

MAXIMIZING FUNDING TO CONNECT MDUS:

BEAD & Multi-family Dwelling Units

EducationSuperHighway

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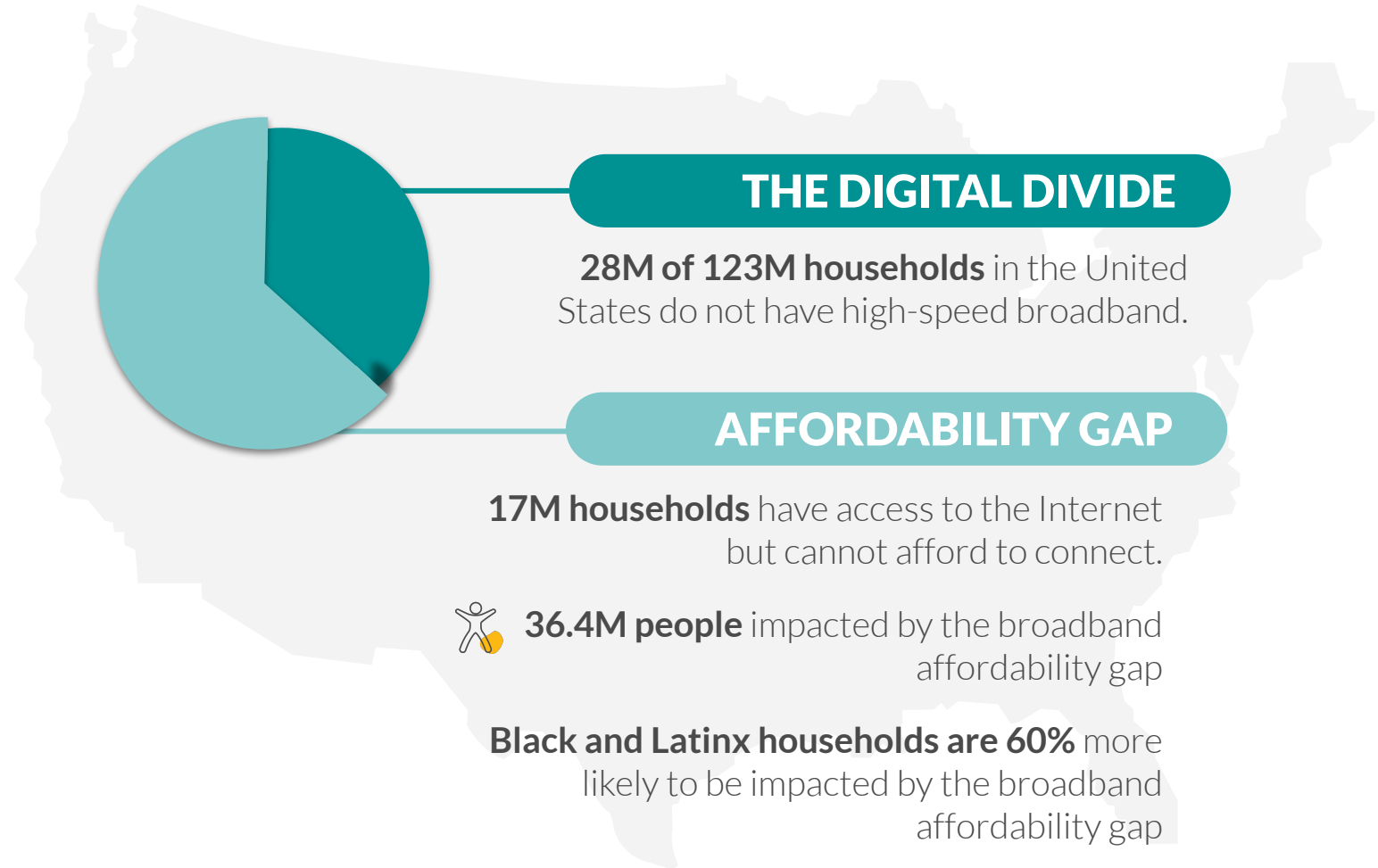
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EducationSuperHighway Focus



EDUCATIONSUPERHIGHWAY'S MISSION

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



DIGITAL DIVIDE

20-25% of the Digital Divide is Concentrated in Affordable Multi-Dwelling Units



6
million people



3.7
million households



APARTMENT WI-FI

Implementation & Components

STEP 1

Procure a fiber internet connection to the building

STEP 2

Install Wi-Fi access points efficiently to provide ubiquitous coverage

STEP 3

Provide residents with the SSID and password to connect to the internet





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**MDU
Opportunities
through BEAD**

Supporting MDU Connectivity



CHALLENGE PROCESS

Ensuring MDUs are properly assigned as served, unserved, or underserved by submitting various types of challenges



UNIT LEVEL CONNECTIVITY

Ensure that deployment projects are focused on ensuring every unit in an MDU are able to be connected

Note: NTIA expectation



NON-DEPLOYMENT FUNDS

Create programs to bring affordable high speed internet access via inside wiring and equipment.

