

The Challenging Path to Broadband Internet Access Equity

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**Internet Equity
Initiative**

Agenda

Analysis of the Broadband Data Collection Availability Challenges Dataset

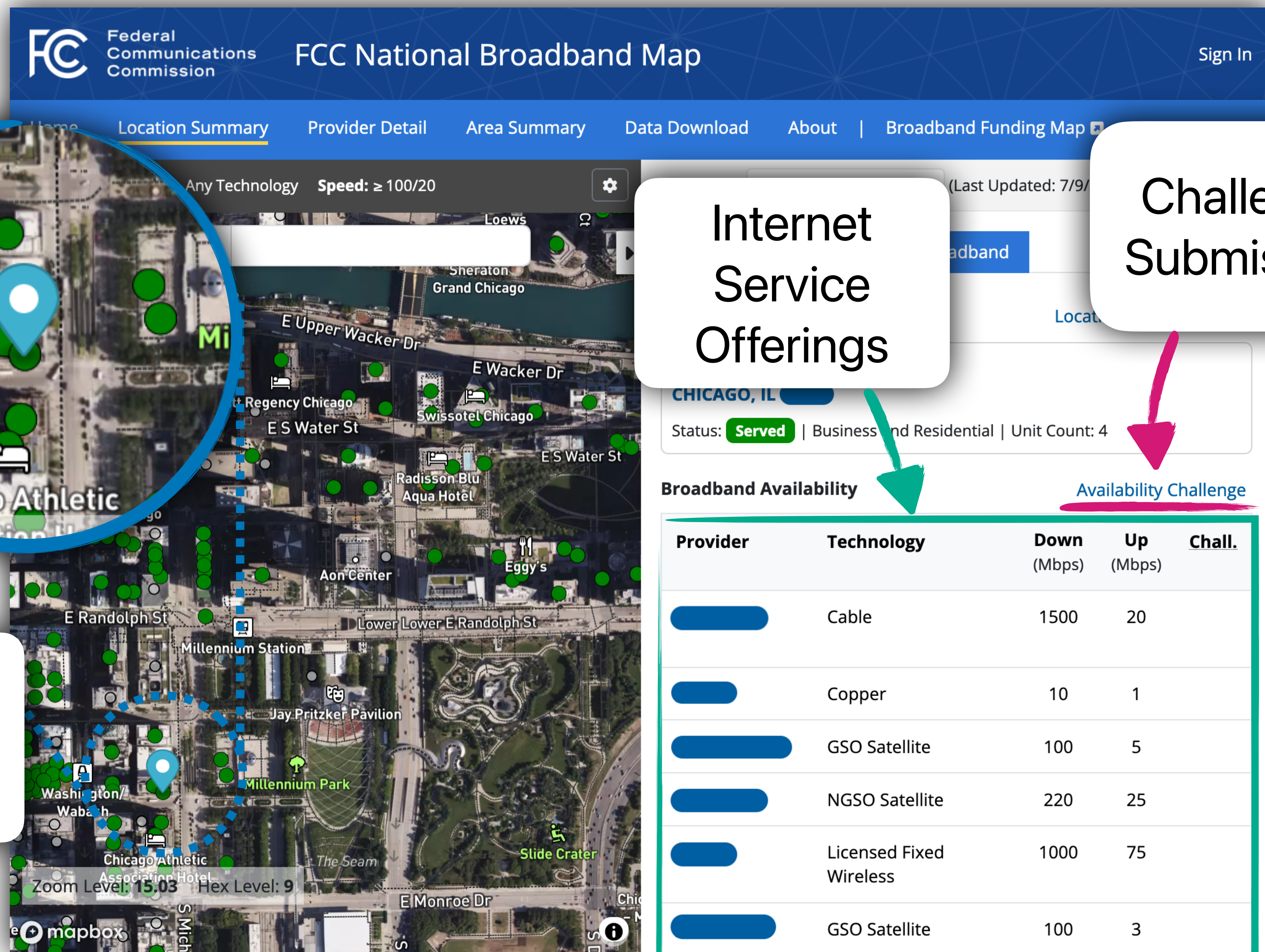
- **Broadband Data Collection and National Broadband Map**
- **Main Analysis Results and Takeaways**



Broadband Data Collection (**BDC**) – **FCC** program that **maps** broadband **Internet** access **availability** in the United States

The BDC program publishes the **National Broadband Map**, one of the **key factors** for the **distribution** of investment **funds** in **Internet infrastructure** deployment

For example, **\$42 Billion** from the **BEAD** program



Internet Service Offerings

Challenge Submission

Locations

Analysis of the BDC Availability Challenges Dataset

Big Picture

A total of **3,690,772** challenges were submitted

2,872,304 locations had at least one associated challenge

2.40% of the **known locations** across the nation

872 providers had at least one associated challenge

Challenges per Location

The **challenges** are **widely spread** among participating locations

The **maximum** number of challenges associated to a single location is **eleven**

