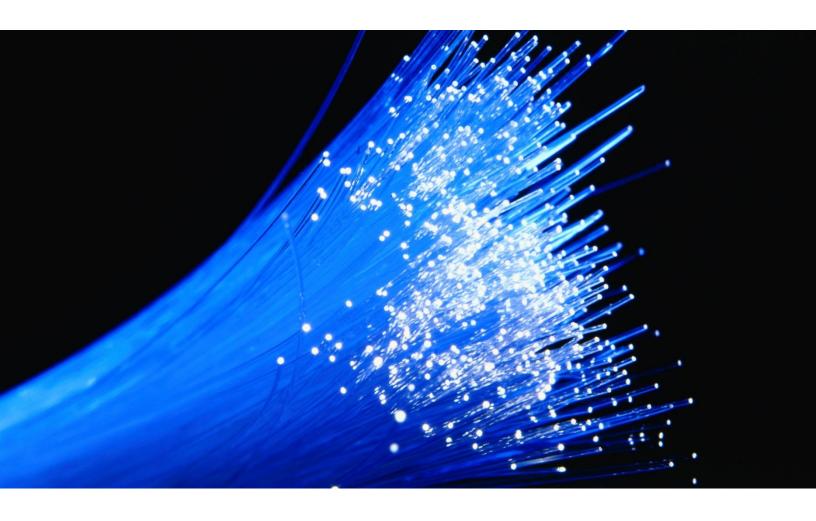
# ctc technology & energy

engineering & business consulting



# Municipal Digital Equity Plan Prepared for the City of Taunton, MA February 2025

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#### **Executive summary**

The City of Taunton commissioned CTC Technology & Energy (CTC) to engage in a study to document gaps in digital equity—a condition in which all residents have access to adequate broadband service and devices and possess the skills to use these resources—and develop strategies to bridge these gaps.

This report presents findings of significant digital equity gaps in Taunton, offers recommendations for how the city can address these gaps, and discusses how other municipalities have recently implemented state-funded programs and services. This includes initiatives launched after the end of the federal Affordable Connectivity Program (ACP), which until April 2024 had provided a \$30 monthly subsidy for broadband bills of eligible low-income households.

This study was funded by the Massachusetts Broadband Institute (MBI) at the MassTech Collaborative under its Municipal Digital Equity Planning Program. Funding came from State and Local Fiscal Recovery Funds provided under the American Rescue Plan Act (ARPA). This report may also be considered by MBI as it develops strategies for addressing digital equity gaps under the Massachusetts State Digital Equity Plan.<sup>1</sup>

#### 1.1 Project overview

This report presents findings (see Section 1.2) and recommendations (see Section 3) informed by the following tasks CTC performed over a six-month period, including:

- Analyzing the availability of broadband service, level of competition, and broadband pricing in Taunton (see Section 5).
- Determining levels of enrollment in the now-defunct Affordable Connectivity Program (ACP), which offered a \$30 monthly subsidy toward broadband bills until earlier this year and estimating of the gap in utilization by eligible households so as to inform future efforts to enroll residents in available low-cost plans (see Section 5.3).
- Conducting interviews with stakeholders from seven entities over the course of several meetings and follow-up communications to further illuminate gaps in affordability, skills, and devices; existence of local programs; and the ability of stakeholders to start or expand those programs to fill the identified gaps. See Section 6 for a report on the stakeholder meetings and Appendix B for the stakeholder questionnaire.

<sup>&</sup>lt;sup>1</sup> The Digital Equity Act is a \$2.75 billion federal program that, in part, funds state planning processes to establish a vision for digital equity that will guide overarching strategies and goals. The first draft of MBI's "Massachusetts State Digital Equity Plan" (SDEP) was released for public comment on November 13, 2023, and can be viewed here: https://broadband.masstech.org/news/mass-broadband-instituteannounces-municipal-digital-equity-planning-program-participants. The SDEP report was in the process of being finalized for submission to the NTIA at the time this report was provided to the City.

