Digital Equity Plan: Everett, Chelsea, & Revere

Produced by the Metropolitan Area Planning Council (MAPC) for Everett, Chelsea, and Revere, MA, October 2022

Executive Summary

For most residents of Greater Boston, access to the internet may seem ubiquitous, if not inescapable. 5G signals on the phone, free Wi-Fi in cafés, high speed home connections, and fast computers put the whole digital world in easy reach. Full digital access allows people to work, learn, socialize, organize, and express themselves in ways that are not only convenient, but increasingly essential. Digital access doesn't just happen, though—it is enabled by infrastructure systems that provide connections to the internet, as well as social systems that equip residents with the money to buy computers and the skills to use them. Unfortunately, there are also systemic inequities in who are served by fast, affordable connections, who can afford a good laptop, and who has the "digital literacy" to get online safely and productively.

Like many other elements of our society, these inequities are felt most by people of color, low-income households, people whose first language is not English, and people from abroad. Data show that these groups are less likely to have a home internet connection and computer and more likely to have trouble affording and using the internet. Interviews with residents highlight key challenges: People described the challenges they face with choppy and unstable connections during remote school, having to cancel their internet subscription because it was too expensive, running out of data at the end of the month, and seniors who were taken advantage of by online scams. The disproportionate impact of these systems on vulnerable communities reinforces other types of injustice.

THE PLANNING PROCESS

In 2021, the cities of Chelsea, Everett, and Revere asked the Metropolitan Area Planning Council to create the Commonwealth's first regional digital equity plan, with the financial support of the Massachusetts Broadband Institute. For this effort, MAPC defines Digital Equity as the 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.

A regional approach was taken because the digital divide crosses municipal boundaries, and the solutions require coordinated efforts. Through a comprehensive planning process, MAPC evaluated available data, coordinated a digital access survey with over 2,000 responses, attended school district meetings, held focus groups in multiple languages, evaluated existing infrastructure, and worked closely with municipal staff and executive leadership to fully understand not only the symptoms, but the root causes of digital inequities. This plan outlines those findings and sets a path forward for these municipalities and others to improve not only digital connectivity and use, but the economic, health, and social well-being of all residents. We hope it may also serve as a resource for others developing digital equity plans elsewhere in the Commonwealth.

LIMITED CHOICE, LIMITED INFRASTRUCTURE

MAPC's analysis found substantial barriers to full digital access in these three municipalities. First, residents in these communities don't have much choice when it comes to "wireline" internet providers: it's either Comcast or RCN. Comcast dominates the market, serving over 60% of surveyed households in Everett and Revere and over 80% of surveyed households in Chelsea. With little competition to choose from, most customers are stuck paying whatever the cable companies are charging, which is often too much for many lower-income households: over 70% of survey respondents reported that they had cancelled internet subscription because it was too expensive. Almost half of the lowest-income households (earning less than $20,000 per year) report they don't have an internet subscription at home, relying on phone plans, public Wi-Fi, or nothing at all.

MAPC also found that despite being densely populated and at the core of the region, the infrastructure in these communities is insufficient to meet current needs. The cable providers' fiber optic networks—which are essential for truly high-speed internet—serve only some neighborhoods. As a result, at least one third of households must rely only on copper cable, DSL, or wireless service for their internet. Where fast connections are available, they come at a premium. Cost-conscious households usually end up with a cheaper plan and slower speeds. The lack of modern infrastructure is reflected in the quality of service: speed test data show that nearly two in five households are connected at speeds that don't even meet a very minimal definition of "broadband" (25Mbps download), much less what was advertised for their plan. The proliferation of smartphones and high-speed cell services isn't guaranteed to close the gap—even 5G remains inadequate for many applications due to high latency, and laptop computers remain essential for tasks such as preparing a resume or writing a school report.

