

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



a reliable router & computer
Adequate Device



*Ability to use safely use technology
& ensure functioning equipment*
Literacy

"Broadband" is defined by Speed

eed for Speed

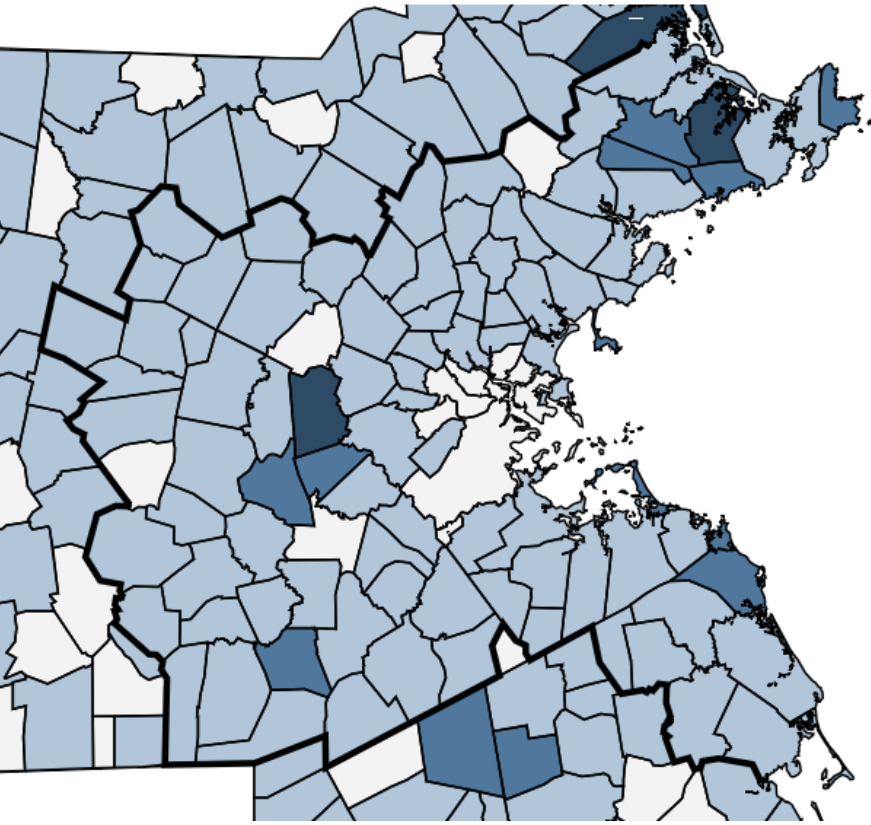
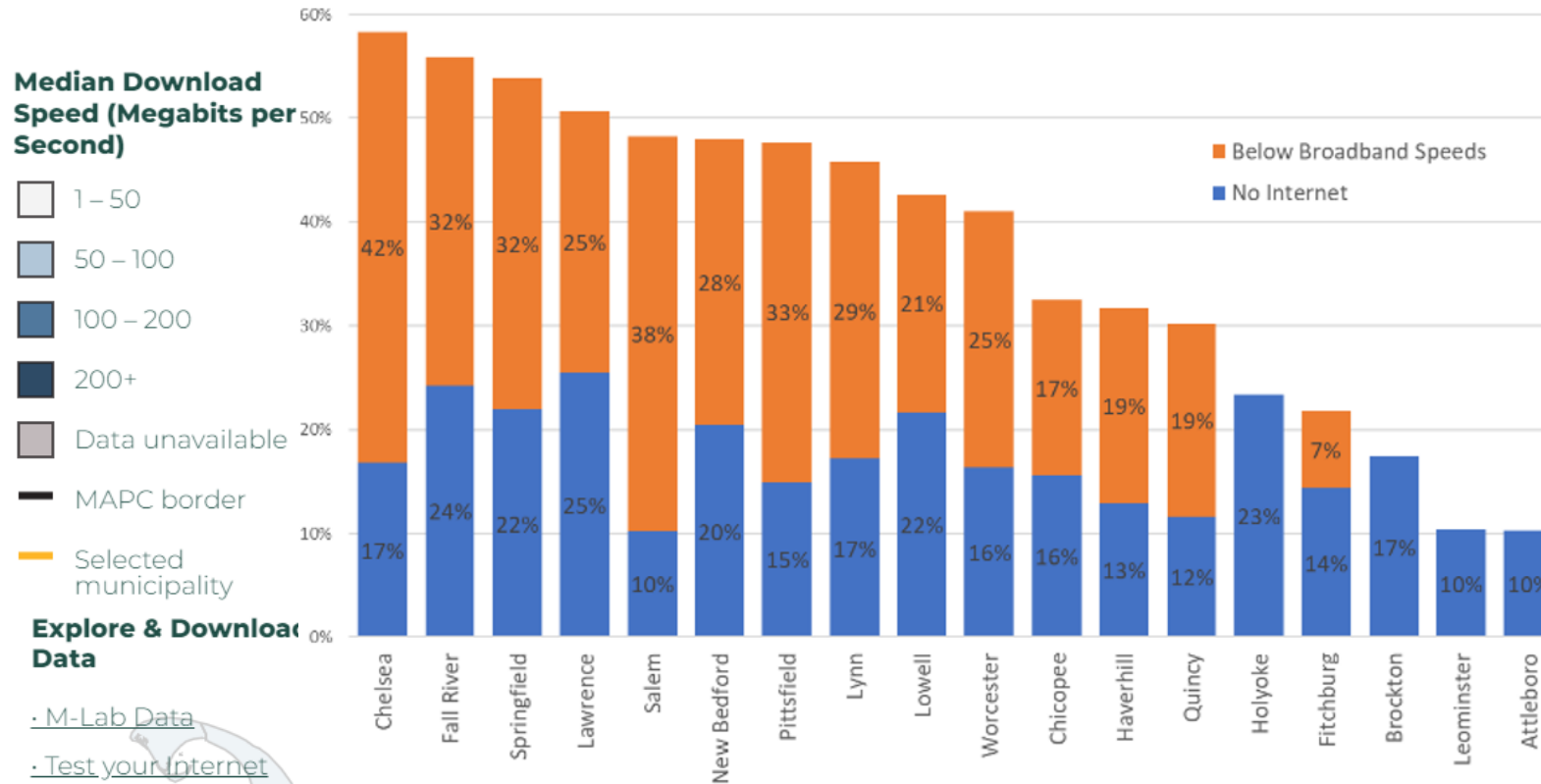
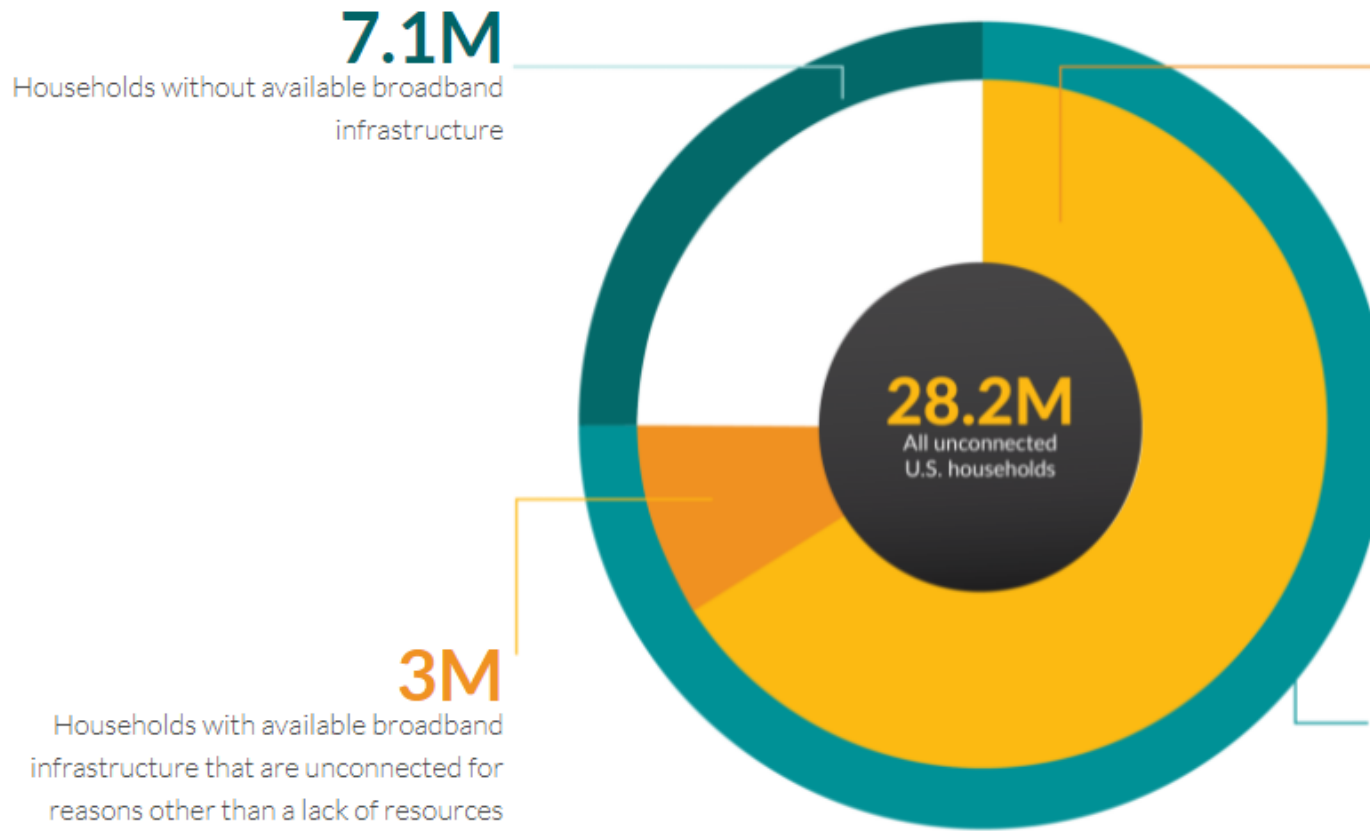