- Promoting MBI's statewide residential digital equity survey (see Appendix A) and reporting on Taunton-specific findings on topics including broadband utilization, affordability, skills, device access, and related topics (see Section 8).
- Developing recommendations on strategies and activities designed to address gaps using potentially available funding, potentially augmented by local funds (see Section 3).
- Tracking how other towns and cities have used funds from MBI's Implementation Grant Program to execute programs in digital literacy, device distribution, education, outreach and adoption, and public space improvements and Wi-Fi availability in apartments (see Section 4).
- Outlining models for how, in the absence of the ACP, the city can consider helping residents
  in connecting to broadband service with low-cost and any future subsidy programs. This
  includes opportunities for single-payer broadband arrangements with internet service
  providers, and promotion of low-cost broadband programs offered by local providers (see
  Section 7).

#### 1.2 Key findings

### 1.2.1 Taunton has nearly ubiquitous wireline broadband coverage from Comcast cable service, significant fiber coverage from Verizon Fios, and some fiber coverage from TMLP

The National Broadband Map reports that Comcast offers cable broadband at served broadband speeds to nearly every broadband serviceable location<sup>2</sup> in the city (99.4 percent of all locations). While the NTIA has defined "served broadband speeds" as 100/20 Mbps, Comcast offers customers in Taunton a minimum of 300/20 Mbps, and every location can receive a maximum speed of 1,200/40 Mbps. Additionally, Verizon offers its Fios fiber services to 15,131 (or 89.6 percent of all) locations in Taunton and the Taunton Municipal Light Plant (TMLP) serves 411 locations or approximately 2.4 percent of all residential locations in the city. The numbers are accurate as of September of 2024, according to the National Broadband Map.

### 1.2.2 Wireline broadband competition is present but not ubiquitous in the city, with approximately 10 percent of Taunton locations having access to only one wireline service

Comcast's cable service and Verizon's Fios service overlap significantly, and with three wireline broadband options in Taunton including TMLP's offering, 15,164 (or 89.7 percent of) residential locations have access to more than one wireline broadband service. However, this leaves 10.3 percent of locations with only one such provider. It is likely that many of these locations are multidwelling units into which neither Verizon nor TMLP has been able to construct fiber. This leaves residents of such units with only one wireline broadband option: Comcast. Some residents in such units also may still be using DSL-based data services, which provide substandard speeds over

made that the same is true for all households or units at that location.

<sup>&</sup>lt;sup>2</sup> The FCC Broadband Data Collection reporting uses the term "broadband serviceable location (BSL)" to represent address level information. A BSL is shown as a single served address for locations that may have more than one household or unit, as is the case with duplexes and multi-tenant or apartment buildings. In cases where an address or location is serviced by a single provider or technology, an assumption can be

legacy copper networks from Verizon. However, data on DSL availability is no longer publicly available from the FCC.

#### 1.2.3 TMLP has built out some fiber in Taunton

TMLP provides electric and broadband service in Taunton. To be prudent from a business standpoint, before constructing fiber broadband service in new areas of its service territory, TMLP asks residents to first express interest by filling out a form on the TMLP website. <sup>3</sup> When enough potential customers have shown interest in a given area, TMLP will plan its construction of last-mile fiber in what TMLP calls "fiberhoods." As noted above, at present, 411 Taunton locations have TMLP fiber broadband service available.

### 1.2.4 One-third of Taunton households have access to fixed wireless services, most of them at subbroadband speeds

T-Mobile, and to a lesser extent Verizon Wireless, offer fixed wireless home services (leveraging the networks previously used only for mobile service) to approximately 34 percent of locations in Taunton. These services provide an alternative to some existing wireline services, with the significant caveat that performance of these networks is dependent on individual subscribers' distance from wireless facilities and that the data speeds may be cut (or "throttled") by these providers during times of congestion. FCC data show that only one third of (or 5,720) Taunton locations have access to licensed fixed wireless services, with 3,794 locations able to receive up to 25/3 Mbps, 177 locations receiving up to 50/4 Mbps, and 1,749 locations able to receive 100/20 Mbps or higher. These licensed fixed wireless services also require a bundled mobile plan and phone at an additional cost.

### 1.2.5 Taunton lags the state and slightly leads nationwide averages of home internet subscription rates, but low-income households experience larger gaps

According to the U.S. Census Bureau's American Community Survey (ACS) data, 75 percent of households in Taunton subscribe to residential internet services via wireline technology (cable, fiber, or DSL), which is below the state figure of 80.4 percent and ahead of the national figure of 73.3 percent. However, among households without wired broadband services, 82.5 percent earn less than \$75,000 annually. This points to further need for local efforts to connect eligible households with available low-cost broadband subscriptions through programs such as Comcast's Internet Essentials and Verizon's Forward program (see section 5.4 for detail on these programs).