3

Challenge Process & Unit Level Connectivity



LEARNINGS

Unit Level Connectivity is required



“I’m happy to respond by email to you to confirm that any BSLs that are unserved must be served, whether within an MDU or otherwise, for a Final Proposal to be approved. So folks will need to find a way, whether by wiring the inside of a building - or if that’s not possible/optimal, by providing wireless signals - to units within MDUs that are not served currently.

...their IP being silent as to a program requirement doesn’t remove the program requirement.

Identified MDU units that are unserved/underserved have to be treated the same way any other unserved or underserved locations must be treated.”

--Evan Feinman, Director, Broadband Equity, Access, and Deployment Program



STATES SHOULD INCLUDE THIS LANGUAGE IN THEIR BEAD VOL 2 INITIAL PROPOSAL

NTIA guidance suggests they expect this requirement of all states. By including it in the Initial Proposal, States demonstrate their intention and understanding of the BEAD expectation

BEAD CHALLENGE PROCESS

FCC Broadband Data Maps **Do Not Accurately Reflect MDU Connectivity**

SIGNIFICANTLY UNDERCOUNT UNSERVED AND UNDERSERVED MDUS

- Count multi-family housing developments as one Broadband Serviceable Location (BSL)
- Lack unit-by-unit connectivity data

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

- Places burden of proof on unconnected residents, most of whom have limited to no access to Internet or are unaware of this program and challenge process.
- By submitting challenges, states can fairly **put the onus back on ISPs** to provide unit-level service availability for all MDUs.



20-25%

of unconnected households nationwide live in multi-family housing

BEAD Challenge Process

Permissible Challengers

State Broadband Offices (**SBO's**) may only allow challenges from the following parties:

- Units of local and tribal government,
- Nonprofit organizations
- Broadband service providers.





NTIA Model Challenge Process: Other Challenge Types/Modules

Availability	The broadband service identified is not offered at the location, including a unit of a MDU
Speed	The actual speed of the fastest available service tier falls below the unserved or underserved thresholds.
Latency	The round-trip latency of the broadband service exceeds 100 ms.
Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”)
Technology	The technology indicated for this location is incorrect.
Business service only	The location is residential, but the service offered is marketed or available only to businesses.
Enforceable Commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.
Planned service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment.
Not part of enforceable commitment.	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment.
Location is/ is not a CAI	The location should or should not be classified as a CAI



Challenge Process: Availability Module

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

Evidence:

- Screenshot of provider webpage
- A service request was refused within the last 180 days (e.g., an email or letter from provider).
- Lack of suitable infrastructure (e.g., no fiber on pole).
- A letter or email dated within the last 365 days that a provider failed to schedule a service installation or offer an installation date within 10 business days of a request.
- A letter or email dated within the last 365 days indicating that a provider requested more than the standard installation fee to connect this location or that a Provider quoted an amount in excess of the provider's standard installation charge in order to connect service at the location.



VERIFYING SERVICE AVAILABILITY

Refining the List of MDUs Through Desktop Assessments

Structured method to enhance the list of BEAD-eligible MDUs

In three steps, a desktop assessment has the potential to uncover evidence of:

- service availability
- speed availability
- service installation denial
- inability or unwillingness to install services within 10 days of a request
- requesting more than the standard installation fee to connect the location
- service provider only offers business service

1

Look at each BEAD-eligible MDU on the National Broadband Map.

2

Attempt to order the service advertised on the map. If multiple providers offer service, try to order each provider's service until you succeed in ordering one.

3

If you cannot successfully order service, mark the BSL as un/underserved. This location should be challenged.

All of which would qualify that broadband service location as being unserved.

