

# CONNECT **BROCKTON**



2024



## A Plan to Expand Digital Opportunity

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# Acknowledgements

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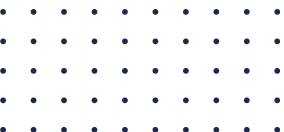
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# SYNOPSIS

## A Summary of Brockton's Plan to Expand Digital Opportunity

Personal computers and high-speed internet have become essential to education, health, civic participation, employment, and entrepreneurship in Massachusetts. A significant number of Brockton residents have limited access to these tools, and many lack the knowledge to make full use of them. Closing this digital divide has become central to community economic development. Over the past year, the city conducted an in-depth digital equity assessment and explored strategies to ensure that all residents have digital opportunity. This synopsis summarizes key findings and strategies detailed in the full plan.

### Key Findings



Approximately **2,500 homes** (6.5% of households) do not have any form of internet access.



Approximately **10,000 homes** (26% of households) do not have wired internet subscriptions. Most of these households use mobile phones to connect to the internet. This is generally slower, less reliable, and monthly data limits may limit access.



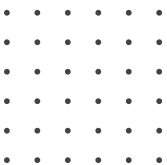
Approximately **11,000 homes** (28% of households) do not have a laptop or desktop computer.



Approximately **2,300 homes** (6% of households) do not have any form of computing device, including mobile phones.



In some Brockton neighborhoods, around **one in three homes** are without any form of internet access and have no laptop or desktop computer. Brockton households are **2-3x more likely** to lack access to the internet and computing devices.



# Key Findings (cont'd)

Among those responding to surveys:



A large majority of Brockton residents without computers and the internet in their homes cite **cost as the most significant barrier.**



About one-quarter of Brockton residents have **difficulty with basic internet browsing.**



Roughly one-third have **trouble using the internet to apply for a job or to access health services.**



Half have **difficulty using it to participate in the community.**



Taken together, these survey responses indicate

**at least 25,000**





adult residents in Brockton could benefit from **digital skills training.**

Gaps in access to digital technology and digital skills in Brockton are generally largest for people of color, low-income residents, young adults, and those with limited English proficiency. A majority of residents in these groups are concerned with internet safety, and lack knowledge and/or confidence in tools to protect themselves online.

# The Digital Opportunity Strategy At-A-Glance

A landscape scan found Brockton is home to numerous organizations with existing initiatives and unique capabilities to help respond to these digital skills and technology needs. Accordingly, the centerpiece of the city's digital opportunity strategy is the formation of a cross-sector Digital Opportunity Coalition. Together, these groups can find synergy through coordination and collaboration. With an unprecedented level of resources from the state and federal government now available to help communities expand access to digital technology, the following strategies will help the city tap these resources and deploy them to maximum effect:

## Summary of High-Impact Strategies to Increase Digital Opportunity in Brockton

<p><b>01</b> </p> <p><b>Plan governance and implementation</b></p>	<ul style="list-style-type: none"><li>• <b>1.1</b> Assign a point person to organize the community's initial implementation effort.</li><li>• <b>1.2</b> Establish goals and identify data sources to benchmark progress.</li><li>• <b>1.3</b> Celebrate success and provide regular updates on Brockton's progress to legislators and leaders from relevant state agencies.</li></ul>
<p><b>02</b> </p> <p><b>Access to fast and reliable internet</b></p>	<ul style="list-style-type: none"><li>• <b>2.1</b> Conduct outreach to income-eligible households to increase enrollment in discounted internet programs.</li><li>• <b>2.2</b> Wire affordable housing developments.</li><li>• <b>2.3</b> Increase eligibility for federal infrastructure funding by ensuring that service levels reported by Internet Service Providers (ISPs) reflect actual network performance.</li><li>• <b>2.4</b> Monitor ISPs and work proactively to help them improve network performance and reach.</li></ul>
<p><b>03</b> </p> <p><b>Access to capable computing devices</b></p>	<ul style="list-style-type: none"><li>• <b>3.1</b> Increase use of the Brockton Public Library's loaner program.</li><li>• <b>3.2</b> Establish a program to recycle, refurbish, distribute, and service devices.</li></ul>
<p><b>04</b> </p> <p><b>Digital skills training</b></p>	<ul style="list-style-type: none"><li>• <b>4.1</b> Post digital navigators in organizations throughout the city.</li><li>• <b>4.2</b> Build stronger partnerships with national and statewide organizations that specialize in digital skills training.</li></ul>

# IMAGINE A CITY WIRED FOR ALL

## In a city that is wired to serve everyone:

- All students complete their homework online on computers that are up to the task.
- Residents in every neighborhood get timely information about their community, and they regularly participate in public meetings from the comfort of home.
- Newcomers build English skills with free online classes that match their levels and learning styles.
- Video conferencing makes it easier for older adults to get timely healthcare, and to stay in touch with family and friends.
- E-business tools give all types of small businesses the power to market their products and services across the globe.

These are just a few of the ways that digital connectivity *could* make inclusive urban communities like Brockton happier, healthier, wealthier, and more resilient. But we are far from realizing this potential. Rather than increasing equity, digital technology is exacerbating racial and class divides in Massachusetts and throughout the US because those with limited income have far more limited access to the internet, computers, and opportunities to build their digital skills.

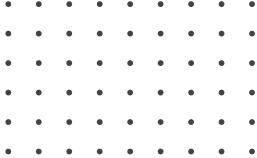
With changes brought about by the COVID-19 pandemic, the digital world now penetrates deeply into every aspect of society. Brocktonians without fast and reliable internet service, adequate computing devices, and the skills necessary to make use of these basic technologies face more extreme social isolation and economic disadvantage. With federal funding from pandemic recovery packages and the Bipartisan Infrastructure Law, an unprecedented effort is underway to close this digital divide all across the US. Success will depend heavily on efforts at the municipal level in communities like Brockton. roportionately targeted by cybercriminals preying on those with limited digital skills. This leaves many residents fearful of the internet and those selling digital products and services.



As a regional urban center, Brockton welcomes immigrants; it provides a range of housing options, including homes that are affordable to those with modest means; and it offers a fertile environment for businesses of all types. To provide each of its residents with the greatest chance to move up the economic ladder, Brockton must work strategically to ensure that digital opportunity is ubiquitous.

This is not the responsibility of a single agency, or even all of city government on its own. Providing unfettered access to digital opportunity will require strong public-private partnerships. But the city can and should take a lead role. Municipal government’s unique ability to bring trusted partners together is especially important on this issue. Residents of low-income communities have been underserved by companies providing digital technology at best; at worst, they have been disproportionately targeted by cybercriminals preying on those with limited digital skills. This leaves many residents fearful of the internet and those selling digital products and services.

This municipal plan outlines the leadership that the City of Brockton can provide to expand digital opportunity. Developed over the past year with assistance from a team of digital equity experts, the plan gives Brockton residents, elected officials, and key partners a detailed view of the work ahead. It describes and quantifies the challenges; catalogs local organizations that are well-positioned to contribute to coordinated digital equity efforts; and lays out a detailed plan for action, including opportunities to implement the strategy with new state and federal funding opportunities.








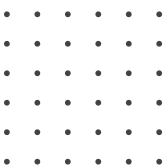
# DIGITAL OPPORTUNITY IN BROCKTON TODAY

## Baseline Assessment of Community Needs

To develop an understanding of where Brockton residents are today with respect to digital opportunity, the planning team collected data from the US Census Bureau, surveyed nearly 600 Brockton residents, conducted focus three focus groups, and interviewed more than a dozen leaders in city government and community-based organizations. The priority strategies outlined in this plan are grounded by this baseline analysis of community needs.

