MBI
MASSACHUSETTS BROADBAND INSTITUTE
at the MassTech Collaborative

Cape & Islands Region Massachusetts Broadband and Digital Equity Listening Session

September 2023

Agenda

Welcome!

Introducing MBI

Statewide Planning Process

Digital Equity and Broadband in the Cape & Islands

Breakout Sessions

Thank You & Closing

Meeting Ground Rules

Be **fully present** by not checking your phone or computer

Know when to lead versus **creating space for others to speak**

Be open and listen to others. Even when you disagree, suspend judgment, and look for common ground.

Recognize that **we are all approaching this process with different levels of understanding and lived experiences** surrounding equity and digital equity.

01

Introducing MBI

About the Massachusetts Broadband Institute

MBI
MASSACHUSETTS
BROADBAND INSTITUTE
at the MassTech
Collaborative

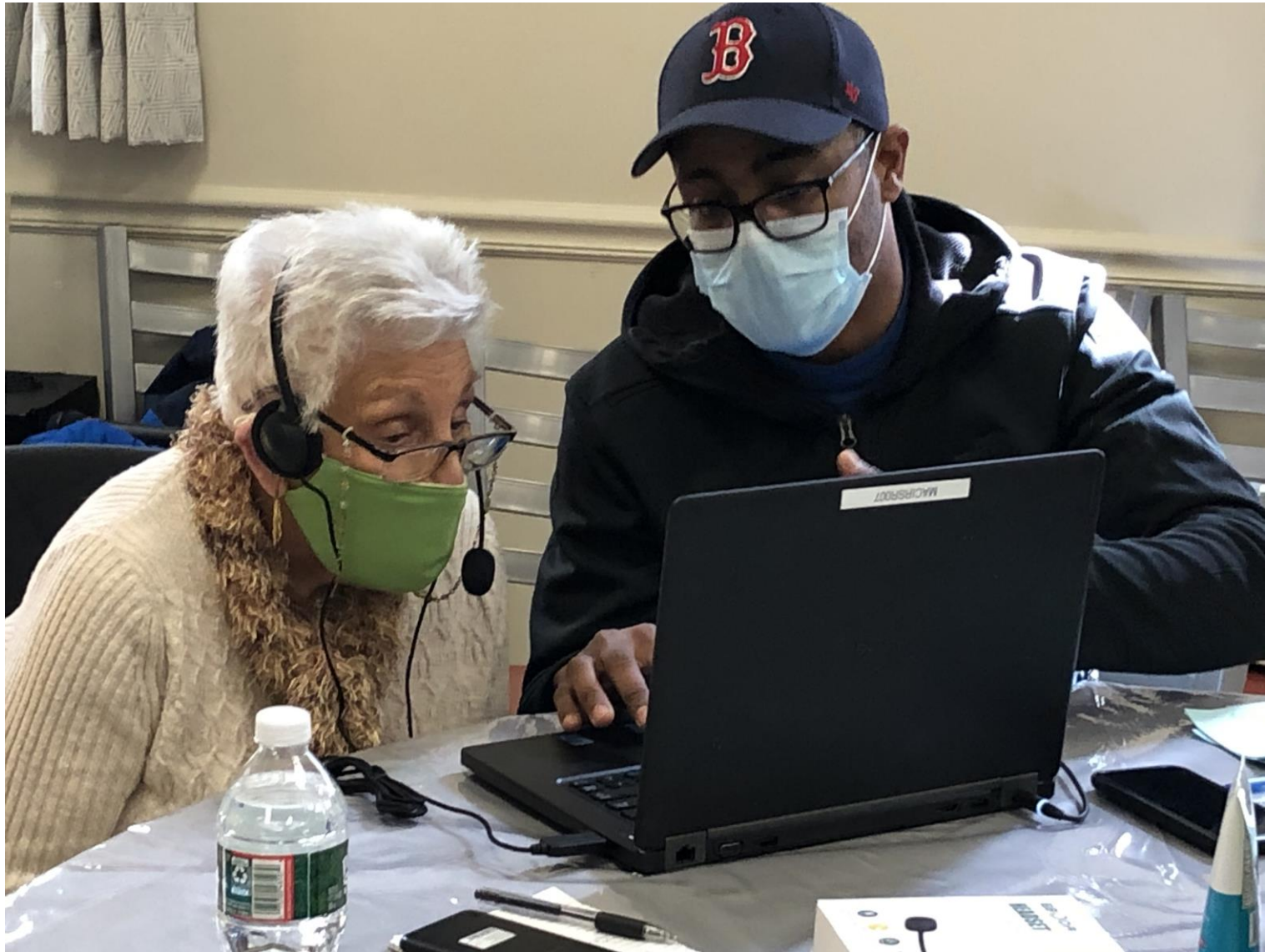
MBI's mission *is to make affordable high-speed Internet available to all homes, businesses, schools, libraries, medical facilities, government offices, and other public places across the Commonwealth. MBI works closely with key stakeholders to bridge the digital divide in Massachusetts.*