CLOSING THE DIGITAL DIVIDE

Fortunately, there is already much underway to close this digital divide. The Affordable Connectivity Program (ACP) helps tackle the affordability problem with subsidies for low-income households. School districts provide laptops and wireless hotspots so that students can stay connected. Community-based "digital navigators" help their neighbors use technology, while gaining important skills and experience. Municipalities such as Chelsea, Everett, and Revere are making plans and investments to provide Wi-Fi, devices, and training.

Our research found much that can be done to advance and scale these efforts. As of 2022, just 21% of Massachusetts households eligible for the ACP have signed up for the benefit (25% in Chelsea, 18% in Everett, and 19% in Revere). Stakeholders say that more outreach, a simpler process, and language accessibility are all needed to achieve more widespread adoption. In addition, our outreach found there is an unmet need for digital literacy training that meets people where they are, in terms of location, language, and needs.

While the ACP is a great benefit for the households that receive it, individual subsidies are not an effective long-term solution to broadband affordability when there are so few options available in many neighborhoods. Other approaches are needed to fundamentally change the quality and price of internet service. One option is to deploy

free Wi-Fi networks in areas of high need, such as public housing and affordable housing developments. With high-speed broadband wireless available in every unit, residents get great service at no cost.

At a broader level, there is a need to enable greater competition in the marketplace of Internet Service Providers so that customers have more choices. A "public utility" model of broadband access may be necessary to accomplish this. When a municipality or public agency owns a fiber optic network serving every neighborhood, there's no monopoly based on the physical connection. Customers pay for the actual costs of the fiber connection and then have many options for internet service providers, helping to lower subscription costs. Preliminary plans underway in Chelsea and Revere suggest that public utility fiber connections to every home could be paid for at half the monthly cost for basic cable internet service available today.

A MUNICIPAL & REGIONAL APPROACH

Cities and towns have a key role to play when it comes to digital equity. They can start with creating a digital equity plan such as this one: map out assets and needs; identify key community partners; and adopt appropriate strategies for closing the gap. Those strategies might include a range of short- and long-term actions, including establishment of a Digital Equity Officer position to coordinate work across multiple departments and outside entities. Installation of in-unit Wi-Fi in affordable housing is one near-term step that can drastically increase quality and reduce cost for those most in need. Based in part on this study, Chelsea and Revere have already signed contracts to install "apartment Wi-Fi" at two housing authority sites with a combined 178, 2- and 3-bedroom units.

Another near-term, low-cost strategy is to adopt a policy requiring installation of fiber-ready conduit when repairing or reconstructing local roadways; each segment of conduit put in place this year reduces the cost and disruption of fiber optic lines at a later date. Municipalities can also lay the groundwork for long-term investments through a municipal broadband feasibility plan that assesses the finances, feasibility, and phasing of a "public utility" fiber optic network. With such a plan in place, cities and towns will be well-positioned to compete for broadband funds that may become available through federal infrastructure programs.

Municipalities should also look outside city or town hall for valuable guidance and partners. School administrators, housing authorities, nonprofits, community organizations, workforce boards, and community colleges each have a unique relationship with communities of concern for digital equity. These partners have a role to play in ensuring community needs are heard and addressed in Digital Equity Plans, as well as in implementing plans through outreach, training, or device distribution.