### 1.2.6 Approximately 39 percent of households that were potentially eligible for the FCC's Affordable Connectivity Program (ACP) actually enrolled by the program's end

The ISPs in Taunton all participated in the ACP, either directly or through an affiliate. The federal ACP program paid a \$30 monthly subsidy for broadband service for eligible low-income residents. As of January 31, 2024, FCC data indicate that 4,254 households in Taunton were receiving the ACP subsidy—or 39 percent of the estimated 10,912 households eligible for the program. <sup>4</sup> This enrollment rate had steadily increased by 15.3 percentage points in the last year of the ACP—

<sup>&</sup>lt;sup>3</sup> "Who We Are," Taunton Municipal Light Plant Online Internet Services, https://internet.tmlp.com/Home/About.

<sup>&</sup>lt;sup>4</sup> Estimates are based on 2022 American Community Survey reported data on household income, food stamp recipiency, Medicaid recipiency, supplemental security income, and public assistance income.

enrollment rates for eligible households were at 23.7 percent in January 2023 and had progressed to 30.6 percent in June 2023. This increase may reflect positive results of efforts by local entities to boost awareness and participation when the program was still active.

When the ACP program ended, it meant that 4,254 Taunton households lost this benefit. Yet most internet service providers (ISPs) in Taunton do offer low-cost broadband subscriptions to eligible households. These programs should be promoted so that households struggling to pay their internet bills each month, or those without service currently, are aware of other options for discounted service.

### 1.2.7 Significant numbers of Taunton households lack a device at home according to survey data and stakeholders interviewed for this report

ACS data show that 9.3 percent of households in Taunton do not own any computing device, a figure that is higher than both the state and national figures. Even more, the data show that 24.9 percent of households do not have a desktop or laptop computer specifically, which is higher than the state and national figures of 17.2 percent and 20.7 percent, respectively. This gap has been widely cited by the stakeholders engaged with for this report, including the Council on Aging, Boys and Girls Clubs of Metro South, Taunton Housing Authority, Community Counseling of Bristol County, and Old Colony YMCA. This suggests that more device distribution programs may be necessary, especially among individuals served by key stakeholders that participated in this study.

### 1.2.8 Taunton respondents to the MBI survey who had household income of less than \$60,000 reported significantly lower confidence in performing common online tasks

With respect to skills, 89 percent of respondents with household income above \$60,000 reported that searching and applying for a job was "easy," yet just 74 percent of the respondents from lower income households said so. Similarly, 69 percent of respondents with income above \$60,000 found searching and applying for benefits or resources online to be "easy," but only 46 percent of their counterparts felt the same. This points to the need for more digital literacy class opportunities for low-income households in Taunton, so that people seeking skills training can receive this education and support.

### 1.2.9 Low-income residents report significant difficulty in paying their monthly broadband bills, pointing to the need for wider enrollment in subsidy and low-cost programs

Paying monthly broadband bills is a challenge for low-income Taunton residents. The average monthly cost of home internet service for all Taunton residents who participated in the MBI survey is \$139 for bundled service, and \$86 for unbundled service (see Section 8.1.2). Of respondents from households with income lower than \$60,000 per year, 63 percent said it was somewhat hard or very hard to pay their internet bill each month, compared to 47 percent of respondents with household income of more than \$60,000 per year. Given that Taunton 's broadband providers offer low-cost internet options like Comcast's Internet Essentials and Verizon's Forward program, this finding underscores the need for wider enrollment support in these programs among low-income residents.

### 1.2.10 Across the income spectrum, Taunton residents are very concerned about privacy and security online

Taunton residents who participated in the MBI residential survey expressed deep concerns about online safety and privacy. These sentiments held across the income spectrum, with 83 percent of

respondents saying they are very or somewhat concerned by their online safety. Almost all respondents, 91 percent, said they were most concerned about their data being stolen or used without their consent. Additionally, 67 percent are most concerned that they or a loved one could get scammed or tricked, and 63 percent are most concerned about being tracked or surveilled. This suggests a need for skills training and education in the community.

#### 2 Digital equity funding landscape

To implement strategies recommended in this report, the City and its stakeholders can potentially leverage certain funding sources.