Investments: Vinfen

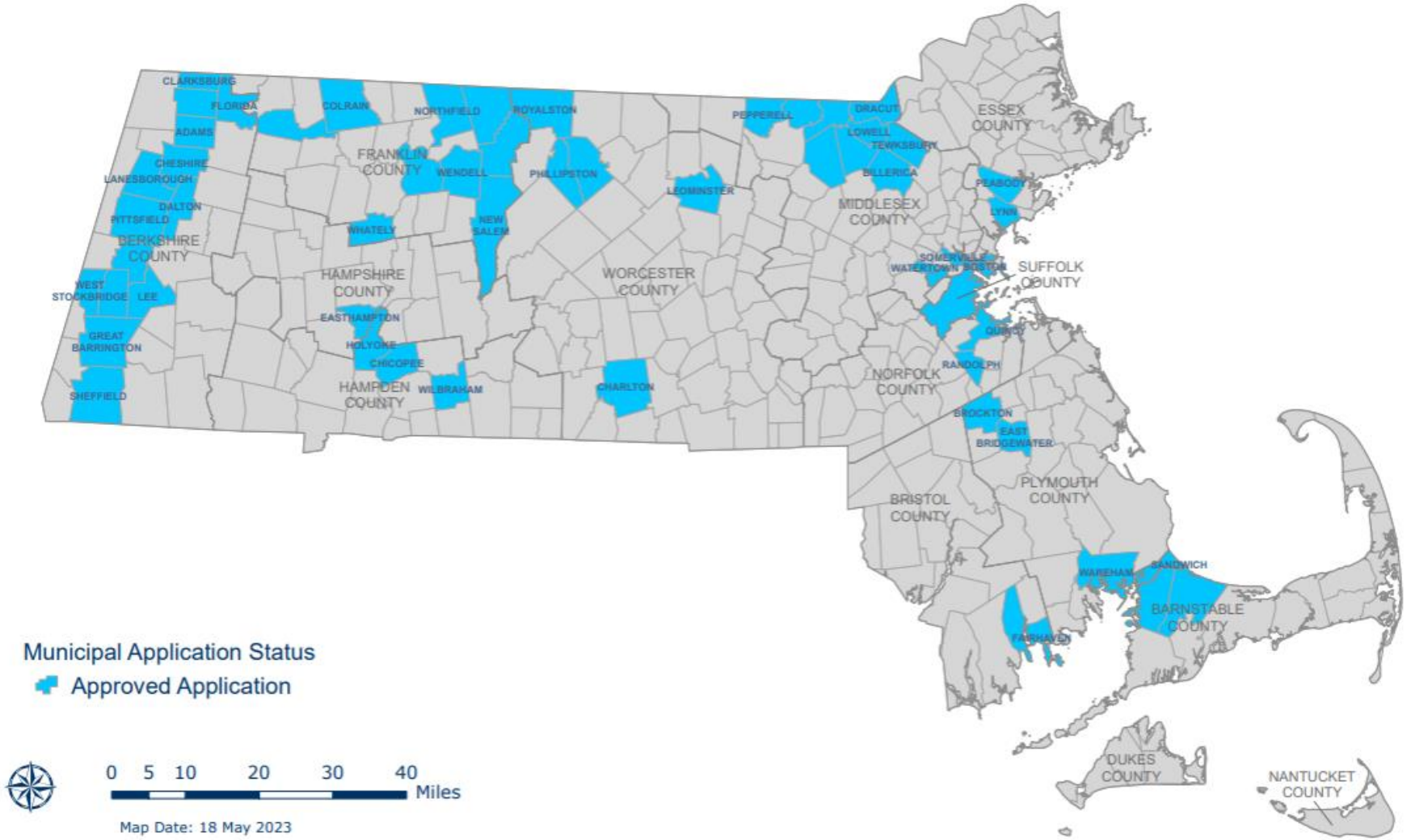
Through a regional network of Human Services providers, Vinfen will support the deployment of 15 regionally based Technology Navigators who will support 4,000 people with disabilities to obtain devices, learn how to use them and enroll in the Affordable Connectivity Program (ACP).

How to get involved?

Connect with Vinfen!
Jessie Wolfe, wolfej@vinfen.org



MBI's Digital Equity Programs and Partnerships



Cape & Islands Participants

Sandwich
Bourne
Orleans

MBI
MASSACHUSETTS BROADBAND INSTITUTE
at the MassTech Collaborative

Massachusetts Broadband & Digital Equity Funding

$75M - State ARPA Digital Equity Fund

$175M - US Treasury Capital Projects Fund

$1M - NTIA Digital Equity Act Planning Grant

$147M - NTIA Broadband Equity, Access,
and Deployment Grant (including $5M Planning Grant)

Ellen Sharpe

Director of Tribal Employment Rights, Mashpee Wampanoag Tribe

02

Statewide Planning Process

State Broadband and Digital Equity Planning

The State Digital Equity Plan will include…

- Vision and input gathered from communities across the state in the planning process
- Community-identified barriers to digital equity
- An assessment of what's working to advance digital equity
- Strategies to build on existing data, reports, and plans

How you can further shape the plan!

Contribute to Asset Mapping Database

Fill out Asset Mapping form with relevant assets including programs, organizations, reports, engagement activities

Take our Public Survey

Send to your friends and family!

Promote a Listening Session

Tell your networks about the regional listening sessions!

Boston 9/30
Greenfield 10/3

Timeline

Summer to Fall 2023	**Regional listening sessions, focus groups, public survey, asset mapping**
Fall (Oct. & Nov.) 2023	Plan drafting and writing
Winter (Nov. & Dec.) 2023	Public comment period
Winter (Dec. & Jan.) 2024	Plan Submission
February 2024	Ongoing community engagement, challenge process launch, and grant deployment

→ Visit broadband.masstech.org for upcoming events and ways to get involved.