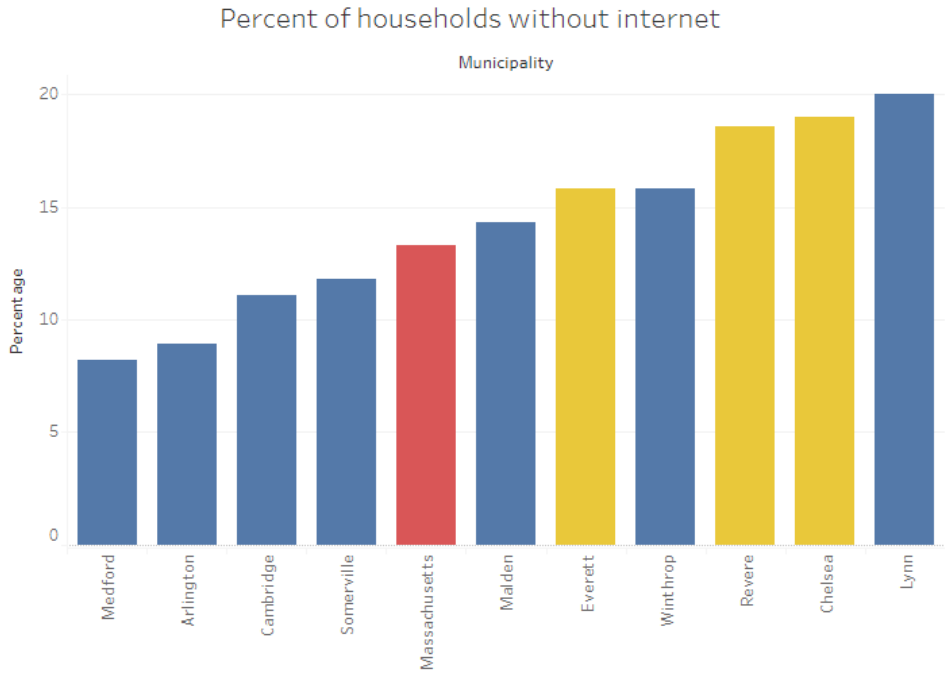
Regional collaboration is also important to advancing digital equity. By working together, cities and towns can understand the broader landscape of internet service provision and needs. Multi-municipal partnerships with regional nonprofits may enable those organizations to serve cultural or immigrant communities that are spread across multiple cities and towns. A "community of practice" among municipal staff focused on digital equity could provide a venue for those staffers to share successes, challenges, and lessons

learned. Where legislative or state actions are needed, joint municipal advocacy will be essential to getting changes adopted in law or policy.

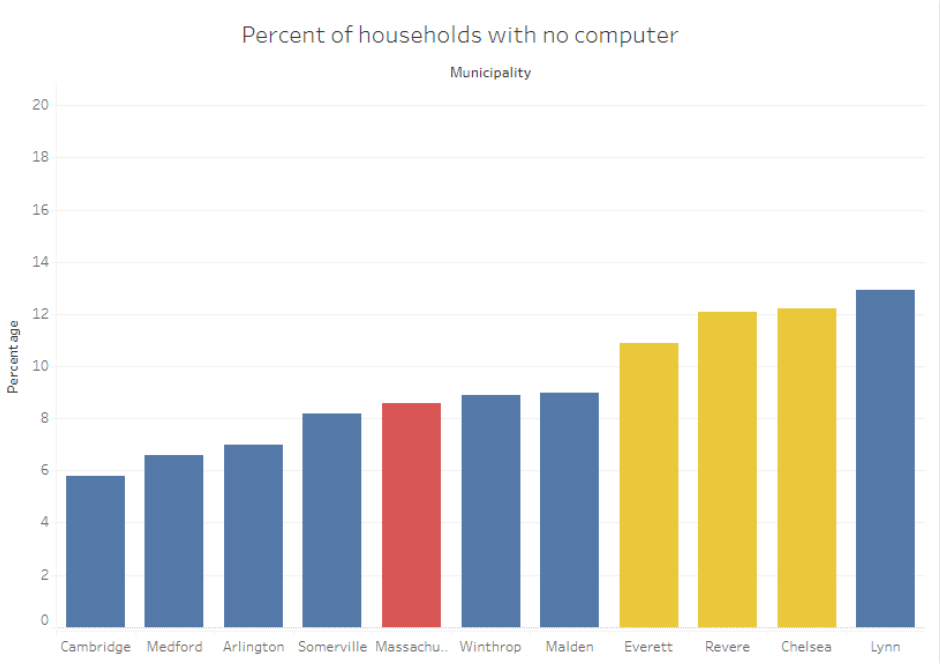
This report on conditions in Chelsea, Everett, and Revere shows that the digital divide is both persistent and ever-changing. Fortunately, there are many opportunities to close the gap: a new statewide Digital Equity Fund, administered by MBI, will provide resources for planning and implementation. Upcoming federal infrastructure dollars may be available for creation of municipal Wi-Fi and broadband networks. And an emerging cadre of community-based and regional organizations is making efforts to link digital equity with workforce training, lifelong learning, and community empowerment. Together, we can create true Digital Equity in Massachusetts.