We begin with a look at three fundamentals that all Brocktonians require in order to have true digital opportunity:

<b>1</b>	<b>2</b>	<b>3</b>
Fast and reliable internet service in their homes	Appropriate computing devices for a range of uses	Digital skills to make full use of these tools
		



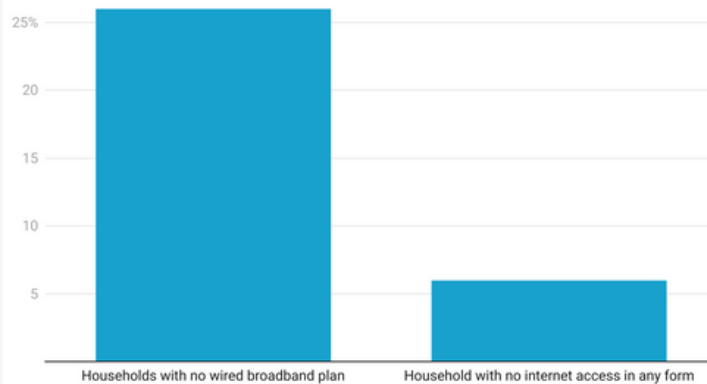


## Fast and Reliable Internet Access

While it is often possible to access the internet at school, the workplace, or at a public library, service at home is essential for many activities, especially those that require longer periods of time online, and private, quiet spaces. The landscape for internet access is constantly evolving as private internet service providers (ISPs) enter and exit the local market with various technologies, and public subsidies to help low-income households afford service ebb and flow. This baseline analysis suggests internet access is currently highly uneven throughout Brockton.

**Internet access is a sizable challenge for many in Brockton, particularly younger residents, and those with low-income or limited English.** According to the most recent Census figures, 6 percent of Brockton households—or roughly 2,500 homes—do not have any form of internet service (Figure 1). [1] Survey responses give us more information on this unserved population. One in five (20 percent) respondents who took the survey in a language other than English reported having no internet. [2] Younger respondents are also more likely to lack access, with 25 percent ages 18 to 34 reporting no internet at home, compared to just 7 percent of those age 60 or older. Internet access is perhaps most dependent on having sufficient income to purchase a plan. One-quarter of survey respondents with income below \$30,000 do not have internet at home.

**Figure 1: One-quarter of Brockton's households lack access to wired broadband internet; 6 percent do not have any internet service at home.**

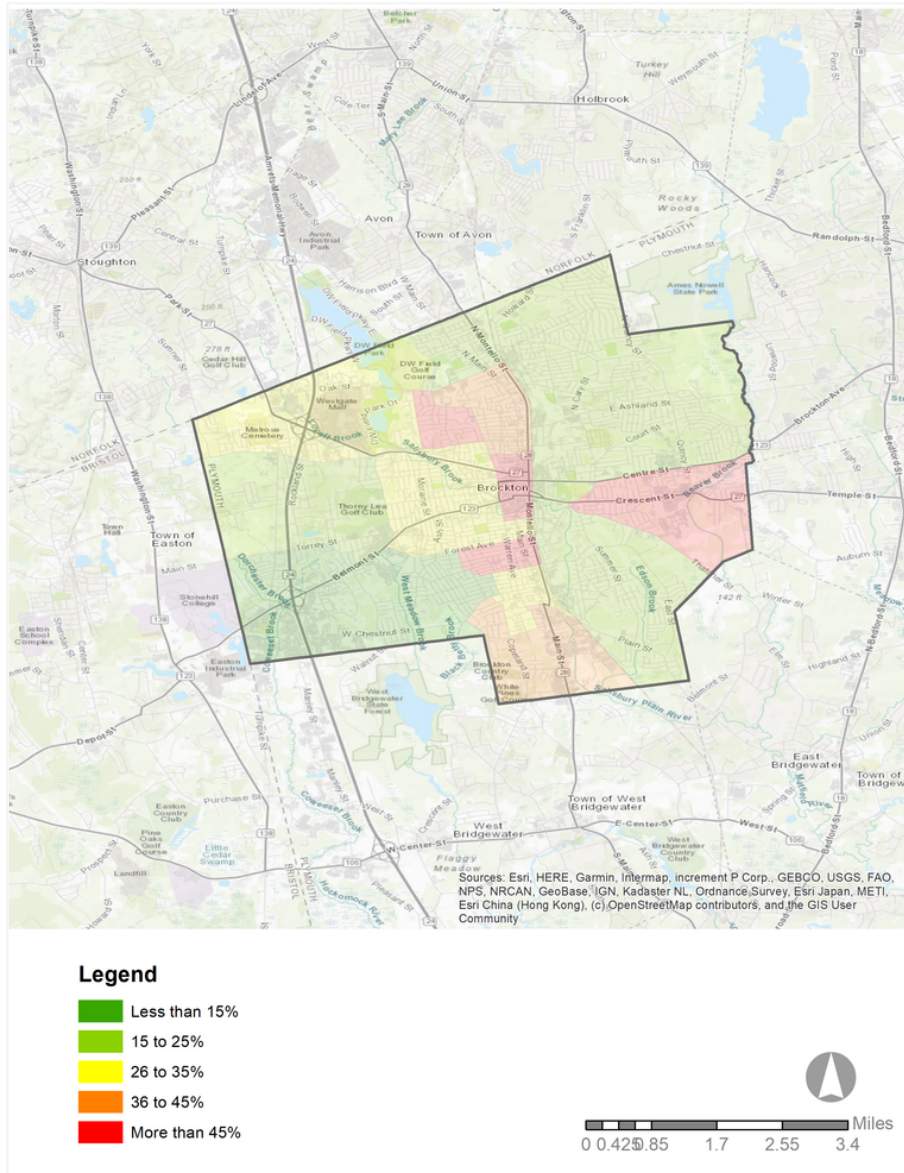


Source: 2022 American Community Survey • Created with Datawrapper

[1] The most recent Census figures come from the 2022 American Community Survey. However, to make comparisons to smaller communities and across Brockton census tracts, we utilized five-year estimates, as noted in the source references in the accompanying figures and maps. These estimates combine survey responses collected between 2018 and 2022, a period that includes both the pre- and post-COVID timeframe during which there was considerable variation in access to digital technology.

[2] Throughout we use taking the survey in a language other than English as an imperfect proxy for limited English speakers.

**Map 1: Nearly one-third of households in downtown Brockton do not have internet access.**



The strong relationship between income and access means home internet is less common in Brockton’s lower-income neighborhoods. In the downtown area between Lawrence Street, Wyman Street, and Warren Avenue, Census data show nearly one-third of households do not have internet. Access to internet is also relatively low in the Crescent Street area of east Brockton, south Brockton, and the neighborhoods surrounding the Westgate Mall, where roughly one-quarter of homes do not have any form of internet access (Map 1).

**Cost is by far the largest barrier to internet adoption.** Among survey respondents without internet, nearly 70 percent say the reason why they do not have service is that they cannot afford it at current prices. Comcast plans currently start at \$35 month, but the cost rises to \$55 per month after the first year. Many households with limited digital skills would likely opt to rent a router from Comcast, which adds \$15 per month to the bill. With taxes, this would mean paying well over \$70 per month after the first year. While a \$10 discount is available with paperless billing, this requires linking a bank account for auto withdrawals, which is difficult for those struggling to maintain balances. Other services, including satellite and fixed wireless, are even more expensive in Brockton (Figure 2).

**Figure 2: Standard internet plans are too expensive for many Brockton residents.**

Carrier	Connection	Speed	Standard Rate	Modem Rental	Discounts
Comcast	Cable	150/20 Mbps	Year 1: \$35/month; Year 2: \$55/month	\$15/month	\$10 for paperless billing
T-Mobile	Fixed Wireless	NA	\$65		\$5 for paperless billing
Verizon	Fiber	300/300 Mbps	\$60	Included	\$10 for paperless billing
Earthlink	Fixed Wireless	25/10-15 Mbps	\$95		
ViaSat	Satellite	25-150 Mbps	\$100	\$15/month	

Source: Analysis of rates posted by carriers, March 2024 • Created with Datawrapper

For those with limited income, Internet Service Providers (ISPs) do offer discounted plans (Figure 3). However, adoption has historically been very low. This is likely due to a combination of lack of awareness, a complicated enrollment process, and the relatively low service levels offered by the discounted programs.