03

Existing Conditions

Digital equity *is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.*

– National Digital Inclusion Alliance

Image Source: Detroit Community Technology Project

Determining Factors of Digital Access

Connection

Fast
Affordable

Adequate Device

Router
Personal Computer /Laptop

Literacy

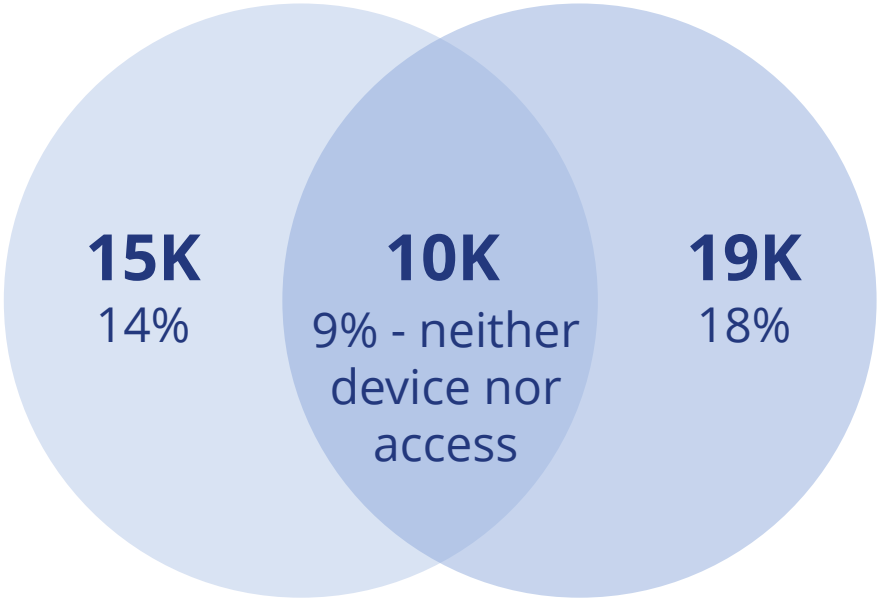
Use of Technology
Ensuring functioning equipment
Evaluating quality of information and privacy risks

Digital Gaps in the Cape & Islands

Of **109,000 households** in the region...

Many more face challenges with finding the support they need to use the internet safely and meaningfully.

Households with **no computer** (laptop or desktop).



Households with **no broadband internet subscriptions**.*

These challenges have **disproportionate impact for specific population groups** depending on a range of socioeconomic, historical, and geographic factors.

* Residents with no broadband access (cable, fiber optic, or DSL) in their household. **Source:** U.S. Census Bureau

Statewide Survey - Preliminary Findings

Total Responses x Region

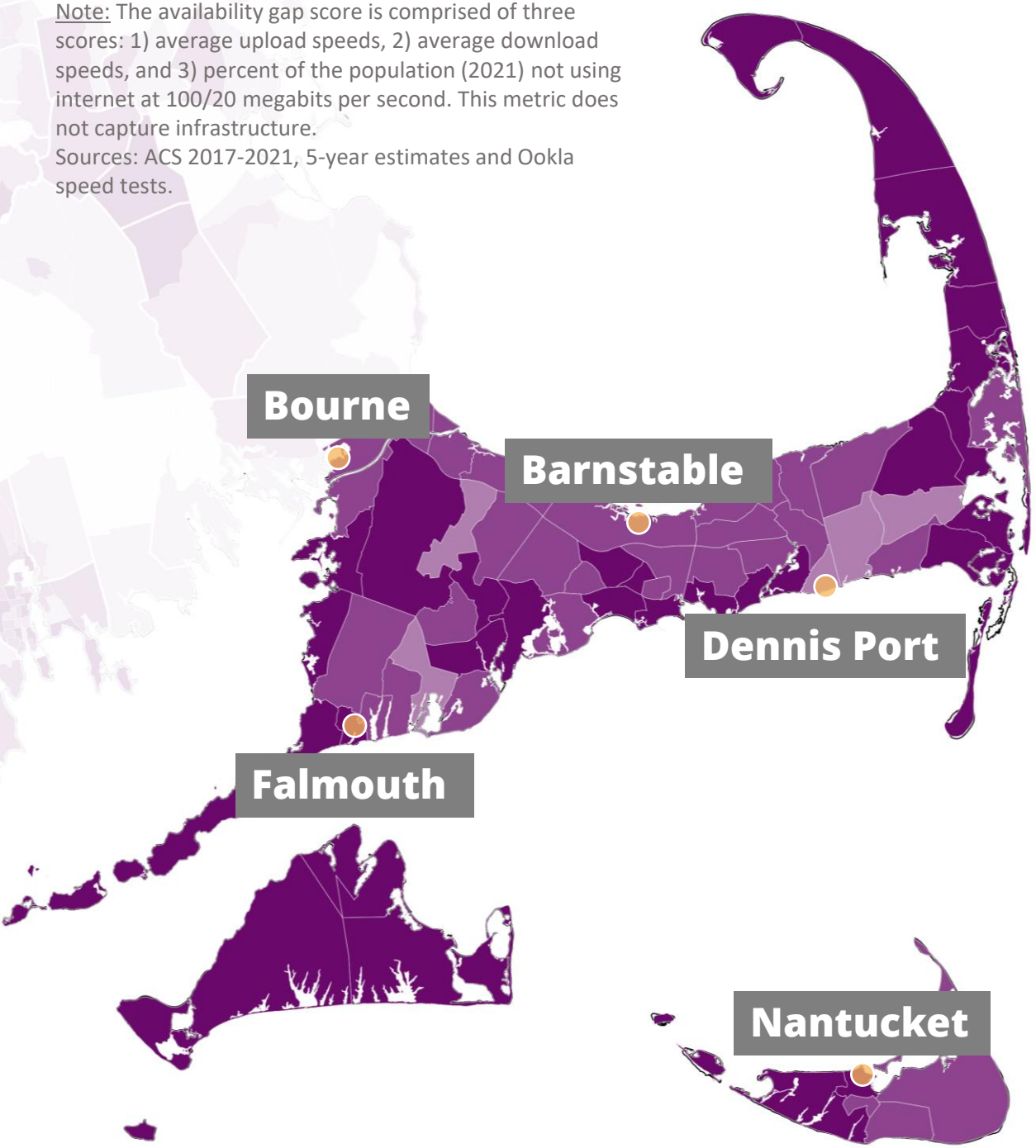
Region	Responses	Target
Connecticut River Valley	821	307
Greater Boston Region	1,091	1,085
Cape Cod & Islands Region	828	112
Southeast Region	1,101	608
Northeast Region	1,034	455
Central Mass Region	175	378
Berkshire Region	918	55
Unknown	62	-
Total	6,030	3,000

Covered Population Responses in Cape Cod & Islands

Covered Population	Responses	Target
Aging Individuals	480	43
Veterans	61	7
People of Color	209	14
Households with Limited English**	0	1
Individuals with Disabilities	78	15
Low-Income Households	43	13
Residents in Rural Areas	230	31

**Response numbers are updated as of Wednesday, 9/13, 12pm.*
*** This is an estimate based on the number of non-English surveys submitted.*

Note: The availability gap score is comprised of three scores: 1) average upload speeds, 2) average download speeds, and 3) percent of the population (2021) not using internet at 100/20 megabits per second. This metric does not capture infrastructure.
Sources: ACS 2017-2021, 5-year estimates and Ookla speed tests.