#### 2.1 American Rescue Plan Act and Digital Equity Act

This subsection provides general background on the major funding sources. The next two subsections provide detail on what is available to Taunton.

The American Rescue Plan Act (ARPA), established in 2021, gave State and Local Fiscal Recovery funds to both the State of Massachusetts and directly to local jurisdictions. Through MBI, the state has allocated \$75 million in state ARPA funding to digital equity and directed \$50 million to grants through its Broadband Innovation Fund. This fund supports grants under the Digital Equity Partnerships Program <sup>5</sup> and the Municipal Digital Equity Planning Program (which funded the development of this municipal report). <sup>6</sup>

Additionally, the National Telecommunications and Information Administration (NTIA) offered grant programs for promoting digital equity, supporting digital inclusion activities, and building capacity for state-led efforts to increase adoption of broadband by their residents through the Digital Equity Act of 2021.<sup>7</sup> The bill has allocated \$60 million for planning grants for states, territories, and Tribal governments to develop State Digital Equity Plans. MBI is the lead agency for Massachusetts and was responsible for conducting the planning process and drafting the state Plan with a \$1 million federal grant under this program. The Plan was submitted to NTIA at the end of 2023.

The state digital equity plans set the stage for the \$1.44 billion Digital Equity Capacity Building Grant program. The Capacity Grant program opened in early 2024 and is being reviewed on a rolling basis, allocating funding over several years. Under this program, states apply for funding to support the implementation of their digital equity plans. States receive funding based on a legislatively mandated allocation formula. Once received, states have five years to use this federal funding to develop their own digital inclusion projects, including competitive grant programs for activities by state agencies, local governments, non-profits, and others.

Following the Capacity Grant program, NTIA implemented the \$1.25 billion Digital Equity Competitive Grant program. This direct funding program awards individual grants to eligible entities, including local governments, nonprofits, and community anchor institutions. Funding will support programs that address the affordability of services and devices, provide education and tools to increase privacy and cybersecurity while online, develop digital literacy and technical skills for personal and professional growth, and provide technical support and training for repair and updates to devices. (Applications for this program were due on September 23, 2024, and the awards are likely to be announced by NTIA in early 2025.)

<sup>&</sup>lt;sup>5</sup> "Digital Equity Partnerships Program," MassTech, <u>www.broadband.masstech.org/partnerships</u>.

<sup>&</sup>lt;sup>6</sup> "Municipal Digital Equity Planning Program," MassTech, <u>www.broadband.masstech.org/municipal</u>.

<sup>&</sup>lt;sup>7</sup> "Digital Equity Act of 2021," Congress.gov, <a href="https://www.congress.gov/index.php/bill/117th-congress/house-bill/1841">https://www.congress.gov/index.php/bill/117th-congress/house-bill/1841</a>.

#### 2.2 MBI-funded opportunities

Two groups of MBI-funded programs provide opportunities for the City of Taunton.

### 2.2.1 MBI's Municipal Digital Equity Implementation Program has launched and is available to municipalities for amounts up to \$100,000

Following the Digital Equity Planning Program through ARPA, MBI launched its direct grant program—the Municipal Digital Equity Implementation Program (MDEIP)—for municipalities to access funds to implement programs proposed through this and similar reports. The City of Taunton can start its application for these funds immediately, using this report and ongoing conversations with local organizations as a guide.

The one-time grant of up to \$100,000 is intended to help municipalities make local digital equity investments and execute projects that will increase access, adoption, and usage of the internet. Applications are reviewed by MBI on a rolling basis (see Section 4 for examples of implementation projects in other municipalities).

CTC is ready to assist the City in the process of applying for an implementation grant at no cost to the City; MBI has already pre-approved covering the cost of this assistance.

### 2.2.2 MBI's Digital Equity Partnerships Program supports nine organizations across the state, which can potentially assist the City of Taunton

MBI's Broadband Innovation Fund addresses immediate and ongoing digital equity needs and has awarded nine organizations across the state with funding necessary to implement various initiatives. Some of these efforts can indirectly benefit the City of Taunton, as noted below.

In September 2022, MBI issued an RFP soliciting partnerships with interested Regional Planning Agencies, Philanthropic Foundations, public and nonprofit service providers, and other organizations across the state to facilitate the implementation of programs that address six key areas of digital equity:

- 1. digital literacy,
- 2. Wi-Fi access,
- 3. public space modernization,
- 4. connectivity for economic hardship,
- 5. device distribution and refurbishment, and
- 6. education, outreach, and adoption.