**Figure 3: ISPs offer discounted internet plans, but many residents do not know they exist and enrolling can be challenging.**

Plan	Connection	Speed	Rate	Eligibility
Verizon Forward	Fiber	300/300 Mbps	\$20/month	Income less than 135% of poverty or qualify for Pell Grant, WIC, SNAP, or Medicaid
Comcast Internet Essentials	Cable	50/10 Mbps	\$10/month	Qualify for National School Lunch Program, housing assistance, Medicaid, or SNAP

Source: Analysis of rates posted by carriers, March 2024 • Created with Datawrapper

The federal Infrastructure Investment and Jobs Act created the Affordable Connectivity Program (ACP) to help more low-income families access high-speed internet. Nearly 14,000 Brockton households enrolled in the program, which provides a monthly \$30 subsidy. [3] This enrollment figure represents an estimated three-quarters of eligible households, which is among the highest utilization rates for Massachusetts cities. However, very high uptake in Brockton may reflect fraudulent claims. Throughout the country, reports suggest scammers have targeted eligible households with various schemes. [4] Indeed, survey responses suggest illicit activity be an issue in Brockton; less than 40 percent of low-income survey respondents have heard of the program.

The Federal Communications Commission (FCC) has paused new enrollments in the ACP due to lack of funding. Unless Congress appropriates additional resources, those who are currently receiving the benefit will soon lose the subsidy. Some could still receive a smaller benefit (\$9.25/month) from the federal Lifeline program; with eligibility limited to those with income under 135 percent of poverty, about 20 percent of Brockton residents will qualify. While ISPs may offer changes to discounted programs when ACP ends, the constant shifting in program names and terms in recent years could further complicate efforts to keep low-income households connected to high-speed internet service.

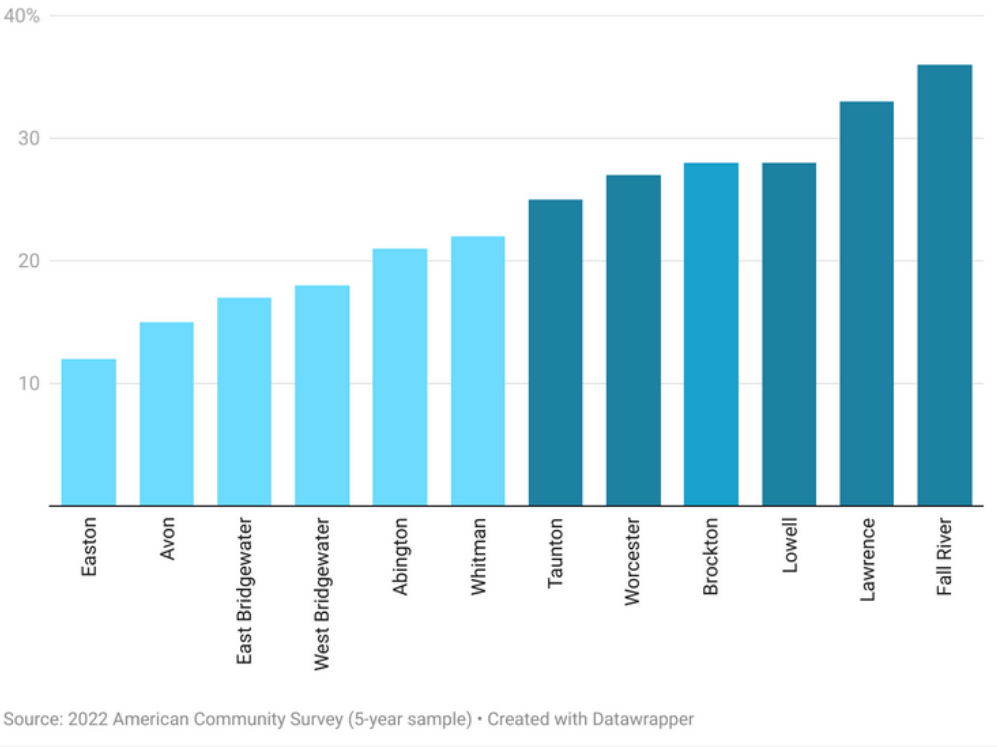
[3] The ACP is open to households with income below 200 percent of poverty or eligibility for federal social safety net programs.

[4] For example, see: “Advisory Regarding Provider Enrollments of Multiple ACP Households Based on the Same Child/Dependent.” (Washington, DC: Federal Communications Commission, Office of Inspector General, September 8, 2022).

Many Brockton residents who do have internet at home struggle with inadequate speed and reliability issues. More than one-quarter of Brockton’s residents—nearly 10,000 households—lack wired home internet service. Some of these residents rely on a satellite provider, a hotspot, or a neighbor’s unsecured wireless network, but the vast majority use mobile phones. Mobile phones generally provide a less reliable signal, and often the monthly service plan includes a data cap.

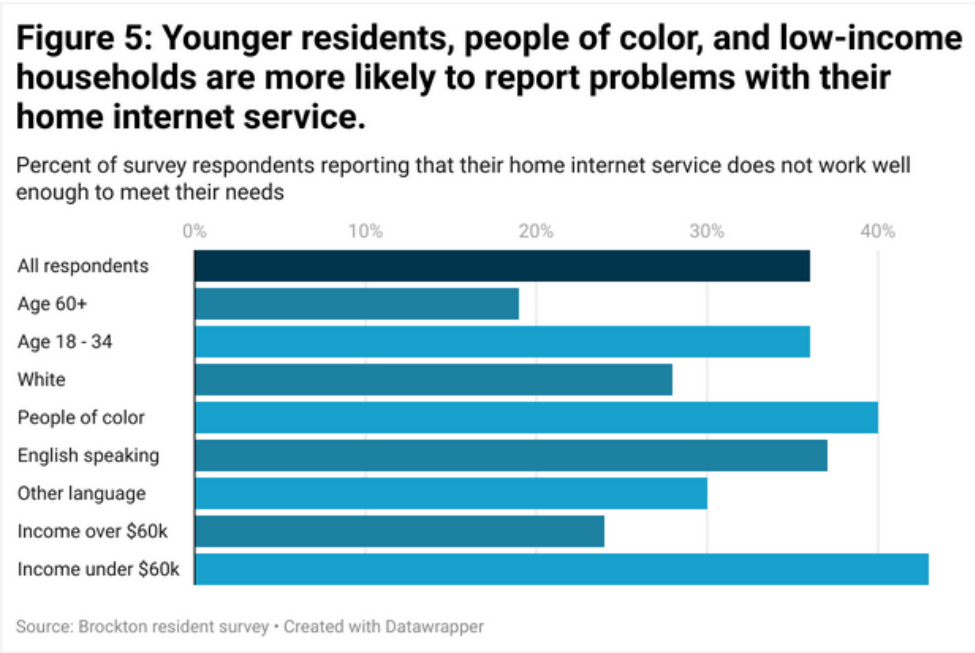
To put the degree of reliance on inferior forms of internet service into perspective, it helps to compare Brockton to both neighboring communities and those with similar social and economic conditions (Figure 4). The share of households without a wired connection to the internet in Brockton is similar to Lowell and Worcester, and slightly better than the most underserved Gateway Cities (Fall River and Lawrence). However, far more Brockton households lack wired internet service than in the surrounding suburbs.

**Figure 4: The share of households without wired broadband in Brockton is similar to other Gateway Cities, but much higher than neighboring communities.**



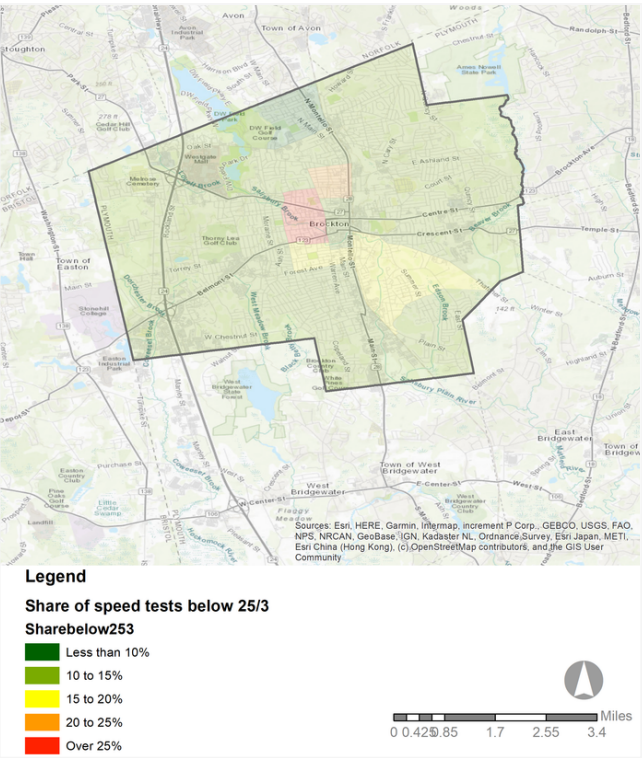
Whether it is this heavy reliance on wireless, issues with outmoded equipment (which could impact service quality for those using both wireless and wireless networks), or a combination of the two, survey responses show many households struggle with internet

speed and reliability. More than one-third (36 percent) of survey respondents say the service quality that they receive is not good enough to meet their needs. People of color and those with limited income are more likely to report issues with their home internet service (Figure 5).



