Digital Access & Equity

SWAP Meeting - March 8th, 2022
What is Digital Equity?

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, health and access to essential services.

- National Digital Inclusion Alliance
Three Determining Factors of Digital Access

- A fast and affordable Connection
- Adequate Device
- Ability to use safely use technology & ensure functioning equipment

Literacy
"Broadband" is defined by Speed

Figure 2: Share of Households without Access to the Internet or with Connections below Broadband Speeds

Median Download Speed (Megabits per Second)

- 1 – 50
- 50 – 100
- 100 – 200
- 200+
- Data unavailable
- MAPC border
- Selected municipality

Explore & Download Data

- M-Lab Data
- Test your Internet speed

Source: MAPC Analysis of data from Microsoft and American Community Survey, 2015 - 2019
Broadband Affordability Gap

7.1M
Households without available broadband infrastructure

28.2M
All unconnected U.S. households

3M
Households with available broadband infrastructure that are unconnected for reasons other than a lack of resources

18.1M
Households with available broadband infrastructure that cannot afford to connect.

46.9M
Population with available broadband infrastructure that cannot afford to connect.

21.1M
Households with available broadband infrastructure
Let's Discuss Today

Digital Access & Equity Plan
*Everett, Chelsea, Revere*

Gateway City Wi-Fi Grant
*Mass Broadband Institute*

Other Digital Equity Projects

- **Digital Navigators**
  *Facilitated MNWB & NDIA & CBO youth works positions*

- **Bridge to Broadband**
  *DESE & ESH partnership connection data on students*

- **BU Spark Student Research**
  *2021 partnership to start to explore speed test data*

- **Regional Convenings**
  *Quarterly Webinars Next on March 15th*

- **Digital Equity Policy Agenda**
  *Compiling for MAPC*

- **Digital Equity Research Agenda**
  *Potential fiber mapping and impact analysis avenues*

- **Wi-Fi Deployment Toolkit**
  *Draft toolkit/videos sharing our experiences*

- **Urban Edge: Columbus Ave Corridor**

- **Digital Access & Equity Plan**
  *Gateway City Wi-Fi Grant*
Digital Access & Equity Plan

*Everett, Chelsea, Revere*

- Advise Capital Investment
- Inform Policy Decisions
- Identify Program Needs
# Digital Access & Equity Plan: Everett, Chelsea, Revere

<table>
<thead>
<tr>
<th>Phase 1A</th>
<th>Existing Conditions Analysis:</th>
<th>Explored a variety of datasets and documented current policies and the broadband market.</th>
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<tbody>
<tr>
<td>Phase 1B</td>
<td>Community Needs Assessment</td>
<td>Survey with CBO and Muni partners. 2,000+ responses to help guide &amp; ground-truth efforts.</td>
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<td>Phase 2</td>
<td>Infrastructure &amp; Technology Evaluation</td>
<td>Leveraged Cable Franchise Agreements to obtain ISP network maps &amp; purchased fiber route data.</td>
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<td>Phase 3</td>
<td>Plan and Program Development</td>
<td>Provided slides to Muni and CBO partners. Currently finalizing website and final version.</td>
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### More About the Community Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>Question</th>
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<tbody>
<tr>
<td><strong>Connection</strong></td>
<td>Does your household currently have an internet subscription or Wi-Fi hotspot?</td>
</tr>
<tr>
<td><strong>Devices</strong></td>
<td>How often does more than one person need to use the internet in your household at the same time?</td>
</tr>
<tr>
<td><strong>Literacy</strong></td>
<td>If training were available, would you be interested in a career in the Technology or IT Field?</td>
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Questions About Internet Connection

- Does your house currently have an internet subscription or WiFi hotspot?
- Who is your current internet service provider?
- If you do not have access to the internet, why not?

If you do not have access to the internet, why not?