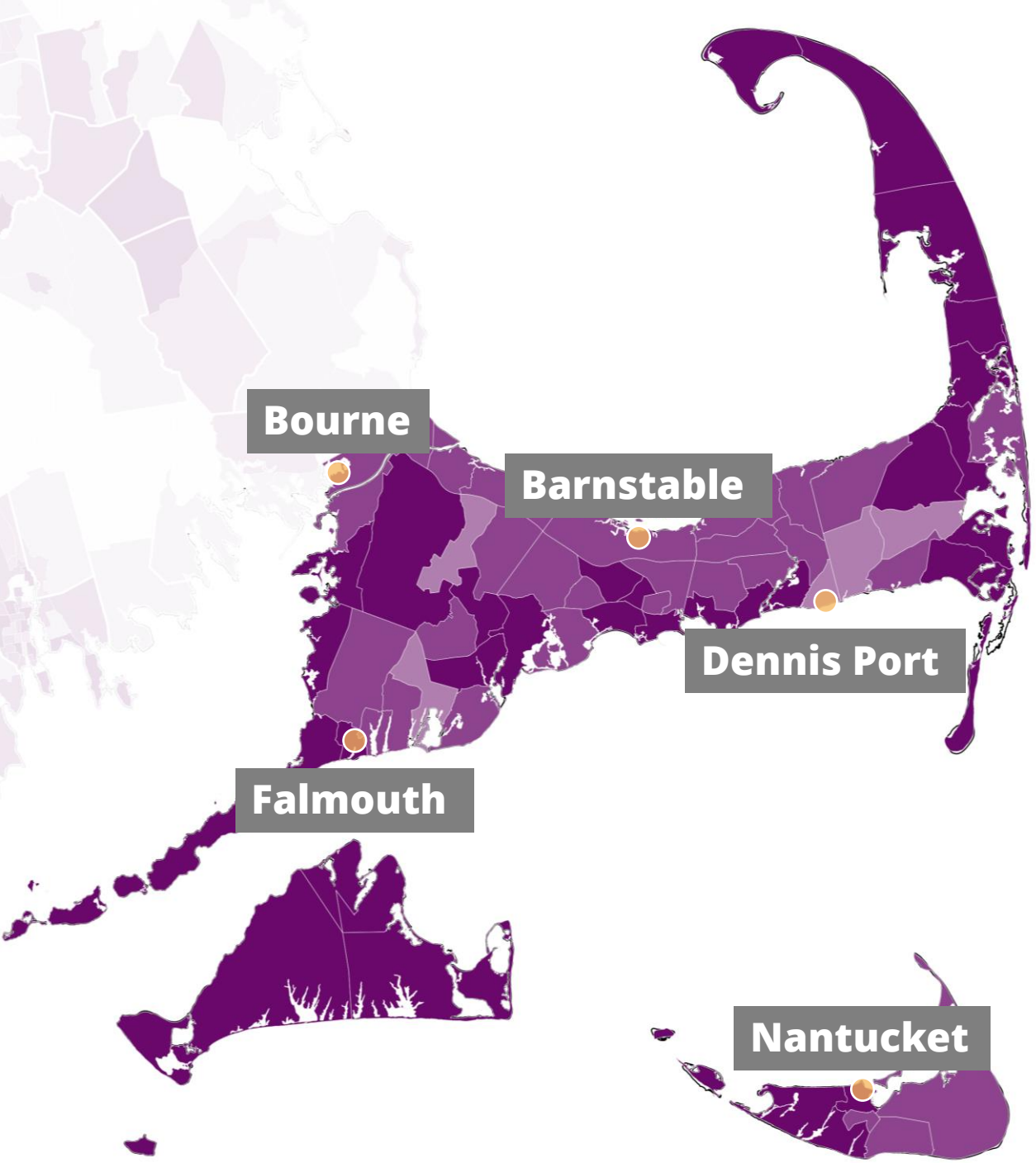
Access and Quality of Service

26% of statewide survey respondents reported that their internet service is not good enough to meet their household's needs.

95% of municipalities in the Cape Cod & Islands region have little or no competition in the broadband market.

Legend
The availability gap score ranges in value from 0 to 100, where 100 indicates the highest gap in availability.

LOW **MEDIUM** **HIGH**



Access and Quality of Service

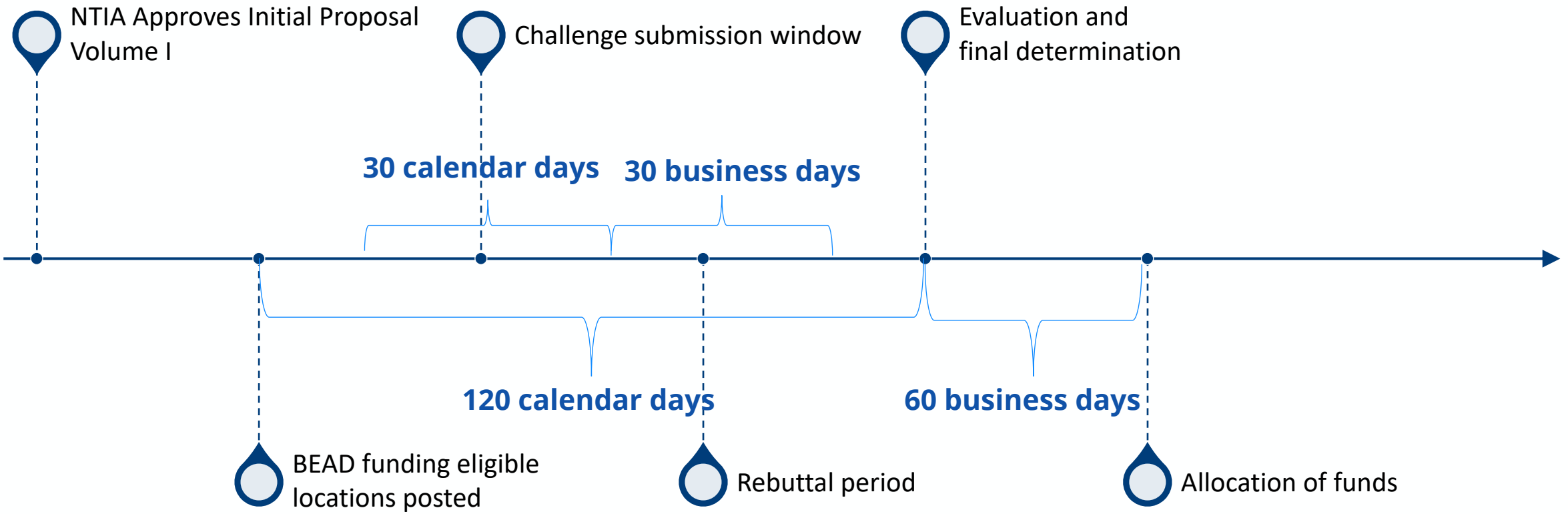
In the Cape Cod & Islands region, there are **~1,670 Unserved or Underserved** locations.