Figure 2: Share of Households without Access to the Internet or with Connections below Broadband Speeds



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

Broadband Affordability Gap



BROADBAND AFFORDABILITY GAP



18.1
M

Households with available broadband infrastructure that cannot afford to connect.



46.9
M

Population with available broadband infrastructure that cannot afford to connect.

21.1M

Households with available broadband infrastructure

Project Sample Overview



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

Potenital fiber mapping and impact analysis avenues

Wi-Fi Deployment Toolkit

Draft toolkit/videos sharing our experiences

Digital Access & Equity Plan

*Urban Edge:
Columbus Ave Corridor*

Digital Access & Equity Plan

Everett, Chelsea, Revere

Advise Capital Investment

Inform Policy Decisions

Identify Program Needs



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

Phase 1A

Existing Conditions Analysis:

Explored a variety of datasets and documented current policies and the broadband market.

Phase 1B

Community Needs Assessment

Survey with CBO and Muni partners. 2,000+ responses to help guide & ground-truth efforts.

Phase 2

Infrastructure & Technology Evaluation

Leveraged Cable Franchise Agreements to obtain ISP network maps & purchased fiber route data.

Phase 3

Plan and Program Development

Provided slides to Muni and CBO partners. Currently finalizing website and final version.

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

More About the Community Survey

2,166 Responses

Connection

Does your household currently have an internet subscription or Wi-Fi hotspot?

Devices

How often does more than one person need to use the internet in your household at the same time?