The **vast majority** of locations ($\approx 96\%$) had **2 challenges or less**

Challenges (#)	BSLs (#)	BSLs (%)
1	2,210,556	76.96
2	552,166	19.22
3	65,332	2.27
4	41,913	1.46
5	1,888	0.07
6	370	0.01
7	66	0.00
8	8	0.00
9	1	0.00
10	3	0.00
11	1	0.00

Challenges per Outcome

Most challenges were **upheld**

Many challenges were **overturned**

Surprisingly, many challenges were **withdrawn**

Outcome	Challenges (#)	Challenges (%)
Upheld	2540062	68.82
Overturned	589931	15.98
Withdrawn	560779	15.19

Challenges per Access Technology

The **majority** of challenges ($\approx 61\%$) were against **Fixed Wireless**

Most **other technologies** received **at least 130,000** challenges

Except for Geostationary Satellite

Technology	Challenges (#)	Challenges (%)
[71] LTF Wireless	2122299	57.50
[50] Fiber	478155	12.96
[40] Coaxial	450389	12.20
[61] NGS Sat	276866	7.50
[10] Copper	231021	6.26
[70] UTF Wireless	130390	3.53
[60] GS Sat	1254	0.03
[72] LbRTF Wireless	398	0.01

Challenges per Category

Vast majority of challenges ($\approx 97\%$) **argued** that a **provider does not offer** either the **technology** or the **speed reported** to be available at a location

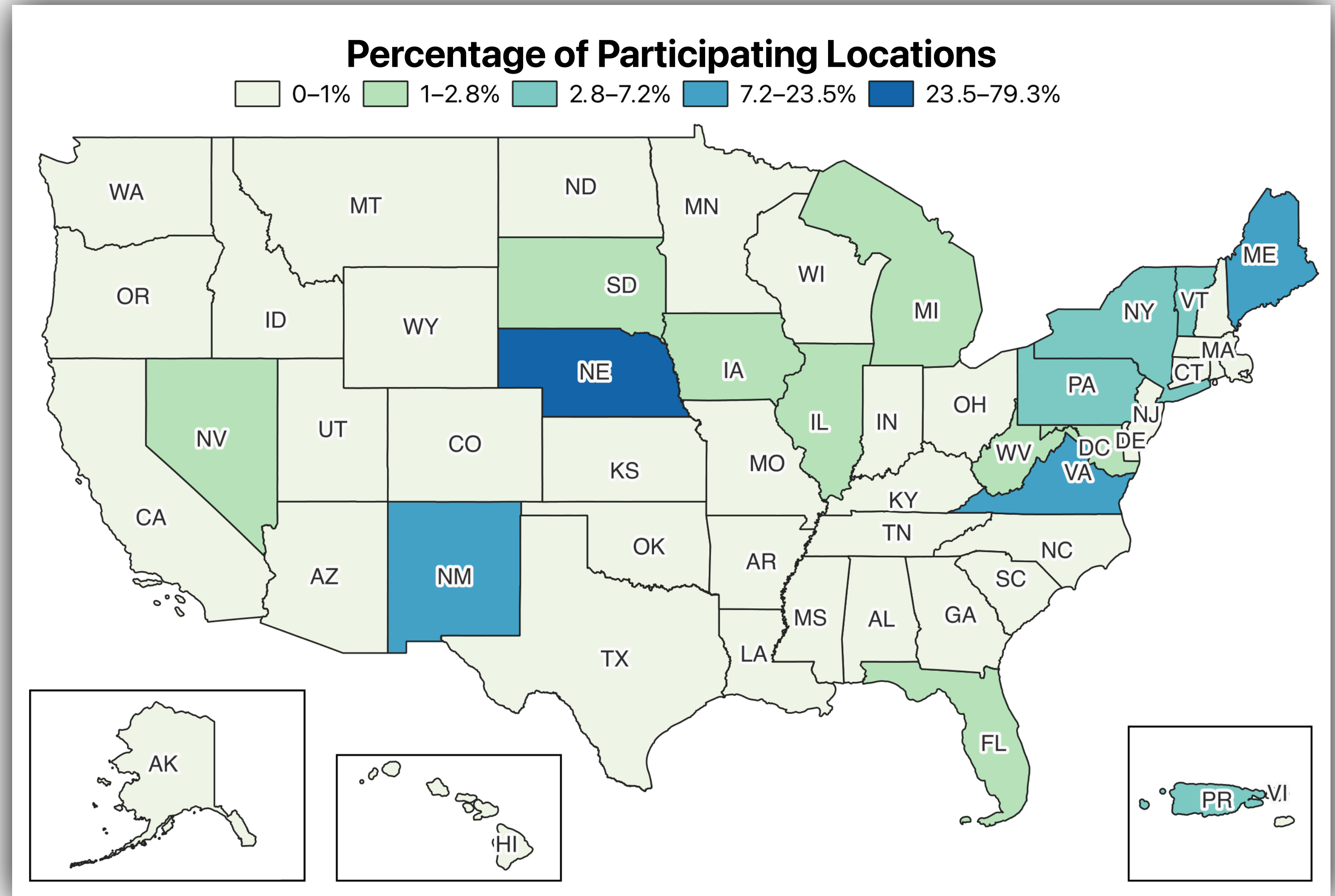
Category	Challenges (#)	Challenges (%)
[5] No Technology	1993503	54.01
[6] No Speed	1613047	43.70
[4] Service Denied	46465	1.26
[8] No Signal	36882	1.00
[3] Extra Fee	393	0.01
[1] No Appt	278	0.01
[9] New Equipment	107	0.00
[2] No Show	97	0.00