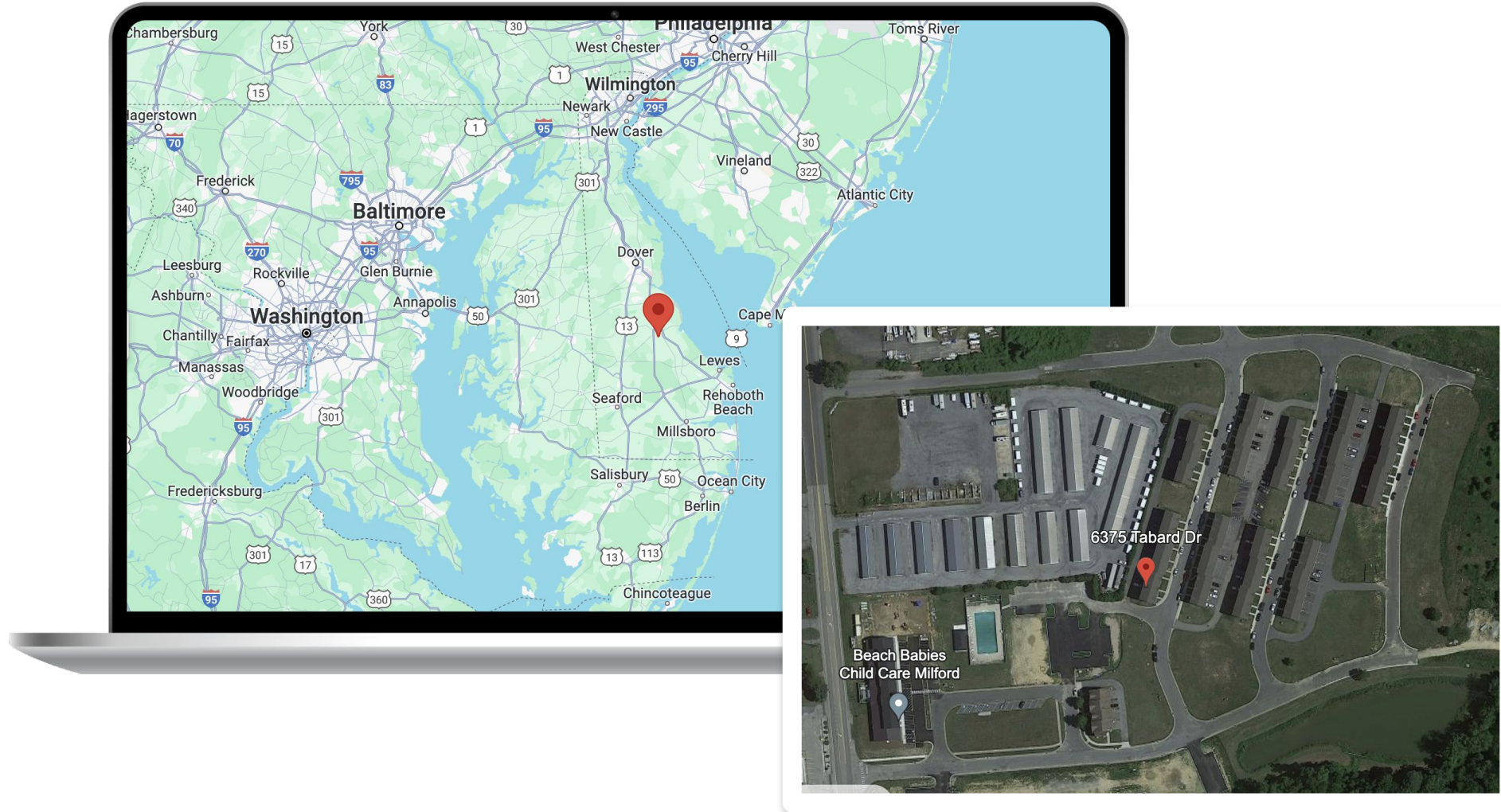


Desktop Assessment **Examples**



DESKTOP ASSESSMENT EXAMPLE

6375 Tabard Dr | Milford, DE



DESKTOP ASSESSMENT EXAMPLE

6375 Tabard Dr | Milford, DE

bandmap.fcc.gov/location-summary/fixed?version=dec2022&location_id=1354223336&addr1=6375+TABARD+DR&addr2=...