- 77.5% Too expensive
- 5.6% Don't have a permanent address
- 8.1% Don't need the internet
- 4.9% Other.
Draft Plan
Visualizations
I would be interested in a career in technology or IT if training were available

Agree 63.0%

Disagree 37.0%
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<tr>
<th>Draft Connection Recommendations</th>
<th>Next Steps</th>
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<tr>
<td><strong>Immediate</strong></td>
<td><strong>Immediate</strong></td>
</tr>
<tr>
<td><strong>DESE / Education Superhighway Bridge to Broadband Program</strong>&lt;br&gt;Data exchange with Internet Service Providers will allow the school district to fully understand which households <em>do not</em> and <em>can not</em> be served by a wired connection.</td>
<td><strong>Confirm participation by School District</strong></td>
</tr>
<tr>
<td><strong>Mass Broadband Institute Gateway City WiFi Grant</strong>&lt;br&gt;Funding available to deploy WiFi service in and near public properties. Could be used to create the infrastructure needed for a larger community wide WiFi network.</td>
<td><strong>Work with MAPC to develop program deployment</strong></td>
</tr>
<tr>
<td><strong>Release an RFI for Municipal Rooftop Use</strong>&lt;br&gt;Rooftops of municipal buildings could be leveraged by internet service providers like Starry and Netblazer to provide competitive options.</td>
<td><strong>Inventory and RFP municipal roofs, focusing on tall or elevated properties</strong></td>
</tr>
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Gateway City Wi-Fi Grant

*Everett, Chelsea, Revere, Quincy, Malden*

Connecting housing authority properties to fast open, free, public wifi in units

Program has since expanded beyond "Wi-Fi" & Gateway Cities
Gateway City Wi-Fi Grant  

*Everett, Chelsea, Revere, Quincy, Malden*

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Program has since expanded beyond "Wi-Fi" & Gateway Cities
Gateway City Wi-Fi Grant  Everett, Chelsea, Revere, Quincy, Malden
In America's most unconnected communities, where 38% of households do not have home broadband, **20-25% of the digital divide is concentrated in multi-dwelling units.**

*Education Superhighway*

In Massachusetts, there are about **225,000 households** that **do not have** an internet subscription.

**Key Opportunity at Local Housing Authorities**

**240** Housing Authorities in Massachusetts

About **90,000** units of low income housing for families, seniors, and persons with disabilities.
Free Apartment WiFi Model

- WiFi Hot Spots or “Access Points” in common areas are linked to connection.
- A very high-speed internet connection supports an entire building.
- Residents can access free, high-speed internet, without subscription.
Do you currently have Internet access in your apartment?

N = 24

- Yes: 54%
- No: 46%
Do you currently have Internet access in your apartment?
N = 24

- Yes: 54%
- No: 46%

If No, Why Not?
N = 24

- It’s too expensive: 56%
- I don’t need it: 5%
- Language barrier: 6%
- I don’t have a device to use the internet on: 11%
- I don’t know how to use the internet: 5%
- I don’t know how to subscribe: 11%
- I’m concerned about privacy: 6%
Draft Apartment WiFi Heatmap
Partners to Know
$30 subsidy available to income eligible residents for internet, $75 for device. acpbenefit.org

$50M Digital Equity Fund allocated under State ARPA Legislature. Parameters and programs TBD.

Administering $46.5B in IIJA funds for broadband. Includes a $100M allocation to Mass as a baseline. Final determination forthcoming.
Bridge to Broadband Program connects school districts with data on unserved households to focus resources.

Pioneering "Train the Trainer" program focused on digital literacy and basic device and connection provision.

Digital Navigators program model designed to build capacity and resources within communities. Currently partnering with MetroNorth Workforce Investment Board for first program in our region.
Other Work

Regional Convenings
- Digital Navigator Programs
- American Rescue Act (ARPA)
- Open Access Networks

Youthworks
- Digital Navigators

Education Super Highway
- Bridge to Broadband

Potential ARPA Funded Uses