Top 5 Municipalities – Unserved Locations	
Edgartown	247
Gosnold	188
Nantucket	143
West Tisbury	99
Barnstable	82

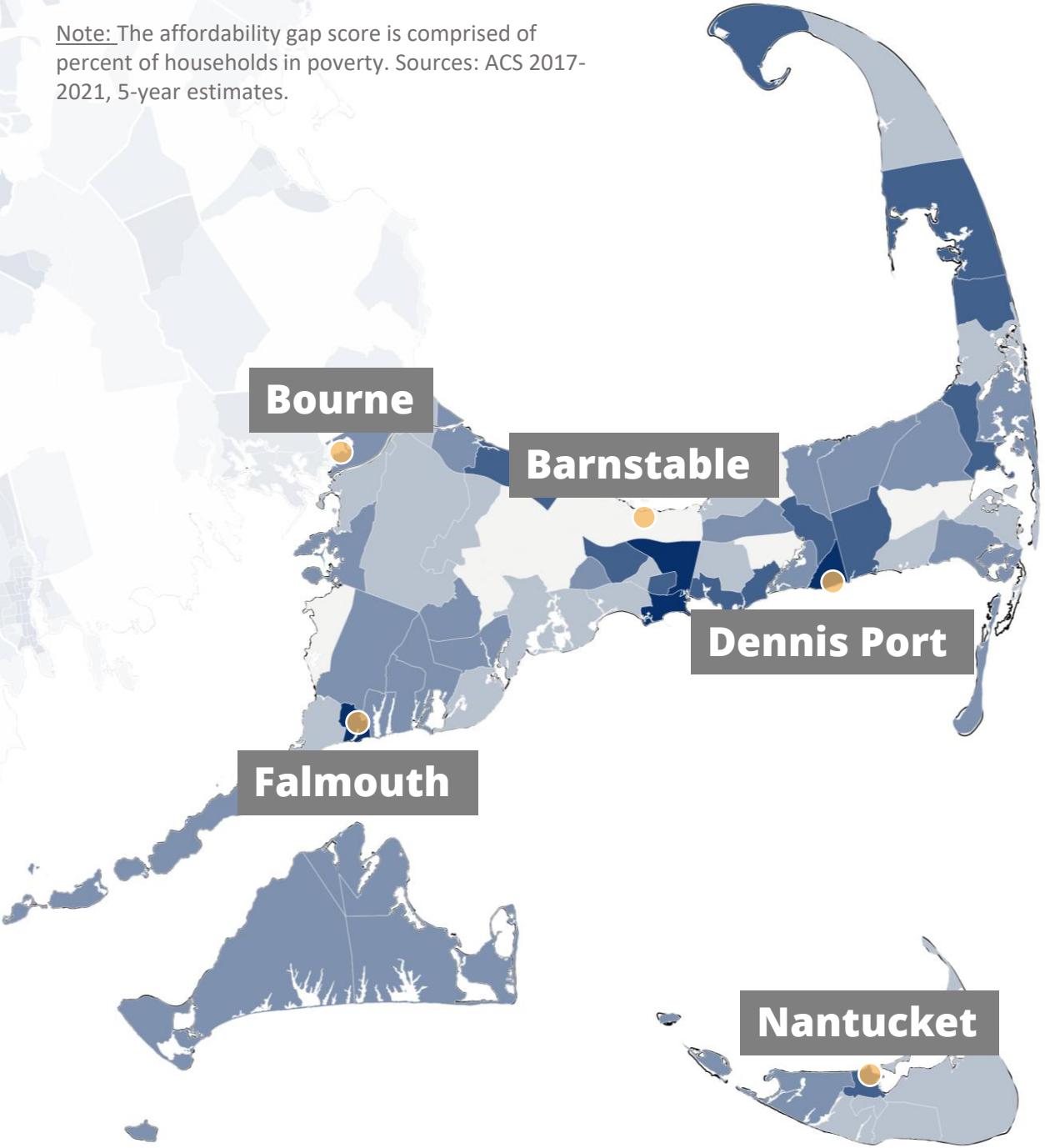
Top Municipality– Underserved Locations	
Bourne	101

Source: Federal Communications Commission, Broadband Data Collection (2022)

Challenge Process



Note: The affordability gap score is comprised of percent of households in poverty. Sources: ACS 2017-2021, 5-year estimates.