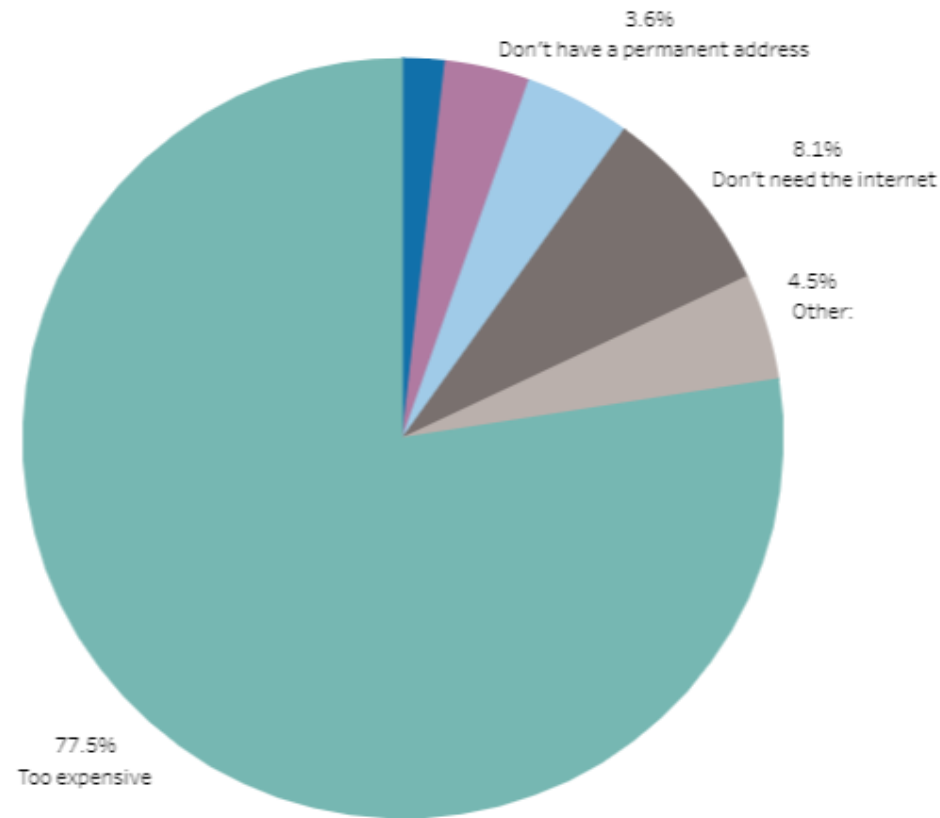
Literacy

If training were available, would you be interested in a career in the Technology or IT Field?

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?



Select City

(All)

Draft Plan Visualizations

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Questions about Literacy

Device Literacy by Language

Device Literacy by Age

Confidence Resolving Issues by Age

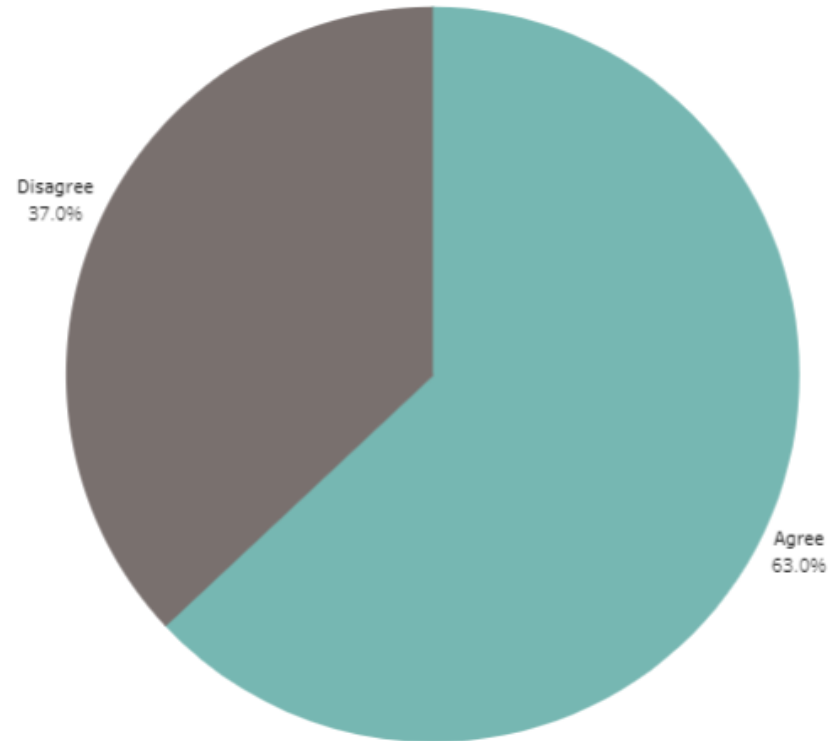
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Select Question

I would be interested in a career in technology or IT if training were available

▼

I would be interested in a career in technology or IT if training were available



Select Municipalities

(All)

▼

Draft Plan
Visualizations

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

Draft Connection Recommendations

Next Steps

Immediate

DESE / Education Superhighway Bridge to Broadband Program

Data exchange with Internet Service Providers will allow the school district to fully understand which households *do not* and *can not* be served by a wired connection.