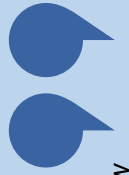
Backing up these survey findings, speed tests show that over 20 percent of households struggle with slow service. Those experiencing slower service are more likely to live in the downtown area. Many factors could contribute to this issue, including large households (or multiple households sharing a plan), older buildings with poor wiring, outdated routers in the home, or underinvestment in the network serving the area (Map 2).

**Map 2: Slower speeds are clustered downtown.**



## Resident Perspective on Internet Access Challenges

From finding employment to filing insurance claims, during focus groups Brockton residents shared personal stories about how lack of internet made life difficult in various ways. They also noted ways in which limited internet access at home made it harder to keep their computer skills current. Many pointed to issues with service quality and support. Others emphasized how data caps, which are common for lower-cost mobile phone plans, inhibit home internet use.



*I remember that time when I lost a job interview because I could not get access to the internet. I did not have internet at home, I was new to the neighborhood, and did not have a car. So, I could not go another place where I could use the internet.*



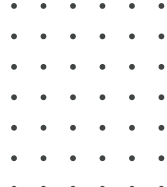
*I would like to add that because I haven't had the internet for quite some time now, I feel that am no longer as skilled at doing certain things that I used to be able to do on the computer.*



*But it's the same thing at the beginning of the month, it's [internet speed] very fast. And towards the end, it starts getting really choppy.*



*The phone is full of all sorts of apps and it's free. Forget it, it's [the monthly data quota] going to run out on me.*







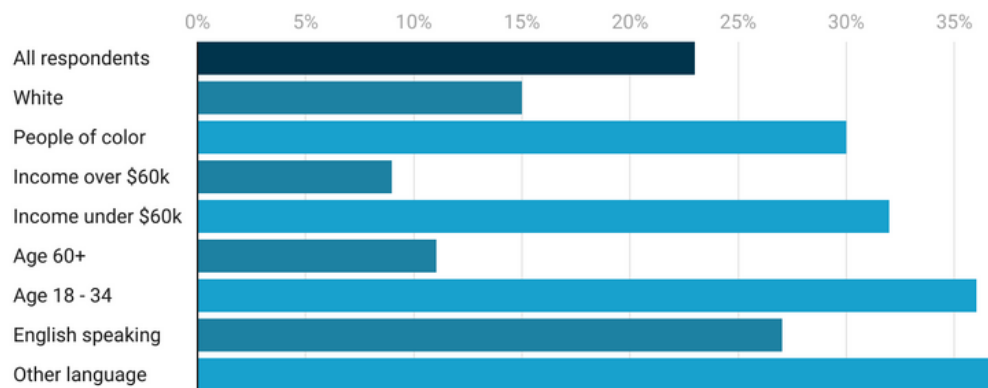
## Appropriate Computing Devices for a Range of Uses

From browsing the web to watching video, today's smartphones have the power to enable many internet technologies. But low-income residents often rely on older phones with damaged screens, limited battery life, and slow processing. And even the most advanced phones are not capable of running many applications. Making full use of digital technology requires a laptop or desktop computer in the home. As with internet service, this baseline analysis suggests access to these devices is highly uneven in Brockton.

**Access to computing devices is a challenge for many Brockton residents, especially those with limited income and English.** According to the most recent Census data, nearly 11,000 homes (28 percent of households) do not have a laptop or desktop computer; 6 percent do not have any form of computing device, including mobile phones. About one-quarter of survey respondents say they lack enough computing devices to meet their household needs (37 percent). And this increases to more than one-third among those with income below \$60,000 (32 percent) or limited English proficiency (Figure 6).

**Figure 6: People of color, low-income, young residents, and non-English speakers are most likely to live in homes without enough computers.**

Percent of survey respondents reporting that there are not enough devices in the home to meet everyone's needs

