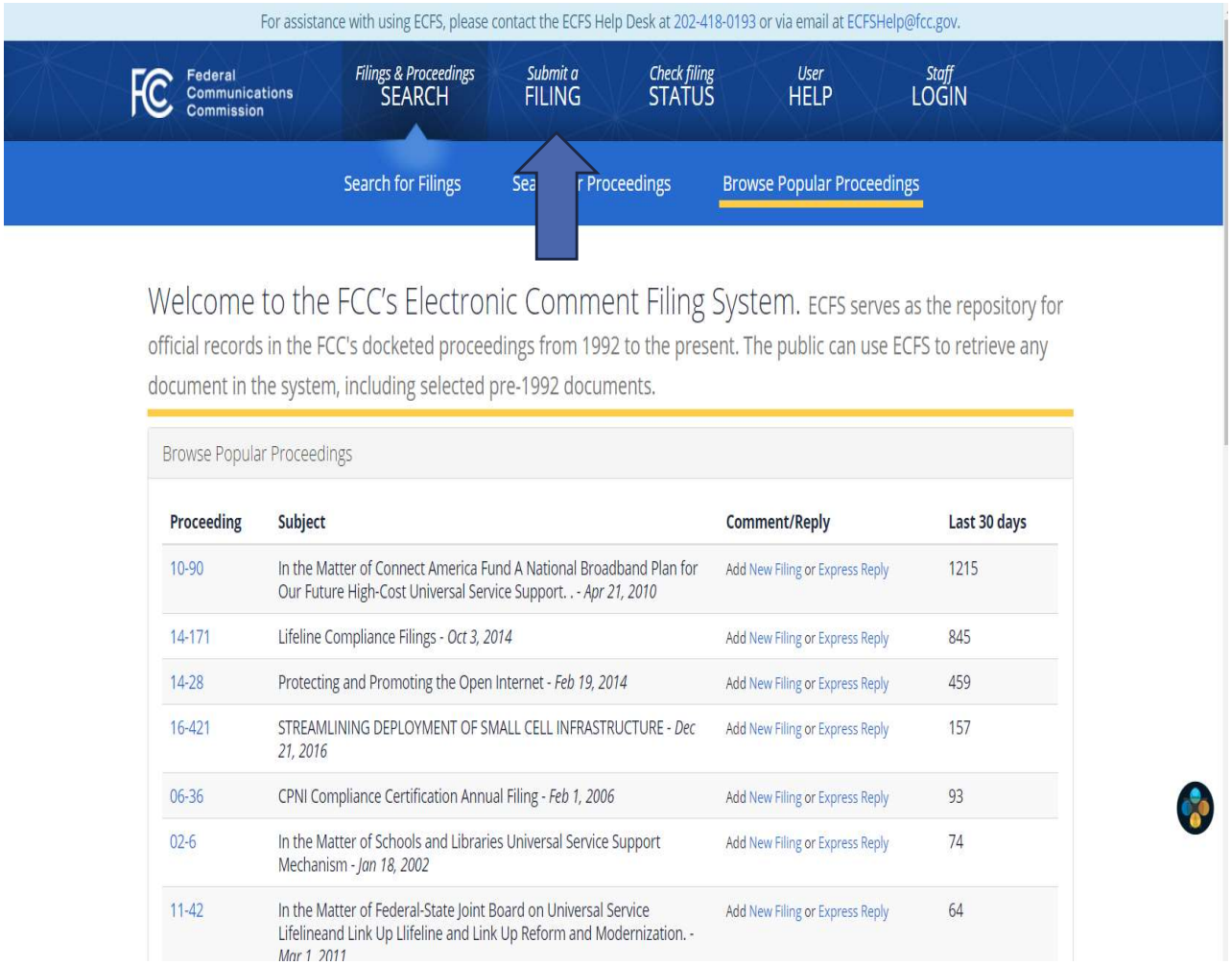

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