In 2023, MBI announced it was awarding funds through the Broadband Innovation Fund to nine partners: AgeSpan, Baystate Health, City of Boston, Tech Goes Home, Massachusetts League of

<sup>&</sup>lt;sup>8</sup> Municipal Digital Equity Implementation Program, MBI Massachusetts Broadband Institute, <a href="https://broadband.masstech.org/digital-equity-implementation">https://broadband.masstech.org/digital-equity-implementation</a>.

<sup>&</sup>lt;sup>9</sup> "Municipal Digital Equity Implementation Program", MBI, <a href="https://broadband.masstech.org/digital-equity-implementation">https://broadband.masstech.org/digital-equity-implementation</a>.

Community Health Centers, Metropolitan Area Planning Council, Metro North Workforce Investment Board, UMass Lowell, and Vinfen. Each partner has a defined scope of services, and their programs will be in operation through June 30, 2026. To varying degrees, the City of Taunton or its residents can benefit from some of the programs, as noted in the following subsections.

#### 2.2.2.1 Tech Goes Home

Tech Goes Home's goal is to support residents in Massachusetts to receive access to the digital tools, skills, and connectivity they need to thrive. In April 2023 it was announced that Tech Goes Home would be receiving a grant of \$4.5 million to address four critical areas to close the digital divide:

- 1. Connectivity for economic hardship,
- 2. Digital literacy,
- 3. Device distribution and refurbishment, and
- 4. Education, outreach, and engagement.

Through MBI's Partnership Program, 16 local entities in Brockton, Chelsea, Everett, Lawrence, Lowell, Lynn, Malden, New Bedford, Pittsfield, Quincy, Revere, Springfield, and Worcester have partnered with Tech Goes Home to advance digital education and device gaps by providing digital tools, skills, and connectivity necessary to thrive.<sup>10</sup>

Local entities that are interested in offering digital literacy education and device distribution programs can still partner with Tech Goes Home directly. To get started on this process, interested local entities can complete this <u>partnership inquiry form</u>.<sup>11</sup>

#### 2.2.2.2 Metropolitan Area Planning Council

MBI has partnered with the Metropolitan Area Planning Council (MAPC), to award \$5.6 million for the Apartment Wi-Fi program.

This program allows MAPC to provide procurement support, capital expense funding, and funding for the first year of operating expenses to provide free Wi-Fi internet access to residents living in roughly 2,400 public and affordable housing units in Massachusetts. The effort targets residents most likely to face barriers to connectivity—those experiencing housing insecurity who have access to broadband but cannot afford it.<sup>12</sup>

If Taunton's housing authority wishes to consider applying for this program it can expressing interest at this link.

<sup>&</sup>lt;sup>10</sup> "Massachusetts Awards \$14 Million to Address Digital Divide," MBI,

https://broadband.masstech.org/news/massachusetts-awards-14-million-address-digital-divide.

<sup>11 &</sup>quot;Partnerships," Tech Goes Home, https://www.techgoeshome.org/becoming-a-tgh-site.

<sup>&</sup>lt;sup>12</sup> "Smart Growth and Regional Collaboration: Apartment Wi-Fi," MAPC, <a href="https://www.mapc.org/ourwork/expertise/digital-equity/apartment-wi-fi/">https://www.mapc.org/ourwork/expertise/digital-equity/apartment-wi-fi/</a>.

#### 2.2.2.3 Mass League of Community Health Centers

The Mass League is a recipient of MBI's Digital Equity Partnership grant, using its funding to help hire and staff a digital navigator at 12 community health centers across the Commonwealth. The navigators assist the health center patients with low-cost internet enrollment. Each health center also chose what digital health tools they would focus on, which could be telehealth, remote patient monitoring, or enrollment in patient portals with the goal that if patients are digitally engaged in their care, they will have healthier outcomes.

Mass League has an established digital navigation program under the FQHC (federally-qualified health center) Telehealth Consortium (FQHC Telehealth Consortium – Bridging the Health Equity Divide), which was founded during the pandemic as a partnership between C3 ACO and the Mass League. Community Health Centers serve the most underserved and diverse populations in healthcare, so the services are provided by and at the health centers for their patients in need.