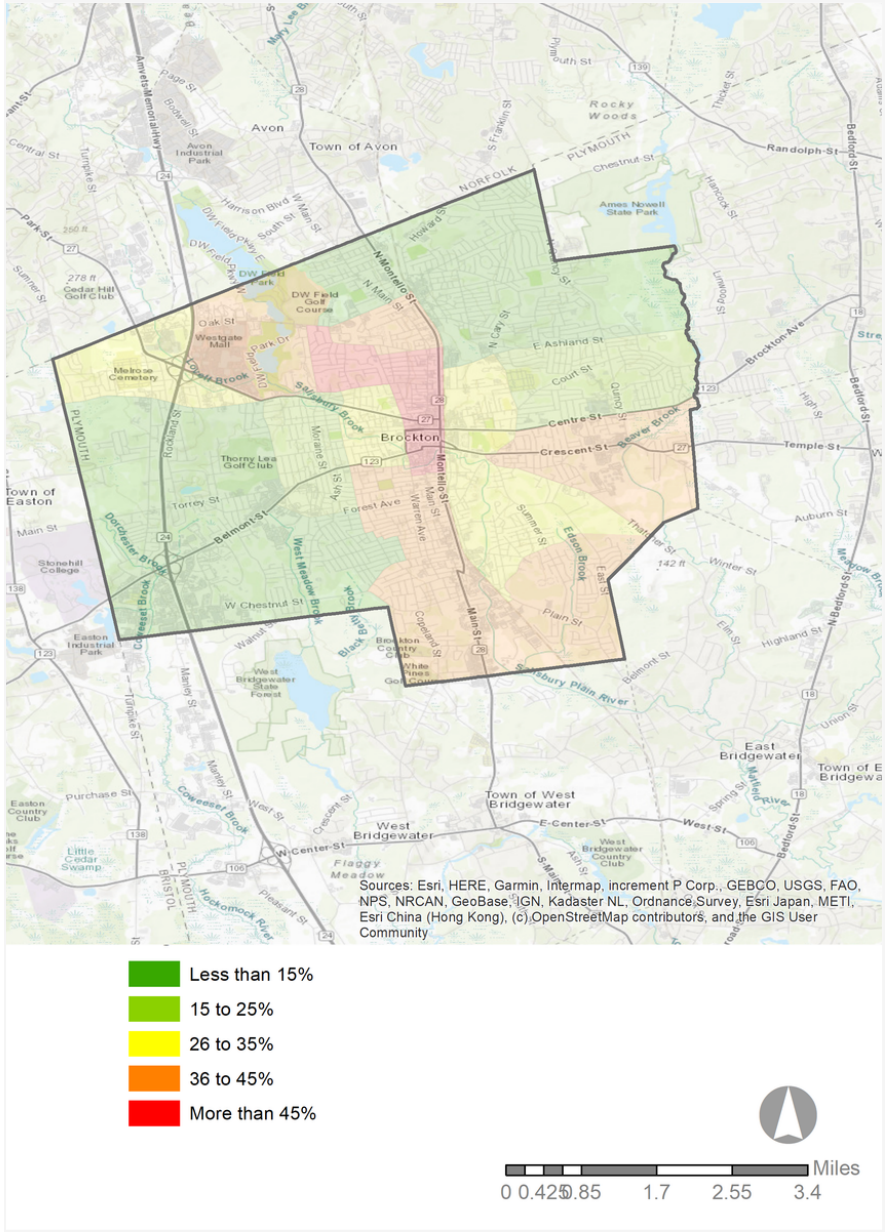


Source: Brockton resident survey • Created with Datawrapper

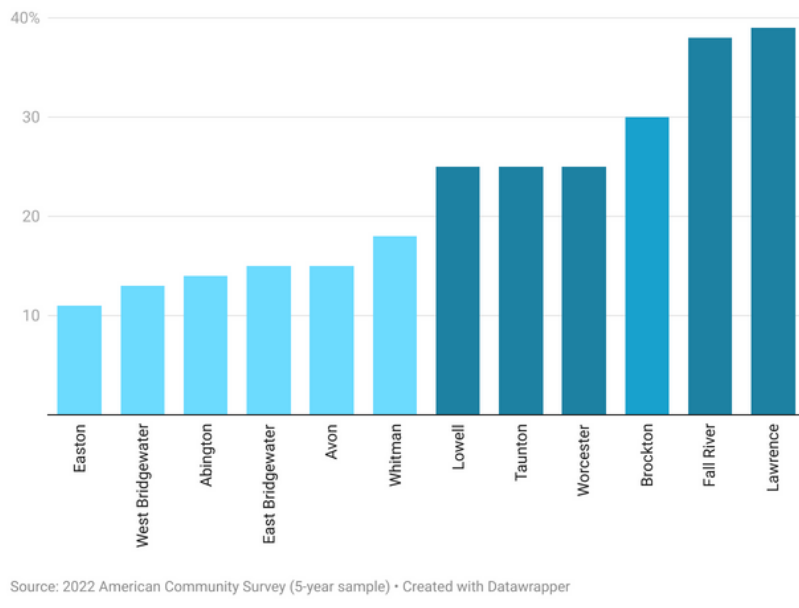
Nearly half of downtown households do not have any laptop or desktop computer. More than one-third are without such devices in the Crescent Street area of east Brockton, south Brockton, and the neighborhoods surrounding the Westgate Mall (Map 3).

The percentage of Brockton households without a desktop or laptop computer is similar to other Gateway Cities (Figure 7). However, the gap compared to the suburbs is even larger than the wired internet disparities. The share of Brockton homes without a laptop or desktop computer is nearly three times higher than some neighboring communities.

**Map 3: A large share of households living downtown, the Crescent Street area, south Brockton, and around the Westgate mall lack laptop and desktop computers.**

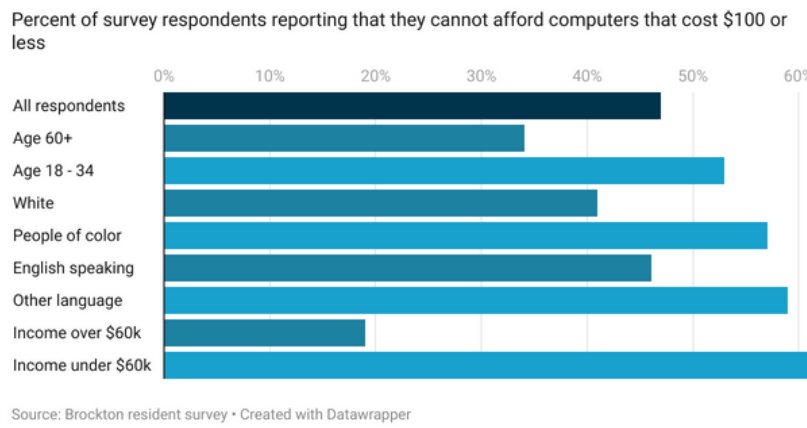


**Figure 7: The share of households without laptop or desktop computers in Brockton is similar to other Gateway Cities, but much higher than neighboring communities.**



**Cost is a major barrier.** Nearly half of Brockton residents say they would only be able to afford a computer that costs \$100 or less. This rises to 70 percent of respondents with annual income below \$60,000. More than one-third of survey respondents without internet in their home say the cost of purchasing computing devices contributes to their decision not to pay for internet service. Among survey takers, people of color, low-income, younger residents, and non-English speakers are most likely to have trouble paying for computers (Figure 8). These figures suggest discounted devices, such as the \$150 Dell laptop that Verizon offers to those eligible for Internet Essentials, may still be out of reach for many.

**Figure 8: People of color, low-income, young residents, and non-English speakers are most likely to have trouble paying for computers.**





## Digital Skills

Without a strong grasp of digital technology and how to make use of it, residents will not know what is possible online and they will lack the knowledge and confidence necessary to navigate the digital world. Limited access to technology makes it difficult to build digital skills, as many of these competencies are acquired through self-exploration, classic learning by doing. Of the three fundamentals, digital skills is arguably the most important, and the area where community-driven efforts can have the greatest impact. The baseline analysis points to considerable need for more digital skills training in Brockton.

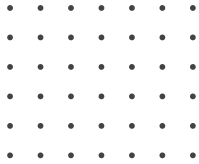
**The ability to make use of the internet varies widely among Brockton residents.** About one-quarter of Brockton residents have difficulty with basic internet browsing according to survey responses. People of color are about twice as likely to report challenges with general internet browsing than White residents (28 percent vs. 15 percent) of Brockton. Younger residents and those with a high school degree or less are also more likely to struggle with basic internet navigation (Figure 9).

**Figure 9: Brockton residents have the most difficulty using the internet to participate in the local community and to search for benefits or resources.**

Percent of respondents who report the task is "not easy" or "hard":		General internet searching	Searching for transportation information	Searching and applying for a job	Accessing health care or telehealth services	Participating in the local community	Searching and applying for benefits or resources
Overall		24	30	30	34	37	45
Income	< \$60k	33	36	37	41	45	52
	> \$60k	6	14	13	22	21	29
Language	English	23	30	27	33	36	44
	Other	26	22	58	40	43	50
Race/Ethnicity	White	15	21	24	26	23	32
	Other	28	34	33	37	42	53
Age	18 - 34	29	28	32	28	36	47
	60+	16	10	22	19	22	20

Source: Brockton resident survey • Created with Datawrapper

Brockton residents are even more likely to struggle with specific tasks online according to the survey. Roughly one-third of respondents say they have some level of difficulty using the internet to apply for a job or to access health services; half have difficulty using the internet to participate in the community.

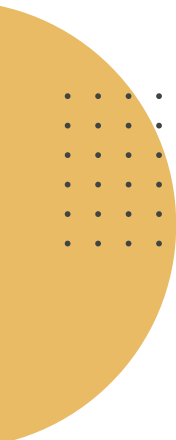


Taken together, these survey responses indicate at least 25,000 adult residents in Brockton could benefit from digital skills training. [5]

**While internet safety is a concern for many, access to resources to stay safe varies widely.** Nearly half of Brockton residents say they are very concerned about internet safety with no major differences by income, educational attainment, or race and ethnicity. Older adults are slightly more concerned than those under age 60. Stolen data, identity theft, and internet scams are the most common fears, though many also worry about loss of privacy and online harassment.

Almost one-third of respondents (30 percent) say they are not familiar with the tools and resources that they can use to stay safe online, or they believe these tools will not work for them. Respondents of color are much more likely to lack knowledge of the tools or to lack confidence in them (40 percent) compared to White respondents (11 percent). Nearly two-thirds (63 percent) of limited English survey takers do not know where they can turn to protect themselves online, and another 25 percent see the tools that they are aware of as ineffective.

**Those with limited digital skills are eager for training and support.** Survey responses show significant interest for digital skills training across various modes: 40 percent of survey respondents indicate a desire to take classes online; 30 percent would like referrals to resources that they can use to learn on their own; about one-quarter prefer to take classes with an instructor in-person.



[5] Brockton has 78,620 residents age 18 and over. On average across the six discrete digital skills tested on the survey, 33 percent of respondents said completing the task was “not easy” or “hard” for them. This suggests at least 25,000 residents could benefit from digital skills training, assuming this percentage drawn from survey responses accurately reflects the needs of the city’s population.

## Resident Perspective on Digital Skills

Focus group participants provided perspective on the challenges that they face making use of digital technology, particularly when language barriers are present, and the vulnerability that they feel going online. They expressed interest in digital literacy training, but they also noted how difficult it can be to find training geared to their learning styles, and many struggle to fit classes into their day.