CC National Broadband Map

Provider Detail | Area Summary | Data Download | About | Broadband Funding Map

Wired & Lic. Fixed Wireless | Speed: ≥ 100/20 | Service Filters | Data As Of: Dec 31, 2022 (Last Updated: 1/3/24)

Address: 6375 TABARD DRIVE MILFORD, DE 19963

Fixed Broadband | Mobile Broadband

Selected Location
6375 TABARD DR
MILFORD, DE 19963
Status: **Served** | Residential | Unit Count: 1

Broadband Availability

Provider	Technology	Down (Mbps)	Up (Mbps)
Comcast Corporation	Cable	1200	35
Hughes Network Systems, LLC	GSO Satellite	25	3
Pocomoke Holdings			
Space Exploration Technologies			
T-Mobile USA, Inc.			
Viasat, Inc.			

Business-only Service

- Viasat, Inc.

challenge.broadband.delaware.gov/challenge/bead-challenge-map

Delaware Broadband Challenge Map

Starlink
Performance: ↓ 220 mbps | Service type: Residential | **Unserved**
↑ 25 mbps | Business

GSO Satellite
HughesNet
Performance: ↓ 25 mbps | Service type: Residential | **Unserved**
↑ 3 mbps | Business

Cable
Xfinity
Performance: ↓ 1200 mbps | Service type: Residential | **Served**
↑ 35 mbps | Business

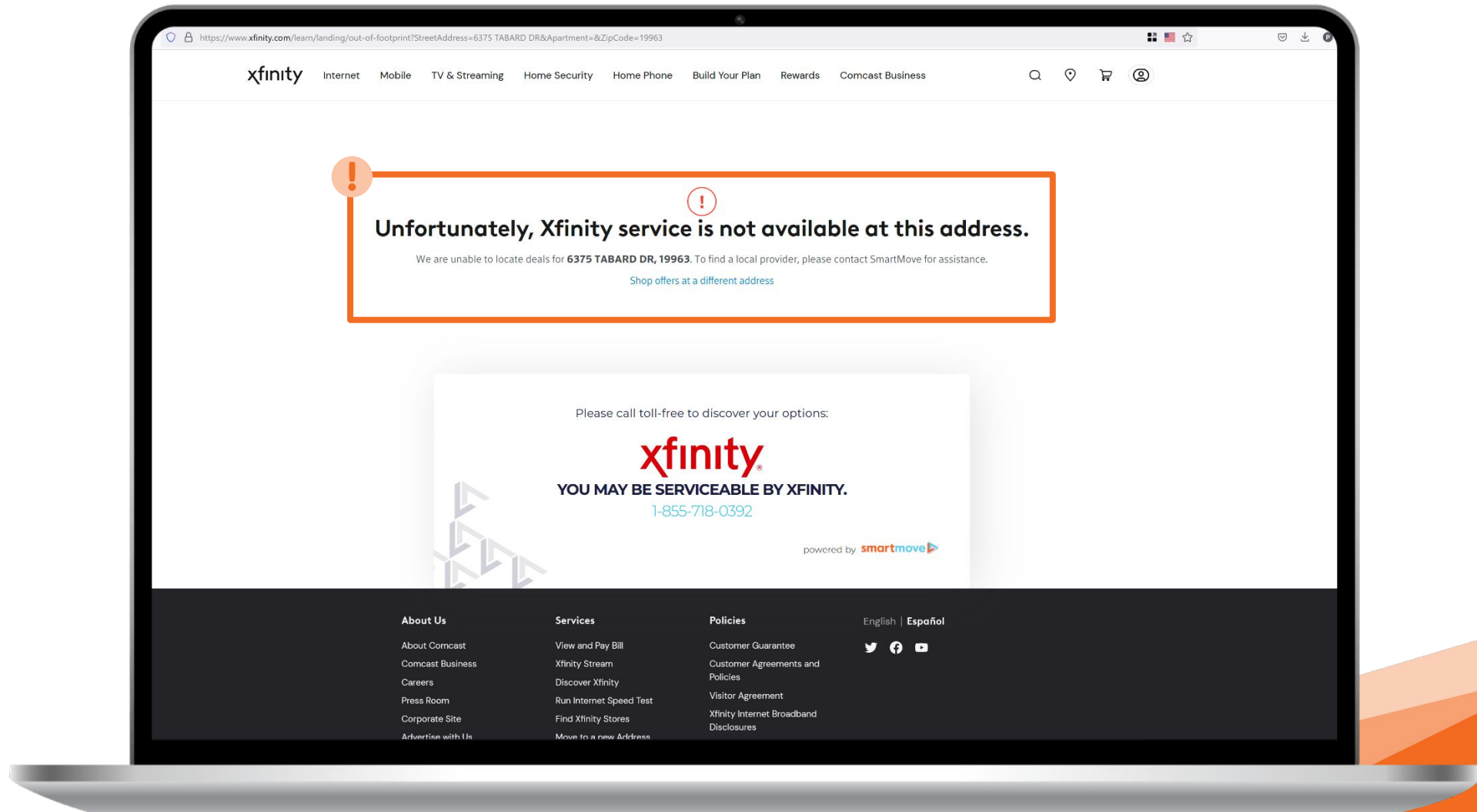
Licensed Fixed Wireless
T-Mobile US
Performance: ↓ 100 mbps | Service type: Residential | **Served**
↑ 20 mbps | Business