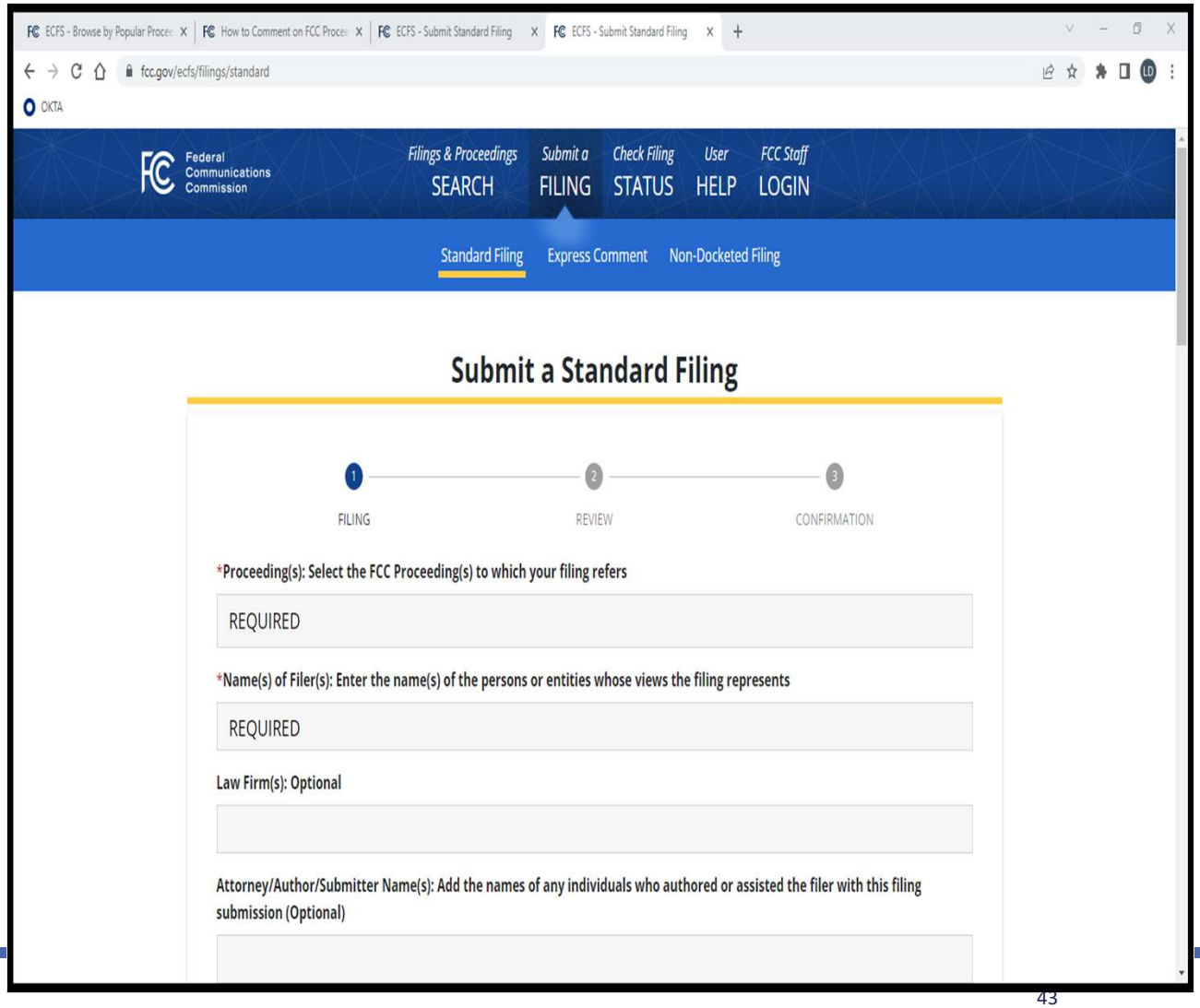
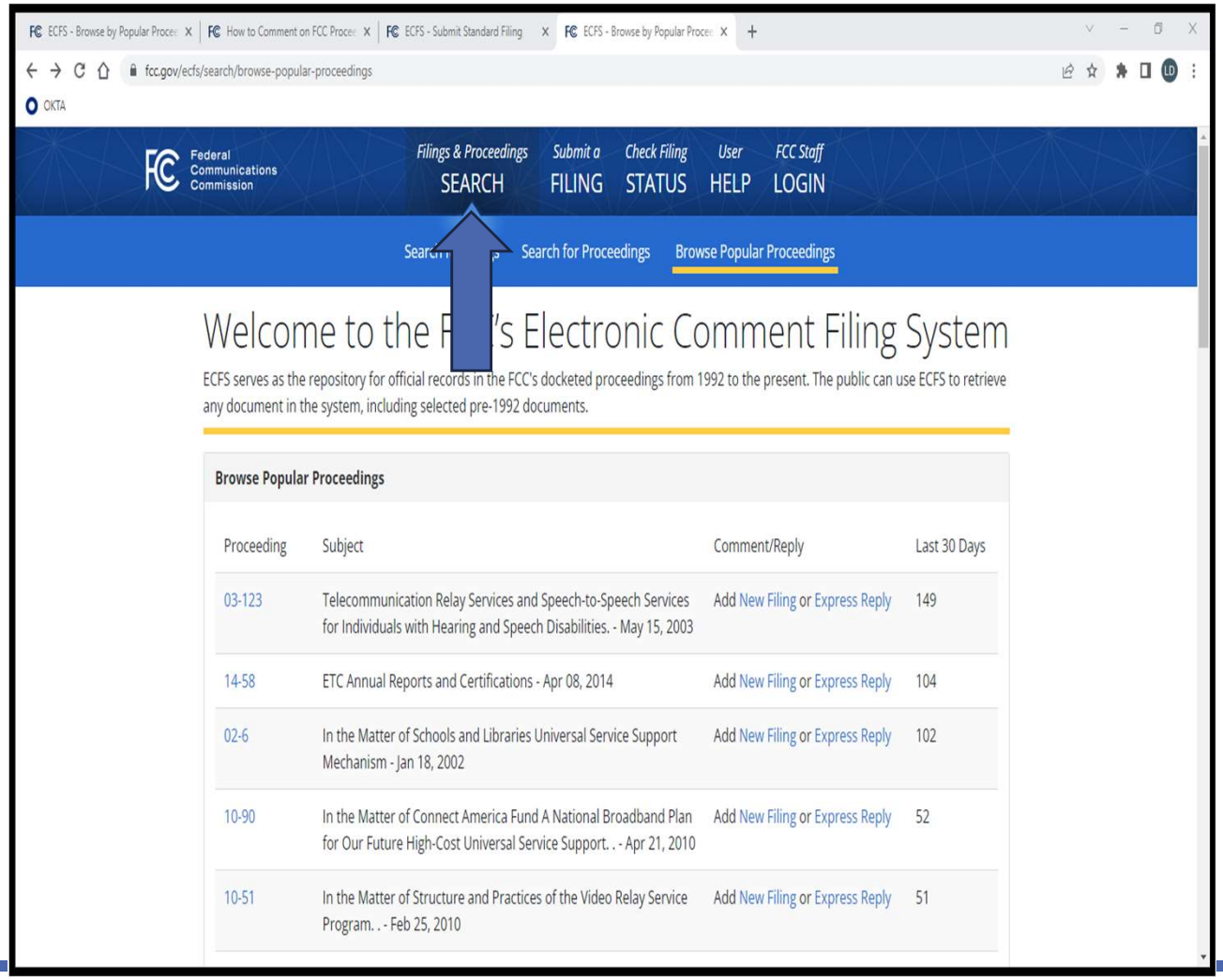


How to File?
continued



Still Have Questions?

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Questions?