*Here everything is done through internet applications, everything is through applications. Many pages come up with the option to set them in Spanish, but many don't. It becomes very, very difficult.*



*I'm not good at picking up stuff like that... I mean, they had classes at the old senior center, they had classes, and I just didn't catch on.*



*...just like they did with my mom, the federal agents went to our house for identity theft. It turned out they said she had a house in Miami, that she had done a robbery. My mom got caught up in that, my mom had to fight in court. That's why I'm concerned about identity [theft].*



*I'd like some classes on hardware. Installing a new device. All of the sudden something isn't working, what do you do? You know, I know you rebooted, but if rebooting doesn't work. I've had some issues lately, and I've spent a good bit of time doing something that I'm sure my five-year-old grandson could have done in 2 minutes.*



*I've wanted to learn and I've tried because where I live, they offer classes for that, and I tried and started, but with so many things you have to do, time doesn't allow, and sometimes you have to deal with one thing or another, and then you lose interest in the end, but yes, it's something I would like.*



## Are the Options for Reliable High-speed Internet Service in Brockton Expanding?

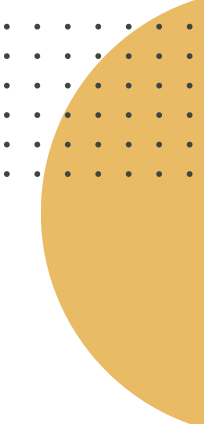
Brockton residents can select from several types of internet service depending on where they live within the city. Comcast's co-axial cable reaches almost every address. For years, this network was really the only option for a high-speed connection, raising cost and reliability concerns. Residents may soon have other choices.

Fiber optic cable is the fastest and most reliable internet technology. Until recently, Brockton residents have not had this option. Verizon is now laying fiber in the city and some residents can already take advantage of this service. However, it is unclear how much fiber Verizon intends to deploy in the community.

By broadcasting signals from a transmitter to a receiver installed on homes, fixed wireless networks have the potential to offer very fast service, but only when there is no interference from buildings, trees, and other electrical signals. Data submitted to the Federal Communications Commission indicate T-Mobile is offering fixed wireless to about one-third of the city. However, most households are currently limited to 25/3 Mbps service, a slow connection by today's standards. [6]

While advances in fixed wireless technology and fiber deployment could dramatically expand choice and service quality for consumers in Brockton, this is not guaranteed. The city will need to monitor progress closely and work proactively to cultivate a competitive market for internet service in the community.

[6] While this T-Mobile is reported in the FCC maps, we could not independently verify that these plans are available to Brockton households as of March 2024.



# BROCKTON'S DIGITAL OPPORTUNITY BUILDERS

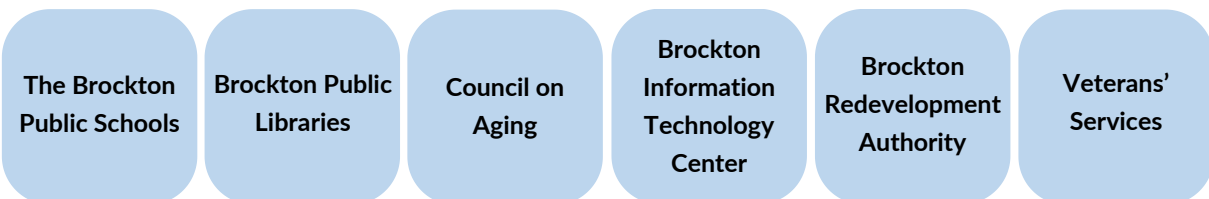
## Landscape Analysis

Brockton has a host of organizations with the reach, trusted relationships, and resources to contribute to coordinated efforts to help residents connect to the internet, access computers, and build digital skills. Many of these organizations are already actively engaged in the work; others are eager to contribute. This landscape scan helps identify these actors and their positioning as “digital equity ecosystem” builders in Brockton.[7]

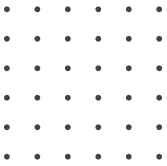
## Municipal Agencies

Municipal government has varied roles to play in the effort to increase digital opportunity. In addition to facilitating strategy development and execution, city government influences the conditions for internet access by permitting infrastructure in public rights of way, purchasing and operating its own networking equipment, and negotiating cable franchise agreements.

Municipal agencies also provide direct services to residents, and as a trusted information source, they can build awareness about programs offered by both the city and responsible private providers. Key municipal agencies include:



[7] For more on the concept of a digital equity ecosystem and the role of various actors, see: Colin Rhinesmith and Susan Kennedy. “Growing Healthy Digital Equity Ecosystems During COVID-19 and Beyond.” (Evanston, IL: Benton Institute for Broadband and Society, 2020).





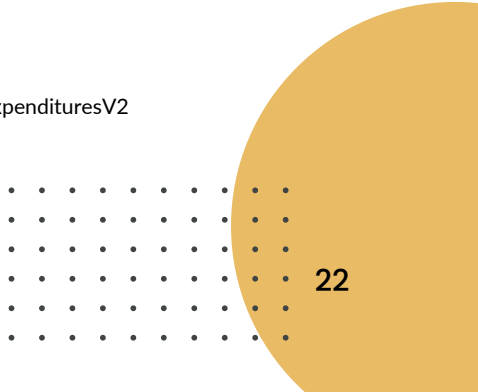
**The Brockton Public Schools.** The Brockton Public Schools serve 15,000 students and more than 6,000 families. BPS has an IT department with roughly 40 staff. The district provides laptops to all students, and many schools allow students to take these devices home each night. Laptops are also available in July and August to students participating in summer learning programs. During the pandemic, BPS purchased more than 1,300 Wi-Fi hotspots to give students internet access for remote learning. While the district is no longer able to provide these connections due to cost, the large number of families requiring these devices offers a strong indication of need (more than 20 percent of households with BPS students had a hotspot at the height of the pandemic). The district also works to help parents utilize Infinite Campus, an online student information system that allows families to track student progress and facilitates communication with teachers.

**Brockton Public Libraries.** The Brockton Public Libraries operates a main library downtown and two neighborhood branch libraries. Like other urban libraries, it is among the least well-resourced in the state with just \$25 of expenditure per capita.[8] However, it is still heavily utilized, with nearly 10,000 visitors per week.[9] The main library has 40 computers and the branch libraries each have about a dozen stations. Patrons can borrow laptops and iPads to take home. The library also loans hotspots. Over the years, BPL has had numerous partnerships and digital skills offerings. Most recently, it provided a six-week training program to 20 seniors. Those who completed the course received a laptop, earbuds, and one year of hotspot service. BPL has also worked with several nonprofits, including Kids Can Code and Girls Who Code, to help young people learn about computer science and software development through clubs and workshops that meet at the library.

**Council on Aging.** The Brockton Council on Aging (COA) has approximately 10,000 members. On a busy day, about 100 will visit the senior center. On Thursdays, the COA offers one-on-one help with computers by appointment. Brockton’s senior center is currently undergoing renovation. The new facility will include a modern computer lab with nine desktop computers.

[8] See: [https://dls.gateway.dor.state.ma.us/reports/rdPage.aspx?rdReport=ScheduleA.GF\\_LibraryExpendituresV2](https://dls.gateway.dor.state.ma.us/reports/rdPage.aspx?rdReport=ScheduleA.GF_LibraryExpendituresV2)

[9] See: [https://mbic.state.ma.us/programs-and-support/library-statistics/files/data/2022/2022\\_Library\\_Services\\_Final\\_upd.xlsx](https://mbic.state.ma.us/programs-and-support/library-statistics/files/data/2022/2022_Library_Services_Final_upd.xlsx)



**Brockton Redevelopment Authority.** The Brockton Redevelopment Authority (BRA) plays a lead role advancing community development and economic revitalization in the city through both brick-and-mortar projects and by supporting community-based organizations that provide direct services, particularly small business support. While the BRA is not currently involved in digital equity efforts, it is well-positioned to lead efforts to increase internet access through the urban renewal plans that it develops and through the funding it provides to community development grantees.

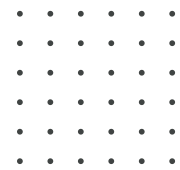
**Veterans' Services.** Brockton is home to at least 3,500 veterans according to the Census. From accessing telehealth to applying for the many services that they are eligible to receive, veterans stand to get especially large benefits from digital connectivity. With a staff of three, the city's Veterans' Services Office (VSO) refers veterans to appropriate services. The Brockton Vet Center, which offer readjustment support to returning service members, has computers that local veterans can use, but it does not provide trainings. The VSO refers clients to libraries or the Council on Aging for digital equity services.