Licensed Fixed Wireless
bloosurf
Performance: ↓ 25 mbps | Service type: Residential | **Underserved**
↑ 3 mbps | Business

Address: 6375 Tabard Dr, Milford

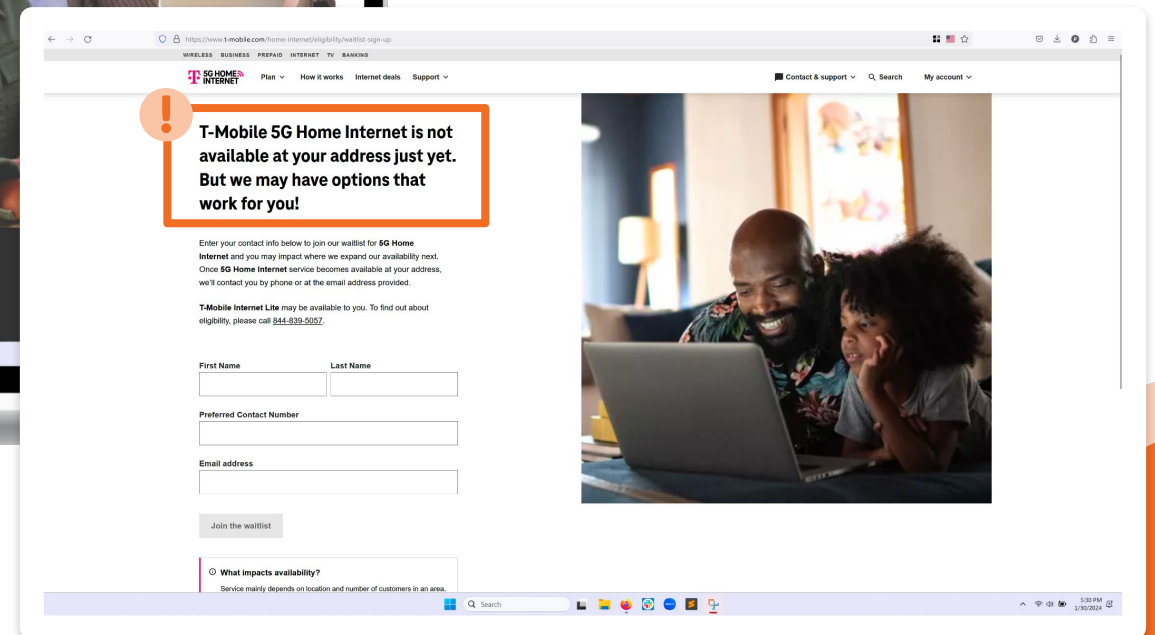
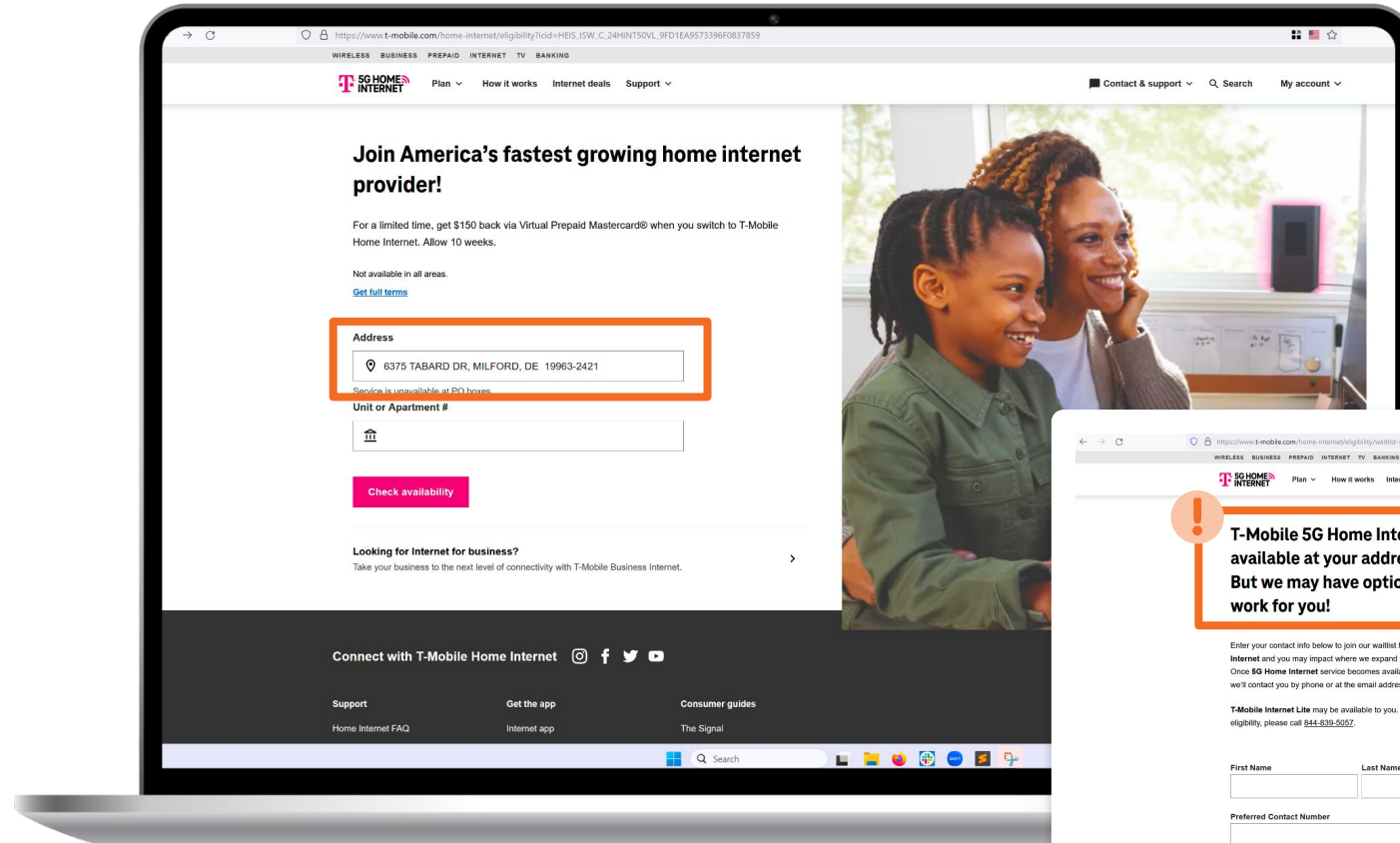
DESKTOP ASSESSMENT EXAMPLE