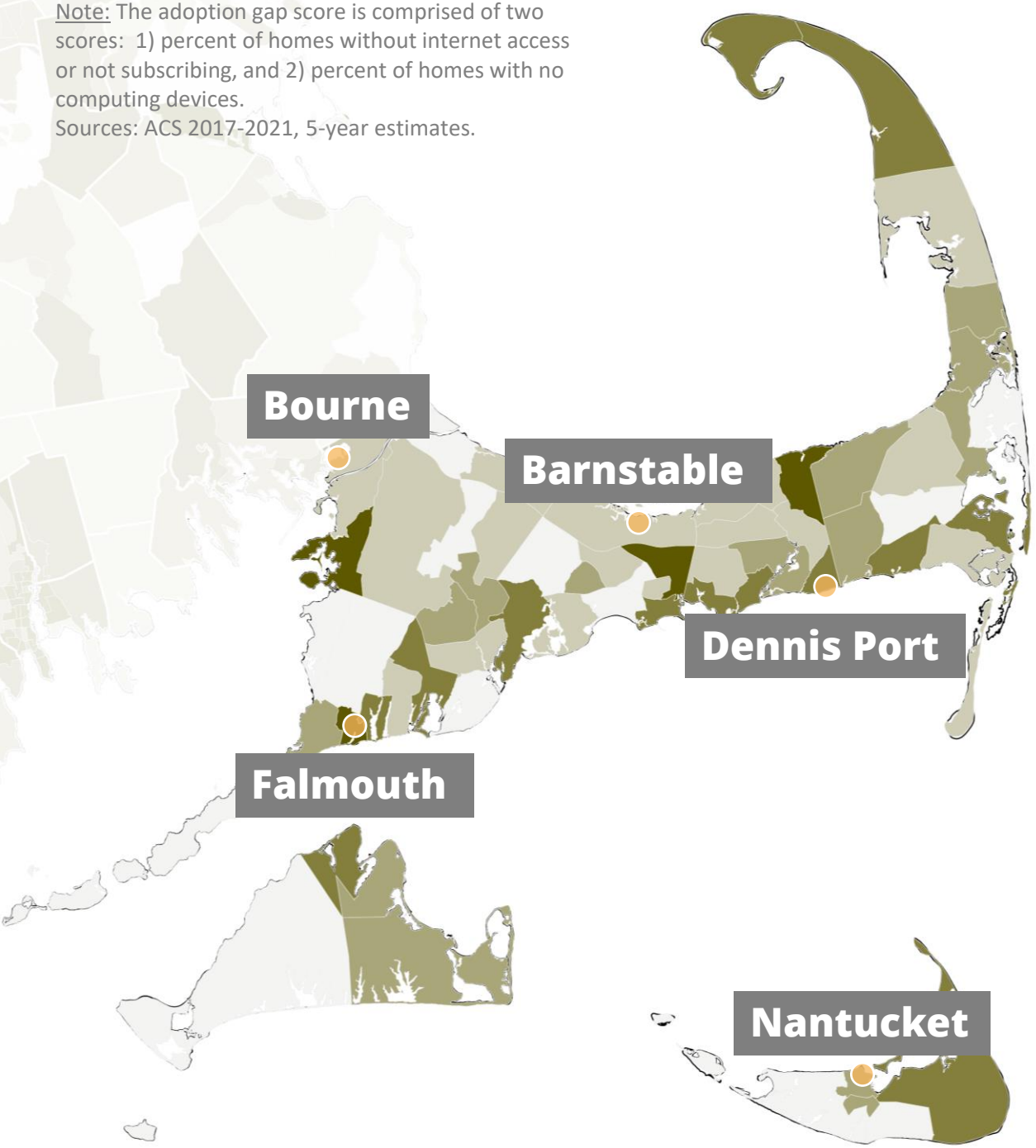
Affordability Gap

Over **1 in 3** survey respondents statewide reported having at least some difficulty paying for their internet.

The average for the lowest broadband price regionwide is **$79.50.**

Legend
The affordability gap score ranges in value from 0 to 100, where 100 indicates the highest gap in affordability.

Note: The adoption gap score is comprised of two scores: 1) percent of homes without internet access or not subscribing, and 2) percent of homes with no computing devices.
Sources: ACS 2017-2021, 5-year estimates.



Adoption Gap

In the Cape Cod & Islands region, adoption gaps are highest in towns such as Barnstable and North Falmouth.

Statewide, **nearly half** of survey respondents without internet at home cite cost as a prohibiting factor.

Legend
The adoption gap score ranges in value from 0 to 100, where 100 indicates the highest gap in adoption.

Community Anchor Institutions

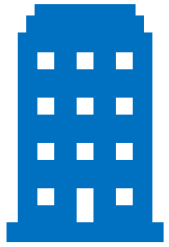
Education Institutions

Community Centers

Libraries

Museums and Cultural and Religious Centers

Healthcare Infrastructure



Public Housing

Assets in the Cape & Islands Region

MBI is collecting unique assets that contribute to digital equity in each region.