Confirm participation by School District

Immediate

Mass Broadband Institute Gateway City WiFi Grant

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.



Work with MAPC to develop program deployment

Immediate

Release an RFI for Municipal Rooftop Use

Rooftops of municipal buildings could be leveraged by internet service providers like Starry and Netblazer to provide competitive options.



Inventory and RFP municipal roofs, focusing on tall or elevated properties

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

***and now
with more!***



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



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.

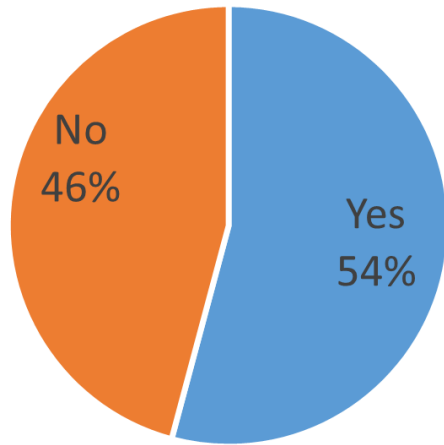
1 very high-speed internet connection supports an entire building

Residents can access **free, high-speed internet, without subscription.**

Senior Housing Outreach - Everett

Do you currently have Internet access in your apartment?

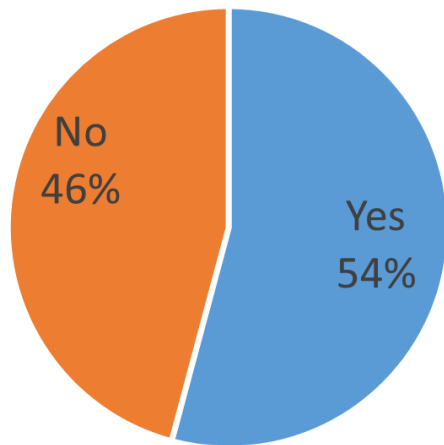
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Senior Housing Outreach - Everett