6375 Tabard Dr | Milford, DE



DESKTOP ASSESSMENT EXAMPLE

6375 Tabard Dr | Milford, DE



6375 Tabard Dr | **Milford, DE**

In Summary

FCC MAP STATUS:

Served

2 providers offering \geq 100/20

PROVIDER 1
(COMCAST)
1200/35

PROVIDER 2
(T-MOBILE)
100/20



ACTUAL STATUS:

Unserved | 81 unit property

Challenge Process: Speed Module

Challenge: The actual speed of the fastest available service tier falls below the unserved or underserved thresholds

Evidence: Speed test by subscriber, showing the insufficient speed and meeting the requirements for speed tests.

Rebuttal: Provider has countervailing speed test evidence showing sufficient speed, e.g., from their own network management system.

Reminder: *Citizen surveys do not constitute acceptable evidence for either challenges or rebuttals-*

www.beadchallenge.org



LEARNINGS

Cellular Licensed Fixed Wireless (CLFW)



CLFW OFTEN WRONG ON THE MAP, borne out over thousands of examples, not to mention median cellular speeds are 90/10 (i.e., less than 100/20)



NTIA APPROVED a state's pre-challenge modification (Georgia and others)



STATES SHOULD ADOPT PRE-CHALLENGE MODULE to more accurately reflect connectivity in their state as these locations actually being “underserved”

*Data from speedtest.net as of Q4 2023

LEARNINGS

New MDU Language Is Critical



“An MDU challenge requires challenges for one unit for MDUs having fewer than 15 units, for two units for MDUs of between 16 and 24 units, and at least three units for larger MDUs”