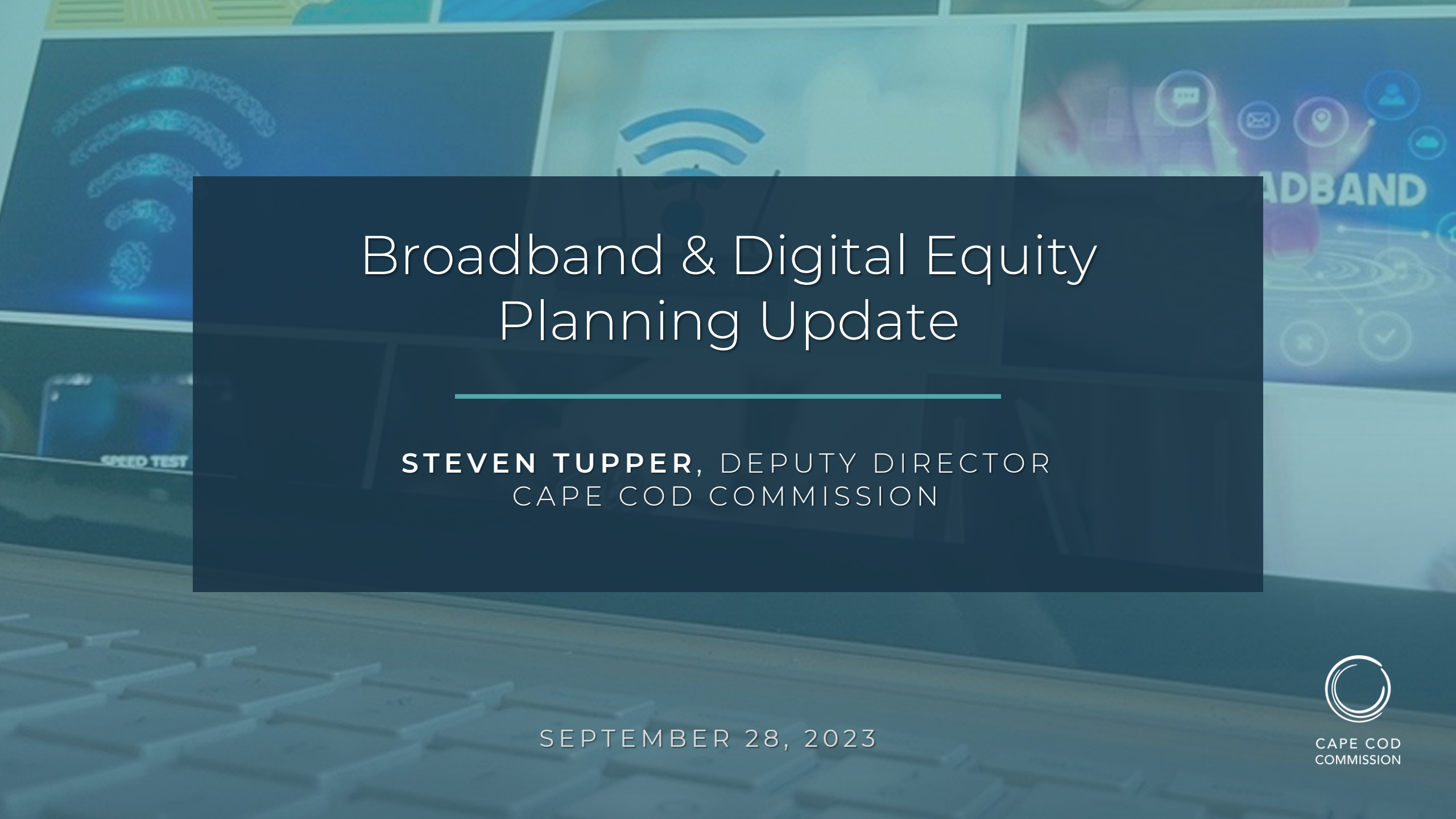
87

Digital equity assets submitted to date for the region

Example Assets:

Elder Services of Cape Cod & Islands: Senior Planet Courses - Free computer classes covering computer basics, protecting privacy online, intermediate classes, and computer essentials.

Cape Cod Community College Adult ESOL - Digital literacy support interwoven throughout curriculum to support students through their learning journey.



Broadband & Digital Equity Planning Update

STEVEN TUPPER, DEPUTY DIRECTOR
CAPE COD COMMISSION

SEPTEMBER 28, 2023

CAPE COD COMMISSION

Broadband and Digital Equity Planning Activities

Cape Cod Context

Regional Broadband Needs Assessment

Asset Mapping Highlights

Broadband and Digital Equity Activities

Cape Cod Context

Regional Broadband Needs Assessment

Asset Mapping Highlights

Regional Broadband Needs Assessment

Process overview

July '23

1. Assessment of existing conditions of fixed and mobile broadband networks and service availability
2. Data collection: statistically valid survey, provider engagement, speed tests, focus groups
3. Identification of infrastructure gaps and barriers to access (includes affordability/skills/devices)
4. Recommendations for addressing gaps identified through the process
5. Coordination with Commission-led/ MBI-funded equity planning and implementation efforts
6. Public presentations

June '24

Project will deliver:

- Assessment, which is foundational to building long-term strategies
- Documentation of service availability and quality, and of gaps to access
- Recommendations on policy and program options to improve connectivity and access

Regional Broadband Needs Assessment

Progress & Project Highlights

- Reviewed existing conditions data, including federal, state, and local data sources.
- Statistically valid phone survey of 700 participants concluded, covering:
  - Service, availability, reliability and speed at specific locations.
  - Costs, data caps, and overage fees.
  - Online activities of internet users and frequency of broadband use.
  - Satisfaction with service and perception of ISP.
  - Interest in alternative services and providers.
  - Barriers to adoption (digital equity considerations).
  - Seasonal usage.
- Speed testing ongoing: public speed tests and regular speed monitoring (conducted by staff and volunteers).
- Up next: engagement with providers (Comcast, OpenCape, mobile) and focus groups with key populations.