Although the Manet Community Health Center in Taunton does not participate in this program, the SSTAR Family Health Center in the neighboring City of Fall River participates in the FQHC Telehealth Consortium's digital navigation program. Community health centers often serve residents beyond the municipality in which the health center is located. As such, residents of Taunton who use this health center can receive access to these digital navigation services.

#### 2.2.2.4 AgeSpan

AgeSpan is a statewide organization supporting more than 230 age- and dementia-friendly communities, including Taunton. (Age-and dementia friendly communities are municipalities that have infrastructure, programs, and policies geared to assist older people or people with dementia. Taunton is included on the state's list of 230 such municipalities.<sup>13</sup>)

AgeSpan supports MBI as part of the Statewide Digital Equity Plan Working Group and collaborates with various partners to promote inclusion of older adults in state and local digital equity planning and programs, working to connect aging services (councils on aging, affordable senior housing, aging service access points) to other partners doing this work including colleges, libraries, and housing partners.<sup>14</sup>

Areas of focus for this program include providing tablets, offering training to help blind and visually impaired individuals, offering educational programs to protect against online fraud online, and helping boost enrollment in low-cost broadband programs. The eight counties involved in this program include Bristol County.<sup>15</sup>

James Fuccione, the Senior Director of the Massachusetts Healthy Aging Collaborative (a co-lead to the AgeSpan Digital Equity Partnerships grant), stated that he and his team can assist Taunton's Council on Aging if it is interested in establishing new digital access programming. One model is a

https://broadband.masstech.org/news/healey-driscoll-administration-awards-20-million-boost-digital-equity.

<sup>&</sup>lt;sup>13</sup> "Examples of age- and dementia friendly community characteristics," Mass.gov,

https://www.mass.gov/info-details/examples-of-age-and-dementia-friendly-community-characteristics.

<sup>&</sup>lt;sup>14</sup> "About Us," AgeSpan, <a href="https://agespan.org/about-us/">https://agespan.org/about-us/</a>.

<sup>15 &</sup>quot;Healey-Driscoll Administration Awards \$20 Million to Boost Digital Equity," MBI, https://broadband.masstach.org/news/healey-driscoll-administration-awards-20-1

Digital Access Program that offers a free tablet device, training on how to operate the device, and free data plans for individuals without broadband access in their home for up to a year. More details on this program, which is offered on the North Shore, can be found at this link. Although the model program is not available to Taunton residents, AgeSpan can provide information and resources to assist Taunton's Council on Aging if it wants to develop similar programming.

#### 2.2.2.5 Vinfen

In April 2023, Vinfen, on behalf of a group of Boston hospitals and other entities comprising the Human Services Alliance for Digital Equity, <sup>16</sup> received \$4.3 million to increase digital inclusion among low-income people with physical disabilities, intellectual and developmental disabilities, and serious mental health conditions. The alliance deploys 15 technology navigators to help people obtain digital devices, develop digital skills, and enroll in low-cost broadband programs. The technology navigators collaborate with people served in their homes and in service settings. Individuals are primarily served through a closed referral system. Still, the alliance can offer materials and resources to interested municipalities seeking information for digital inclusion in telehealth for individuals with disabilities. In addition, the City of Taunton can contact the MBI Partnerships Program lead at Vinfen, Jessie Wolfe, for more information on how Taunton residents with physical, intellectual, or developmental disabilities can begin receiving telehealth services from participating organizations of the Alliance.

#### 2.2.2.6 Metro North Workforce Investment Board

The Metro North Workforce Investment Board was formed to set and oversee workforce policy in the Metro North region of Massachusetts. The goal of the board is to ensure federal and state funds are efficiently and appropriately applied to workforce development programs and initiatives that serve the needs of the region and its residents. In 2023, the Board received an award of \$4.1 million to expand its digital equity initiatives by hiring and training 32 digital navigators and provide employment and career counseling, provide 1,500 refurbished laptops, 300 hotspots, and provide internet access and IT support to recipients. These digital navigators are stationed at 16 local and regional partner organizations and serve 39 Cities and Towns in and around Metro North. Unfortunately, Taunton is not included in this list.