SIGNIFICANTLY REDUCES BURDEN OF PROOF on challenger. For example, a 100-unit building would previously have required 10 units' worth of evidence to submit one challenge; now, this is three



NEW LANGUAGE IS STILL CUMBERSOME, most providers' failure pages do not have address, meaning $2 \times 3 = 6$ pieces of evidence minimum are required to meet the three MDU threshold

LEARNINGS

Call Logs



Sometimes, a challenge will include a call log as evidence of a building not being served



PROVIDER WEBSITES may give an inconclusive screenshot online and require an additional call to confirm lack of service



REVIEWERS SHOULD ANTICIPATE these call logs and not reject out of hand

LEARNINGS

Reviewing Challenges Early and Often



REVIEWERS MAY INCORRECTLY deny challenges even with sufficient evidence




REVIEW CHALLENGES as they come in to allow challengers time to resubmit if needed.

CHALLENGE PROCESS

Organizing a challenge process

Items to consider:

- Who/what organization will be the challenging entity?
 - Identify support options
 - Local coordination
 - Understand type of test (speed, availability, Business only service), evidence required and process to submit
 - Coordinate outreach
- 

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Beyond BEAD Funds



BEAD Non-Deployment Funds | **New Jersey**



PROGRAM DETAILS

Public Housing Authority Connect: Pilot Broadband Program



STATE FUNDING

New Jersey plans to allocate \$20 million from BEAD non-deployment funds towards a public housing broadband grant program to fund upgrades to inside wiring and equipment, including Wi-Fi in common areas and affordable broadband programs



FOCUS ON PUBLIC AND MULTI-FAMILY HOUSING COMMUNITIES

The program will fund unit-level connectivity solutions that will bring high-speed internet access to public housing residents



ELIGIBLE ENTITIES

Public Housing Authorities across the state



Digital Equity Plan | **Maine**



PROGRAM DETAILS

Affordable Housing Connectivity Program (AHCP)



STATE FUNDING

Maine plans to allocate \$2.5 million to expand free or low-cost connectivity (wired or Wi-Fi) for residents of affordable housing units, ensuring service to approximately 41,000 households in subsidized rentals



FOCUS ON AFFORDABLE HOUSING COMMUNITIES

The program will fund unit-level connectivity solutions to bring affordable high speed internet access to affordable housing residents via Apartment Wi-Fi and digital equity activities, digital skill training, affordable devices, technical support, and internet safety education



ELIGIBLE ENTITIES

Subsidized housing owners across the state



FEDERAL AND STATE PROGRAMS

State Grant Opportunities | California

CPUC CALIFORNIA ADVANCED SERVICES FUND (CASF)- BROADBAND PUBLIC HOUSING ACCOUNT



STATE FUNDING

\$15 million available through the CASF Grant for the 2023-2024 fiscal year and likely more in the future



STATE CONTRIBUTION TOWARDS NETWORK

The Broadband Public Housing Account will finance up to 100 percent of the cost in install inside wiring and network equipment



PUBLICLY SUPPORTED MULTI-FAMILY HOUSING COMMUNITIES

Publicly funded and affordable housing developments are required to provide 5 years of free internet access and at an affordable rate thereafter

CURRENT ELIGIBILITIES : Publicly supported housing developments and farmworker housing

FUTURE ELIGIBILITY EXTENSION : Other low-income housing developments and mobile home parks with low-income residents



State Grant Opportunities | Massachusetts

APARTMENT WIFI AND RESIDENTIAL RETROFIT

The **Massachusetts Broadband Institute** will subsidize equipment and installation of broadband infrastructure within qualifying affordable multi-family and public housing developments.



STATE FUNDING-US TREASURY CAPITAL PROJECT FUNDS

\$33 million split between two programs: **Free Apartment WIFI**, which will install building-wide WIFI networks via funding for capital costs and one year of operation, and **Residential Retrofit**, which will install to-the unit wiring at eligible properties.



ELIGIBLE ENTITIES

State and federally funded public housing developments, LIHTC or other deed restricted developments, low income housing and mixed income housing in Qualified Census Tracts



FOCUS ON PUBLIC AND MULTI-FAMILY HOUSING COMMUNITIES

MBI and the Metropolitan Area Planning Council will initiate partnerships with broadband providers and housing providers on a rolling basis.