Key Findings

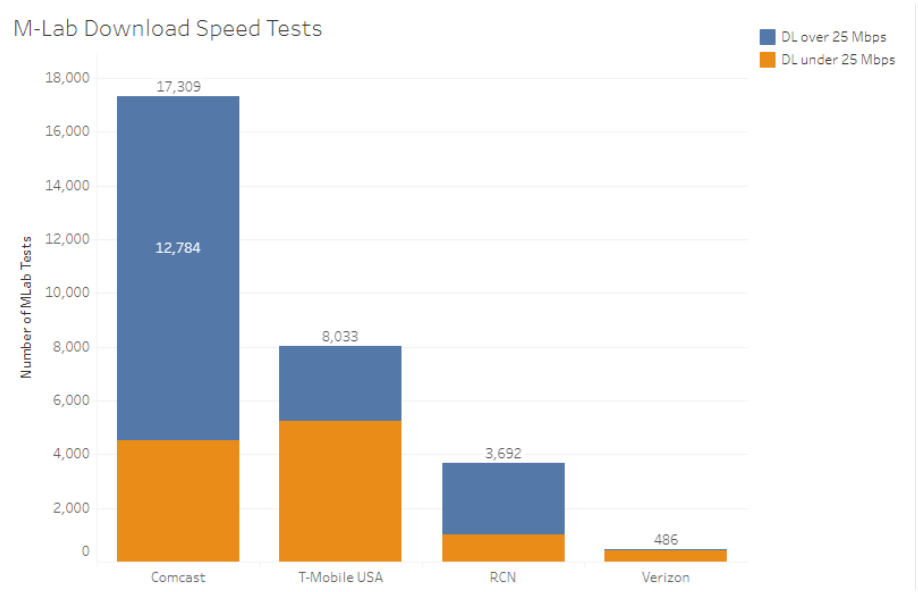
There are still many households unconnected to the internet. 15% of residents in Chelsea, Everett, and Revere don't have access to the internet at home—a total of 8,600 households. Among the poorest households (those earning $20,000 or less per year), this number jumps to 42% in Chelsea, 30% in Everett, and 36% in Revere. Affordability is a big challenge—70% of survey respondents said they had to change or cancel their internet subscription because it was too expensive. Monthly subscription costs in the three cities start at about $30 for the most basic plans.



Many households lack the devices necessary for full digital participation. Nearly one in nine households in the three cities doesn't have a laptop or desktop computer. While mobile devices may someday be capable of connecting residents to a full set of services, not having a device today can leave households unable to work remotely, attend virtual classes, or access government benefits and services.