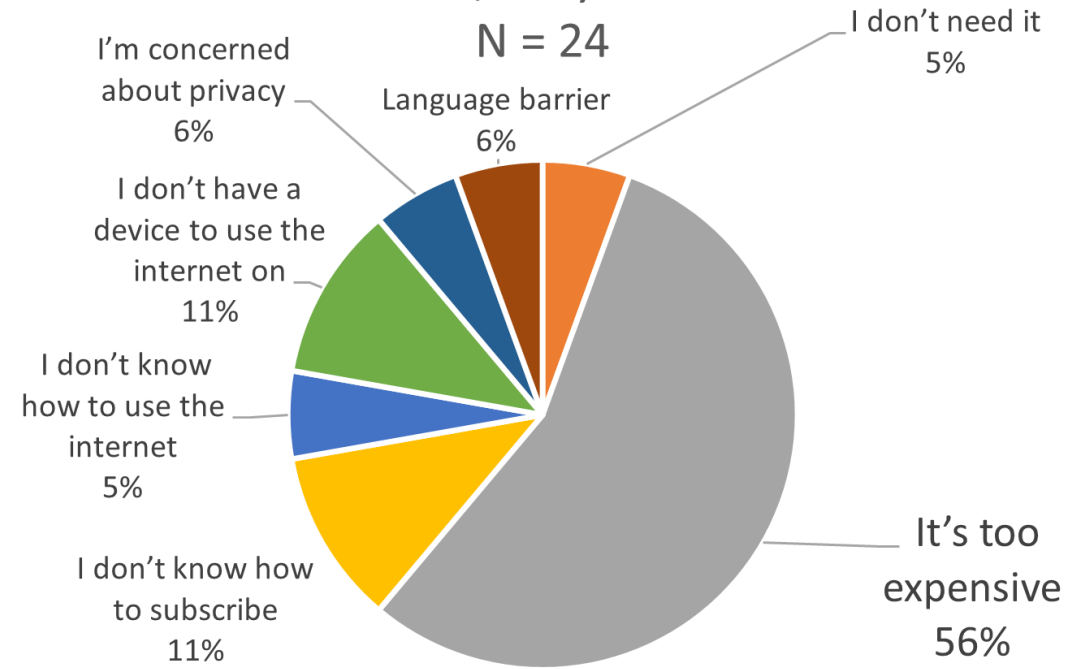
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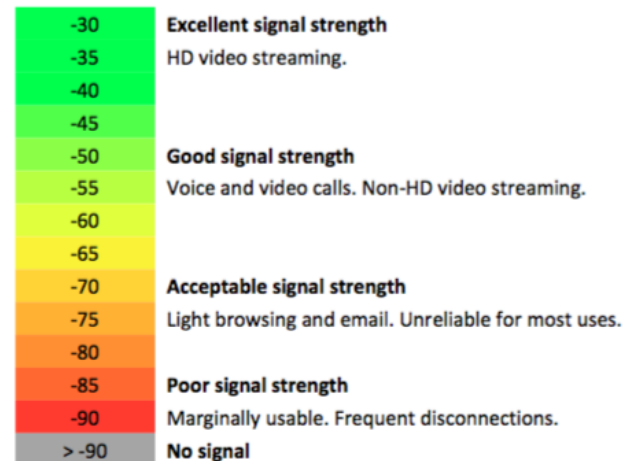
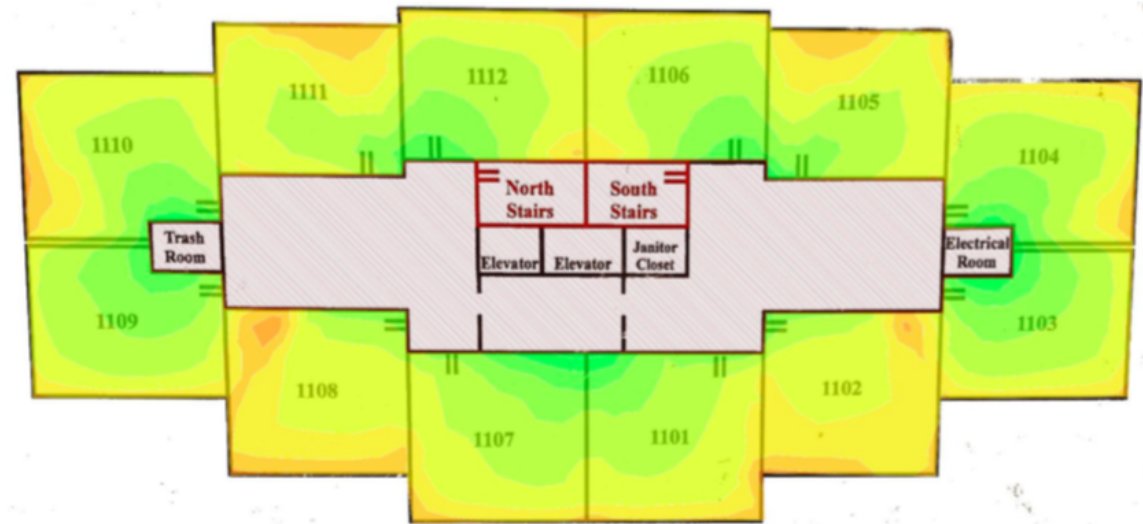
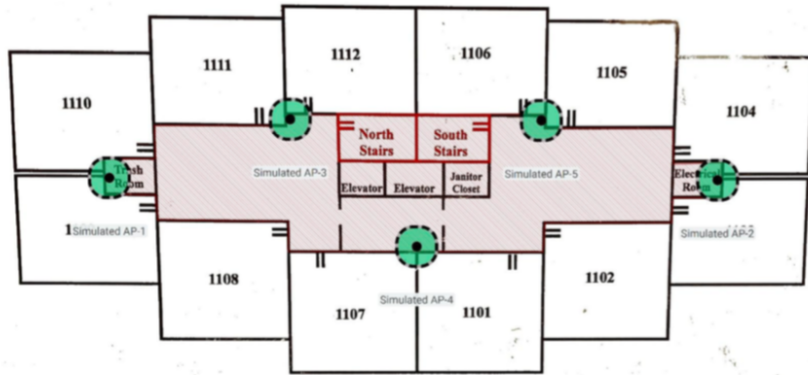


If No, Why Not?

N = 24



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



METRO NORTH
WORKFORCE BOARD