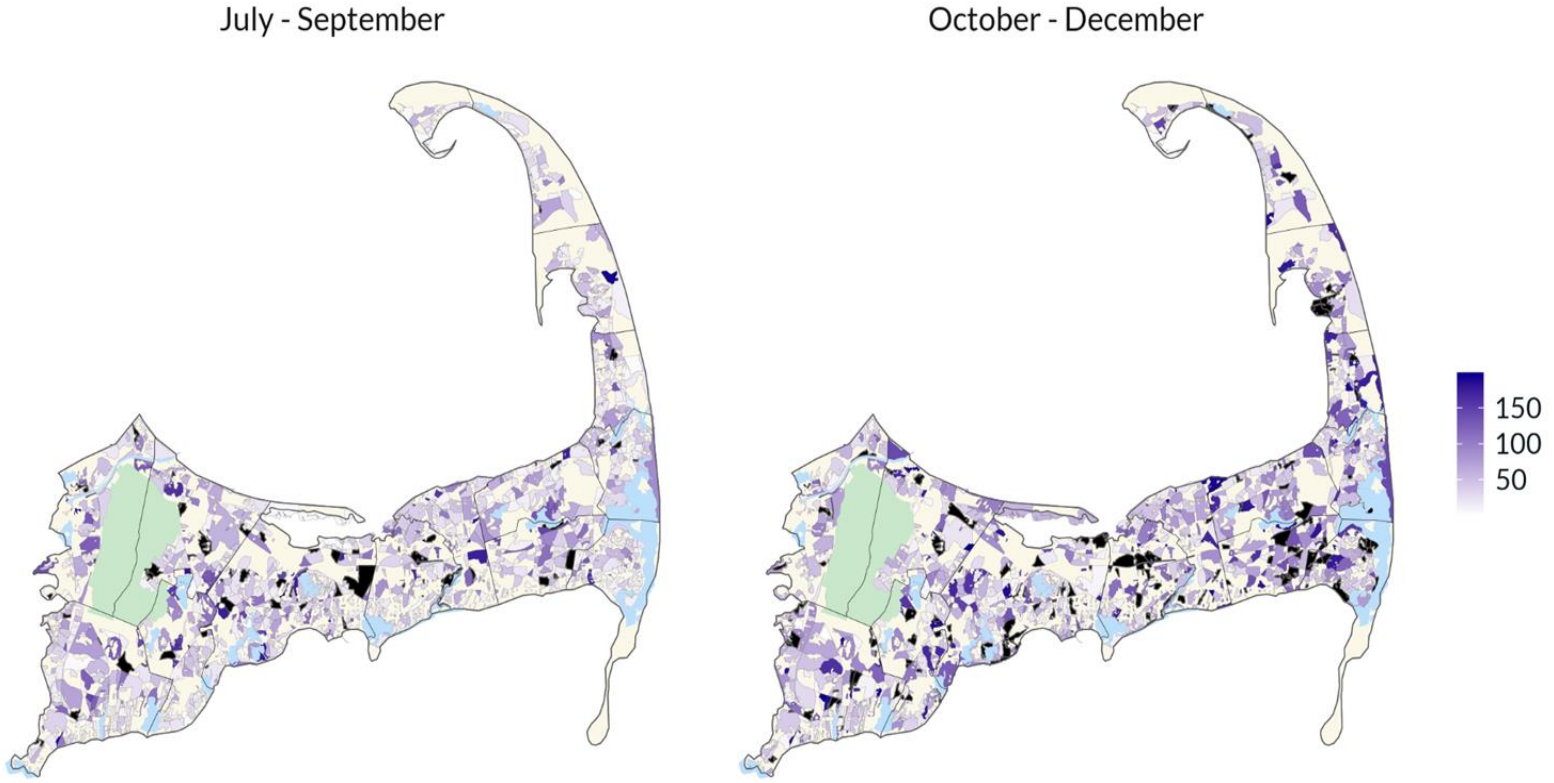
Regional Broadband Needs Assessment

Preliminary Ookla speed test data analysis:

Fixed download speeds in Barnstable County were 60% lower in Q3 (summer) than in Q4 (off-season).

Average fixed download speeds (Mbps) in Q3 and Q4 of 2022

By Census block



Source: Ookla (2022)

Notes: Outliers have been removed from the Ookla tiles, and remaining tiles were aggregated to the Census block-level. Only Census blocks with tests in both quarters are featured in the figure. Blocks exceeding 200 Mbps are represented in black (these blocks range from 201 to 636 Mbps). Areas in blue are large bodies of water and the area in green is Camp Edward. The average download speed in Barnstable County was 25 Mbps in Q3 and 40 Mbps in Q4.

ctc technology & energy
engineering & business consulting
RISI

Broadband and Digital Equity Activities

Cape Cod Context

Regional Broadband Needs Assessment

Asset Mapping Highlights

Asset Mapping Highlights

Key Takeaways for Cape Cod

- **Library** services often include: access to devices and wi-fi on-site, hotspot and device lending, and digital literacy support through library staff.
- **Councils on Aging** across the region are partnering with **Elder Services of Cape Cod & the Islands** to offer digital literacy courses. Other services include: individualized programs to walk seniors through specific tech questions, group courses that incorporate elements of digital equity, and 1-on-1 support.
- **Health and human services** agencies frequently embed elements of digital equity within programs designed to achieve broader goals.

Broadband & Digital Equity Planning

www.capecodcommission.org/broadband

STEVEN TUPPER, DEPUTY DIRECTOR
stupper@capecodcommission.org

SEPTEMBER 28, 2023

CAPE COD COMMISSION

03

Breakout Discussions

Remember the Ground Rules

Be **fully present** by not checking your phone or computer

Know when to lead versus **creating space for others to speak**

Be open and listen to others. Even when you disagree, suspend judgment, and look for common ground.

Recognize that **we are all approaching this process with different levels of understanding** surrounding equity and digital equity.

Respect confidentiality. What is discussed in this room stays in this room.

Breakout Rooms

We look forward to hearing from you on the topics below.

Virtual Breakout Rooms:

Please follow this jam board link:

XX

In Person:

Staff will assign breakout group participation

Visioning Exercise

Thank you for your participation in breakout discussions. We would like to move into a visioning exercise to close out today's activity.

What does Internet for All mean to you?

Imagine it's five years in the future. The Digital Equity Plan has been a resounding success. After some initial challenges, Massachusetts's solutions are having a huge impact on the world in ways you'd never even imagined!

- Take 1 minute to scan the QR code to the right and use one word to answer the question above.

04

Closing Session

Report back

Thank you for your participation in our facilitated discussion. We want to learn more about what you heard and discussed.

What was discussed in your breakout room?

Timeline

Summer to Fall 2023	**Regional listening sessions, focus groups, public survey, asset mapping**
Fall (Oct. & Nov.) 2023	Plan drafting and writing
Winter (Nov. & Dec.) 2023	Public comment period
Winter (Dec. & Jan.) 2024	Plan Submission
February 2024	Ongoing community engagement, challenge process launch, and grant deployment

→ Visit broadband.masstech.org for details on events and ways to get involved.

MBI
MASSACHUSETTS BROADBAND INSTITUTE
at the MassTech Collaborative

Thank you!

Contact MBI at

broadband@masstech.org

Visit the **Internet for All Page**

broadband.masstech.org/internetforall