## Affordable Housing

Research shows that residents of affordable housing are more likely to lack digital opportunity. In part, this is because many are extremely low-income and unable to afford even low-cost internet plans and computing devices. Affordable housing properties are also more likely to have challenges with networking infrastructure, especially older public housing developments that lack modern wiring. These dynamics make affordable housing developers and operators key thought-partners and actors in closing the digital divide. [10]



**Brockton Housing Authority.** The Brockton Housing Authority (BHA) owns and operates nearly 2,000 apartments across 16 complexes. These buildings range in size from almost 400 units to under 20. In addition, BHA manages approximately 2,700 housing assistance vouchers that make private housing more affordable for low-income residents in Brockton and surrounding towns. In the past, BHA has operated computer centers and offered training in some of its developments. However, longstanding underfunding of public housing has made it difficult to sustain these efforts.

Verizon reportedly has plans to install fiber in several BHA properties. This would provide residents with the opportunity to access fast, reliable, and affordable service. (As residents of public housing, they should all be eligible to receive Verizon's discounted plan, though they will likely still need to go through the process of signing up and demonstrating eligibility).



[10] Ben Forman. "Connected Communities: Providing Affordable Housing Residents with Unfettered Access to Digital Opportunity in Massachusetts." (Boston, MA: MassINC, 2023).



**NeighborWorks Housing Solutions.** Like the BHA, NeighborWorks Housing Solutions (NHS) administers a large number of state housing assistance vouchers throughout Plymouth county. The nonprofit is also increasingly developing its own portfolio of affordable housing properties in Brockton. It completed a 48 unit building in 2021, and 150 units are in development across three future projects. In addition to providing affordable housing, NHS also offers a range of workshops and classes. They include homebuyer education, financial coaching, and small business assistance. Courses are provided at the Multicultural Banking Center at HarborOne, as well as online.

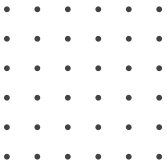
**Father Bill's.** Father Bill's MainSpring provides emergency overnight shelter to 130 adults. The facility also offers extensive case management, including connections to healthcare and job training. Father Bill's is constructing a new 128-bed facility that will include a day center to provide more services to both prevent homelessness and to help those experiencing homeless transition to stable housing. Father Bill's also operates several group homes that provide long-term supportive housing for Brockton residents.

## Health and Human Services

Digital technology can increase access to health information and care. Its potential benefits are especially large for populations that have difficulty getting appropriate treatment because of travel barriers and/or limited availability of culturally competent providers in their area. But this potential has not been realized, furthering inequality. Physicians and public health experts increasingly worry that as more health care moves online, health disparities will grow larger. Brockton has sophisticated community health providers devoted to health equity that can join with digital equity advocates to ensure that digital opportunity leads to better health outcomes for all.

**Brockton  
Neighborhood  
Health Center**

**Old Colony  
Elder Services**

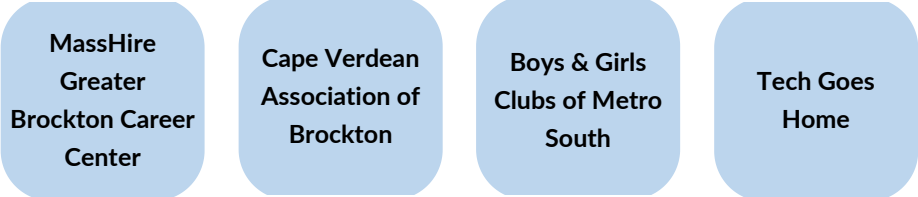


**Brockton Neighborhood Health Center.** Brockton Neighborhood Health Center (BNHC) provides the city's diverse residents with comprehensive and culturally competent health care, serving nearly 40,000 patients annually at three locations: its main clinic downtown, a nearby pediatric center, and a clinic at the MainSpring shelter. BNHC also operates more than a dozen group homes across the city. Like providers throughout the state, BNHC rapidly shifted to telehealth during the COVID-19 pandemic and has gradually returned to in-person care. However, it continues to provide telehealth appointments to increase patient access. Issues with digital skills, internet service, and computing devices have presented barriers in some instances. At present, BNHC does not have digital navigators to assist with these needs. Instead, the workload largely falls on social workers and nurses with limited training and many other responsibilities.

**Old Colony Elder Services.** Old Colony Elders Services (OCES) provides a range of in-home services with the goal of helping older adults remain in their homes. Clients receive regular visits from social workers, nurses, and others who help with transportation, nutrition, medication and insurance. OCES reach is significant. In 2023, the agency delivered over 450,000 meals to households in the region in 2023.

# Community-Based Organizations

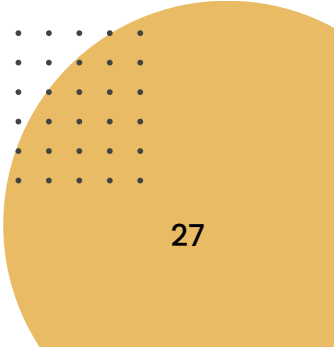
Community-based organizations are essential to the success of any plan to expand digital opportunity in cities like Brockton. They are generally more nimble than public agencies, allowing them to experiment with new programs and service delivery models. They also often have the most trust with individuals in underserved communities, putting them in the best position to inform the strategy and help ensure that it succeeds.



**MassHire Greater Brockton Career Center.** The MassHire Greater Brockton Career Center (MGBCC) serves roughly 4,000 clients per year, most of whom are unemployed and looking for work. [11] The center offers digital skills training on a number of topics, including introduction to computers and applying for jobs online; social media use, including job search on LinkedIn; Excel skills, from basic to advanced; and interviewing on Zoom. While these workshops are free and open to everyone, they are mostly provided online and require the basic skills and technology to participate.

**Cape Verdean Association of Brockton.** From ESOL instruction and small businesses assistance to supporting families in crisis, the Cape Verdean Association of Brockton (CVAB) serves the city’s immigrant communities with special emphasis on the needs of youth and older adults. CVAB employs a hub and spoke model, connecting residents with providers in the community that can deliver appropriate services.

[11] See: <https://www.mass.gov/info-details/fiscal-year-2024-ccpr>.



**Boys & Girls Clubs of Metro South.** The Boys & Girls Clubs of Metro South's Brockton clubhouse has a large computer lab with state of the art devices. After school and summer programs introduce youth to digital technology through STEM programming, including robotics, as well as digital photography and graphic design.

**Tech Goes Home.** A nonprofit based in Boston, Tech Goes Home (TGH) partners with community groups to provide digital skills training. The trainings are tailored to the needs of each community group's population. All participants receive a free Chromebook, and one year of internet service. To reach residents of Brockton, TGH is building new partnerships with New Birth Baptist Church and Winning Every Student.



# ACTION PLAN

## High-Impact Strategies to Increase Digital Opportunity in Brockton

Brockton has an unprecedented opportunity to increase digital opportunity by strategically deploying new state and federal funding. To win these resources and make and sustain as much progress as possible with them, the planning process identified a discrete set of meaningful and achievable near-term strategies across four key areas:

01  Plan governance, implementation, and evaluation

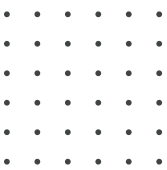
02  Internet access

03  Device access

04  Digital skills training

The center piece of this strategy is the formation of a Digital Opportunity Coalition. Forming a cross-sector coalition to close the digital divide is a best-practice in the field. There are numerous examples in Massachusetts and beyond that Brockton can emulate as it designs its own approach. [12] The landscape scan notes a number of organizations with existing initiatives and unique capabilities to reach and serve Brockton residents most in need of support. By regularly convening these groups around the implementation of this plan, the city can help establish respective roles, find synergy through coordination and collaboration, and unify groups to collectively advocate for state and federal resources over the long term.

[12] The National Digital Inclusion Alliance (NDIA) offers tips for getting started. See: [https://www.digitalinclusion.org/wp-content/uploads/dlm\\_uploads/2021/09/Building-a-Coalition.pdf](https://www.digitalinclusion.org/wp-content/uploads/dlm_uploads/2021/09/Building-a-Coalition.pdf).