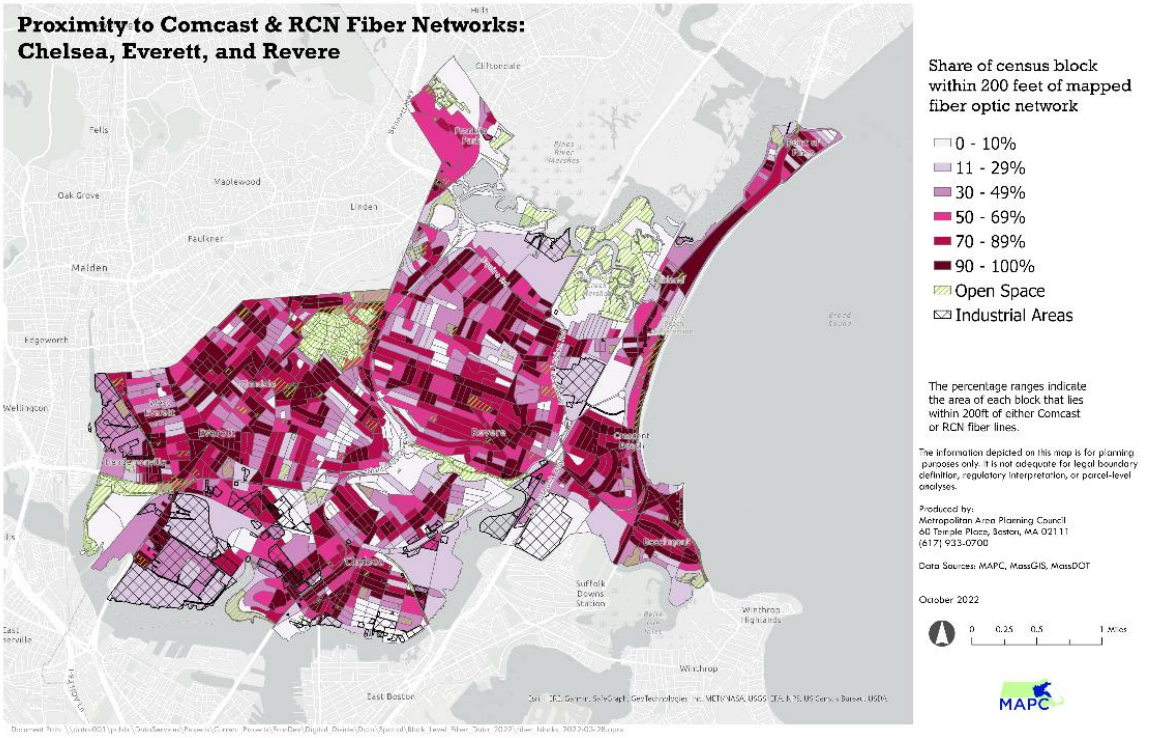


Many households that are connected aren't getting broadband speeds, even when that's what they are paying for. Speed test data from show that one third of addresses are getting service that is less than 25 Mbps download, a bare minimum definition of "broadband" speeds. This figure includes a quarter of Comcast subscribers who are presumably subscribed to plans that promise 50Mbps or higher.



Residents have few choices for "wireline" internet service and many are not even served by modern connections. Comcast has a near-monopoly on internet service in the three cities, serving more than 60% of survey respondents in Everett and Revere, and over 80% in Chelsea where it is the only cable company. The fiber optic networks of the two companies are far from comprehensive—at least one third of households are beyond the

reach of fiber service, meaning they have to rely on copper cable, DSL, or wireless service.



Key Recommendations

We make the following key recommendations:

1. Apartment Wi-Fi

As part of the State's Economic Recovery Plan, the Massachusetts Broadband Institute has made funds available, through MAPC, to support Wi-Fi deployments to help connect individuals, families, or small businesses with sustainable internet access in Chelsea, Everett, and Revere.

2. Municipal Broadband planning

Municipalities can, through the Build Better Broadband grant program funded by Connect Humanity, evaluate and provide cost estimate analysis for future public infrastructure investments. It will be important to further identify where public infrastructure investments can be leveraged to equitably close the digital divide.

3. Device distribution

Through device refurbishment and training/distribution programs like Tech Goes Home, access to devices can be improved.

4. Digital Navigators

   Digital Navigators can be embedded in municipal offices, healthcare facilities, schools, libraries or other CBOs to provide direct technology and resource support to the community.

5. Digital Equity Officer

   Municipalities could hire a shared digital equity officer modeled after similar positions across the country. This position could be a joint position across municipalities that is focused on the implementation of digital equity initiatives and strategies.

6. Collect information from telecom providers

   Municipalities can use the Cable Franchise Agreements they hold with incumbent Internet Service Providers to access information about existing infrastructure, and use that information to

7. Dig Once/conduit policies

   Municipal investments in fiber can be coupled with Dig Once policies that mandate additional conduit be installed during construction or repair. Installing conduit throughout public rights-of-way can lower costs for providing broadband service in the future.

To access the full Digital Equity Plan, please visit:
https://mapc.ma/digitalequityreport

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