State-Level Analysis

Participation in the challenge process is **highly skewed** and **mostly low**

About **every 3 out of 4** locations in **Nebraska** raised **at least one challenge**

97% of **Nebraska's challenges** were against **Fixed Wireless**

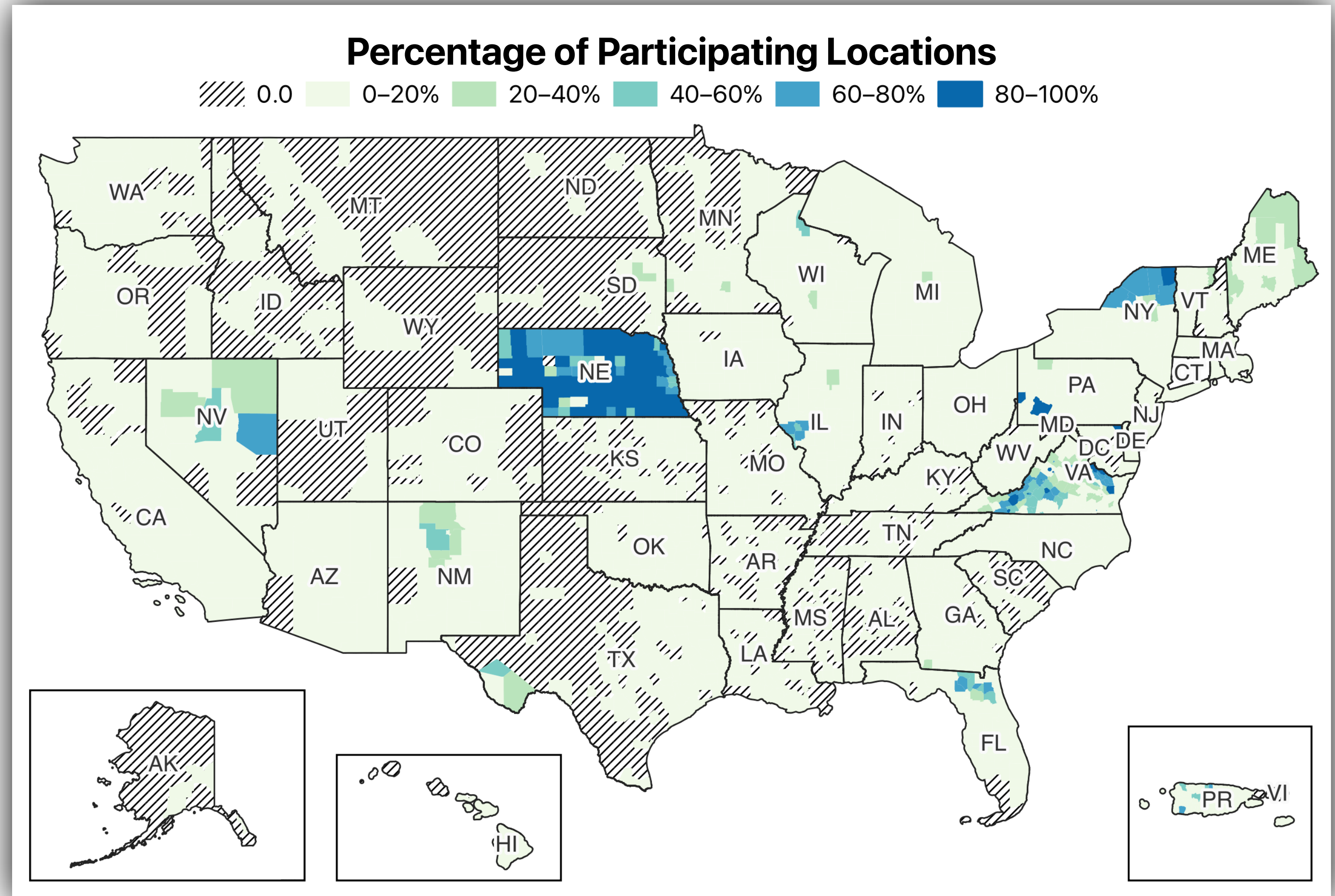


County-Level Analysis

No participation in large swath of counties in the **central continental area**

Nebraska has **high and mostly homogeneous participation** across counties

For **other states**, higher participation is usually **concentrated in a few counties**



Main Takeaways

Low overall participation in the challenge process

Marked **contrast** between **Nebraska** and **surrounding areas**

Higher participation is usually **concentrated**

Fixed wireless was the **main target** for challenges

Challenging is challenging

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Full Paper