CURRENT ELIGIBILITIES : Broadband Providers, public and privately supported housing developments



Summary



PREPARE REVIEWERS FOR CHALLENGE PROCESS

Ensuring reviewers are prepared for any nuanced cases and office can communicate with challengers

ESH available to share examples with reviewers of what to expect



INCLUDE UNIT LEVEL CONNECTIVITY IN REQUIREMENT 8

Ensure MN has included in BEAD Volume 2

ESH has model language we can share for this

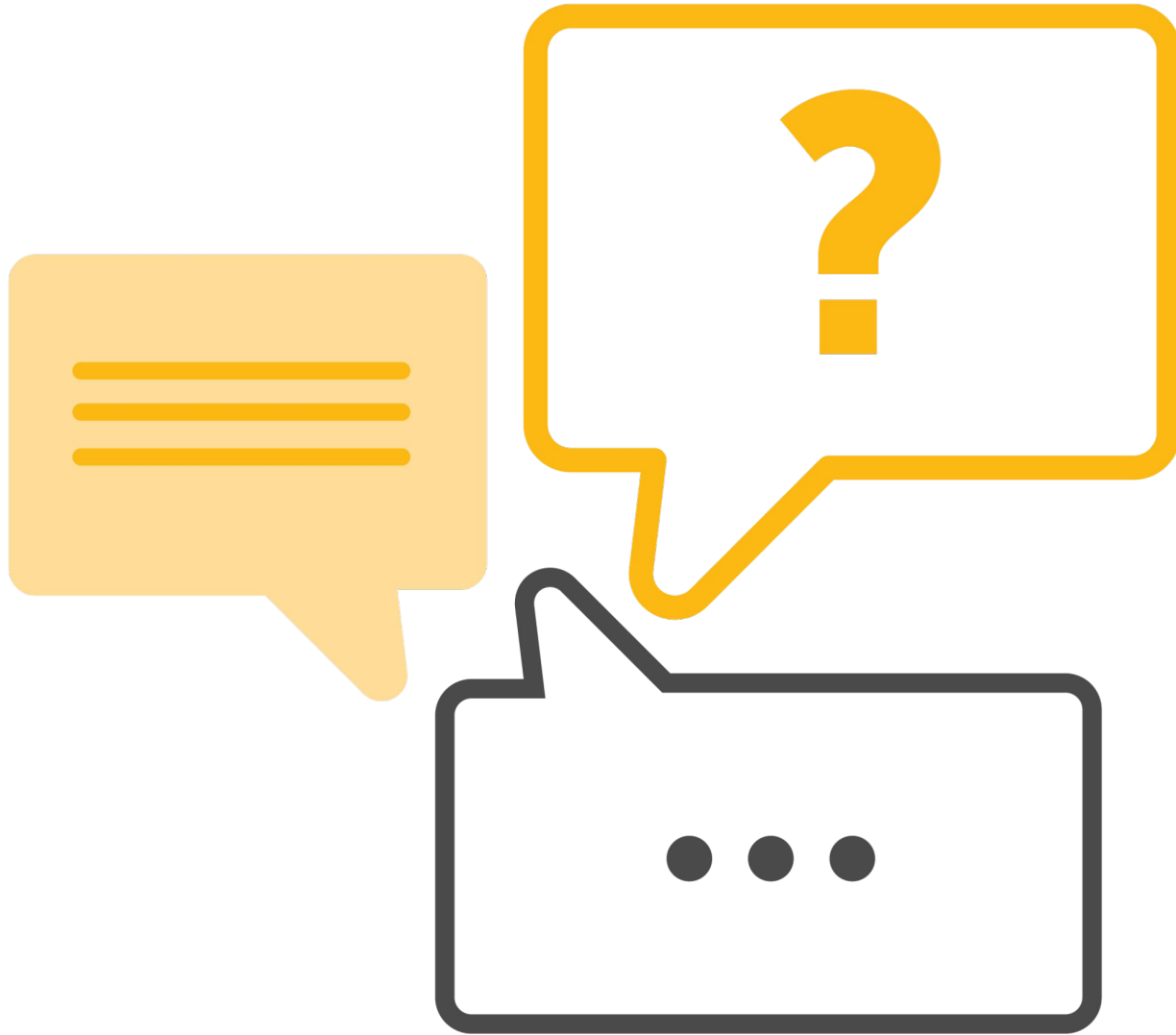


CREATE PLAN TO FUND APT WIFI PROGRAMS

Determine how MN will support affordability in targeted MDUs

ESH can work with you to develop programming





Questions & Answers