# 01

## Plan governance and Implementation

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

**1.1 Assign a point person to organize the community's initial implementation effort.** Building a Digital Opportunity Coalition and formalizing its agenda will require considerable staff capacity, at least for the first 12 to 24 months. Brockton is working to fill this role by recruiting an American Connection Corps Fellow. MBI has partnered with Lead for America and Comcast to place full-time fellows in at least 15 communities for one year. If Brockton is unsuccessful in recruiting a fellow, it can utilize MBI resources from the Municipal Digital Equity Implementation Program to either hire a dedicated grant-funded staff person or contract with an experienced consultant.



- [Massachusetts Digital Equity Fellowship Opportunity](#)
- [Massachusetts Broadband Institute Municipal Digital Equity Implementation Program](#)



Short-term



**1.2 Establish goals and identify data sources to benchmark progress.** As Brockton's Digital Opportunity Coalition coalesces around action that it can take collaboratively, the group should co-develop formal goals. In doing so, coalition members will need to be creative about the use of data to gauge progress. The Census Bureau's American Community Survey (ACS) provides valuable, but imperfect measures. ACS data comes with a time lag of several years and the relatively small sample makes estimates imprecise, so it is hard to accurately track change. Resident surveys provide more timely information, but they are difficult and expensive to conduct. Data collected by agencies and community-based organizations in their normal course of business can provide a much better indication of changes in digital access and skills. From the libraries to the public schools, the city and its partners can develop and monitor key performance metrics to gain a better understanding of resident needs and progress meeting them.



- [Massachusetts Broadband Institute Municipal Digital Equity Implementation Program](#)

# 01



## Plan governance and Implementation (cont'd)

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

**1.3 Celebrate success and provide regular updates on Brockton's progress to legislators and leaders from relevant state agencies.** To maintain forward momentum, Brockton can engage legislative leaders and officials at the Massachusetts Broadband Institute, the Executive Office of Economic Development, and the Department of Public Utilities to share lessons-learned and actively advocating for the funds necessary to implement this plan and sustain the city's progress increasing digital opportunity for its residents over the long term.



[Massachusetts Broadband Institute Municipal Digital Equity Implementation Program](#)



Digital Opportunity Coalition



Ongoing



# 02

## Access to Fast and Reliable Internet

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

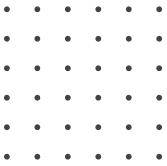
#### 2.1 Conduct outreach to income-eligible households to increase enrollment in discounted internet programs.

Many Brockton households are not signed up for heavily discounted internet service plans like Comcast Internet Essentials even though they qualify. And many that do currently have a low-cost plan through the ACP now need to make other arrangements with this \$30 per month subsidy coming to an end. Working in partnership with trusted community-based organizations, Brockton can launch and sustain efforts to communicate clearly with low-income households about their evolving options and direct them to responsible assistance enrolling in the program that best suits their needs.



Digital Opportunity Coalition

**\*Resources:** [ACP Wind-Down Resources for Partners from MBI](#)

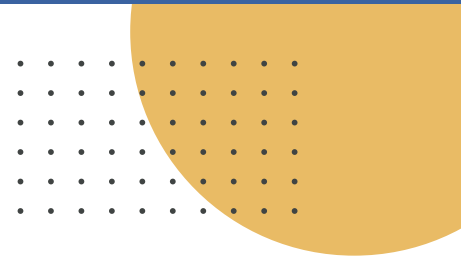


**2.2 Wire affordable housing developments.** Owners of affordable housing in Brockton can tap into two programs with significant funding to dramatically increase resident internet access. MBI's new Residential Internet Retrofit Program makes \$22 million available to equip public and affordable housing units in Massachusetts with state-of-the-art, fiber to the unit high-speed internet. The [Metropolitan Area Planning Council's Apartment Wi-Fi Program](#) provides funding, project management, and procurement support to give affordable housing residents in-unit high-speed internet at no cost. Brockton can closely track the participation of affordable housing owners in the city and actively encourage them to take advantage of these two unique funding opportunities to install modern wiring and networking equipment in their buildings.



[Massachusetts Broadband Institute Residential Retrofit Program](#)

# 02



## Access to Fast and Reliable Internet (cont'd)

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

**2.3 Increase eligibility for federal infrastructure funding by ensuring that service levels reported by ISPs reflect actual network performance.** Brockton has the opportunity to validate the accuracy of data provided to the FCC by ISPs. If the city believes networks in portions of the city perform below reported speeds, it can file a challenge and MBI will investigate at no cost. Any locations in the city where it finds service levels fall below 100/20 Mbps will be designated as underserved, making them eligible for federal funds from the Broadband Equity, Access, and Deployment (BEAD) Program.

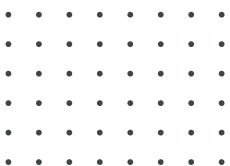


[Massachusetts Broadband Institute BEAD Challenge](#)

**2.4 Monitor ISPs and work proactively to help them improve network performance and reach.** New investment and technology could lead to competition among ISPs, helping to lower cost and increase speed and reliability for all Brockton residents. To further this outcome, the city can maintain current maps of both wired and wireless network coverage to understand how residents are served in each section of the city. These maps will inform how the city makes policy and leverages municipal assets to increase investment in broadband infrastructure over the long term.



- [Massachusetts Broadband Institute BEAD Challenge](#)
- [Urban Agenda Grant Program](#)



# 03

## Access to Capable Computing Devices

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

**3.1 Increase use of the Brockton Public Library’s loaner program.** BPL fills a valuable role loaning computers to residents who need them for a few weeks so they can apply for jobs or accomplish other discrete tasks. In tandem with efforts to promote enrollment in discounted internet, the city can market the availability of these free loaner devices, and provide the library with modest increases in funding to purchase and maintain additional devices in line with growing demand.



- [Urban Agenda Grant Program](#)
- [Massachusetts Broadband Institute Digital Equity Partnerships Program](#)

**3.2 Establish a program to recycle, refurbish, distribute, and service devices.** Brockton would benefit from a program dedicated to recycling computers and distributing them to residents in need. A number of organizations in Massachusetts and throughout the country have experimented with various nonprofit models, including creating local employment opportunities for community tech workers through an existing youth or community development organization. As a core component of the city’s digital opportunity plan, Brockton can likely tap resources to launch such an enterprise from MBI’s Digital Partnerships Grant.



- [Urban Agenda Grant Program](#)
- [Massachusetts Broadband Institute Digital Equity Partnerships Program](#)



# 04

## Digital Skills Training

### Strategy

### Funding Opportunities, Lead Organization, Timeframe

**4.1 Post digital navigators in organizations throughout the city.** Community-based organizations and public agencies that serve high concentrations of residents who would benefit from one-on-one support accessing digital services should have digital navigators on hand to assist them. Beyond people skills and cultural competency, these positions require limited technical knowledge. Brockton can gain efficiencies by centralizing efforts to train and support these workers. Resources for operations and salaries are available through a variety of sources, including the Massachusetts Department of Public Health, the Massachusetts Executive Office of Elder Affairs, Commonwealth Corporation, and MBI's Digital Equity Partnerships Program.

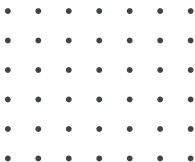


- [Massachusetts Broadband Institute Municipal Digital Equity Implementation Program](#)
- Partnership with [Tech Goes Home](#)
- City of Brockton Community Development Block Grants (CDBG) Program

**4.2 Build strong partnerships with national and statewide organizations that specialize in digital skills training.** From Tech Goes Home to Local Initiatives Support Corporation (LISC), organizations that specialize in providing digital skills training to various populations can provide high-quality programs to residents of Brockton. Working through the Digital Opportunity Coalition, Brockton can proactively establish relationships and ensure that these groups are present and contributing to the city at their full potential.



[Massachusetts Broadband Institute Municipal Digital Equity Implementation Program](#)



The map below offers an example of how the city can develop its own indicators of digital opportunity. The share of parents with online accounts for Infinite Campus (blue shape in pie chart) varies between 40 and 60 percent from school to school. While elementary schools in census tracts where more residents have wired broadband plans generally have higher rates of registration, this is not universally the case. This suggests some schools have been more successful than others helping families build the digital skills necessary to utilize the platform.

**Map 4: Parent and guardian registrations for Infinite Campus vary by school.**