#### 2.2.2.7 UMass Lowell

A \$4 million grant was awarded to UMass Lowell to lead a digital equity initiative serving Leominster, Fitchburg, Lowell, Haverhill, and Lawrence, and communities in Merrimack Valley, Northern Worcester County and the North Shore. Partnering with 13 other higher education community entities, UMass Lowell is providing technical skills, support and training for student digital navigators, and project management resources. Through this grant, UMass Lowell will also be improving multiple public facilities with broadband service, creating a multi-tiered digital literacy

<sup>&</sup>lt;sup>16</sup>Organizations that comprise the Alliance are: <u>Advocates</u>, <u>Behavioral Health Network</u>, <u>Beth Israel Deaconess Medical Center</u>, <u>Boston Center for Independent Living</u>, <u>Clinical Support Options</u>, <u>Open Sky</u>, <u>Riverside Community Care</u>, and Vinfen.

<sup>&</sup>lt;sup>17</sup> "Home," Metro North Workforce Investment Board, https://masshiremetronorth.org/.

<sup>&</sup>lt;sup>18</sup> "Healey-Driscoll Administration Awards \$20 Million to Boost Digital Equity," MBI, https://broadband.masstech.org/news/healey-driscoll-administration-awards-20-million-boost-digital-equity.

and navigation initiative that establishes a regional help desk at UMass Lowell and advances new digital literacy programs, distributing 1,200 new or refurbished devices, and expanding low-cost broadband outreach and adoption programs at six community-based organizations.<sup>19</sup>

#### 2.2.2.8 City of Boston

The City of Boston was awarded \$5 million in grant funding directed to the Boston Housing Authority to support residents seeking affordable and dependable internet connectivity, and to other community organizations that support telehealth programs in Boston and establish workforce development programs through refurbishing distributed devices. A portion of this grant will also go toward the expansion of the City's publicly accessible Wicked Free Wi-Fi network, and to expand the City's Digital Equity Fund.<sup>20</sup>

#### 2.3 Four other funding opportunities are potentially available to the City of Taunton

#### 2.3.1 MBI's Residential Retrofit Program

The Residential Retrofit program deploys fiber at approximately 22,000 public and affordable housing properties to replace deficient wiring and infrastructure through grants to qualified ISPs who will install, own, and maintain equipment.<sup>21</sup> This program is operated by MBI using Capital Projects Fund money.

Similar to MAPC's Apartment Wi-Fi program application, Taunton's housing authority can apply for this program online by expressing interest <u>at this link</u>.

#### 2.3.2 Bristol Elder Services

Bristol Elder Services (BES) operates a network of in-home support to seniors and supports local Councils on Aging with the goal of enhancing the life of elderly people, individuals with disabilities, and their families in Bristol County. <sup>22</sup> BES operates a grant that entities can apply for to support programming to enhance the lives of seniors. This grant is supported by federal Title III funds under the Older Americans Act, which allows states to offer grants to advocate for and develop programs in nutrition, supportive services, caregiving, and preventative services for individuals aged 60 and over. <sup>23</sup> Past awardees used these funds to develop virtual and in-person digital literacy classes on topics that include "how to operate a smartphone," and telehealth education (how to book appointments online, how to attend a virtual appointment, and how to renew subscriptions online), and received awards between \$5,000 and \$10,000.

The next application window for this grant opens in March 2025 and will close at the end of May 2025. A representative at Bristol Elder Services said the organization will circulate the details of this grant

<sup>&</sup>lt;sup>19</sup> "Healey-Driscoll Administration Awards \$20 Million to Boost Digital Equity," MBI, https://broadband.masstech.org/news/healey-driscoll-administration-awards-20-million-boost-digital-equity.

<sup>&</sup>lt;sup>20</sup> "\$5 Million in New Grant Funding to Expand Digital Equity," MBI, <a href="https://broadband.masstech.org/news/5-million-new-grant-funding-expand-digital-equity">https://broadband.masstech.org/news/5-million-new-grant-funding-expand-digital-equity</a>.

<sup>&</sup>lt;sup>21</sup> "Residential Retrofit Program," MBI, https://broadband.masstech.org/retrofit.

<sup>&</sup>lt;sup>22</sup> "About Us," Bristol Elder Services, <a href="https://www.bristolelder.org/about-us/">https://www.bristolelder.org/about-us/</a>.

<sup>&</sup>lt;sup>23</sup> "Older Americans Act: Overview and Funding," Congressional Research Service, <a href="https://crsreports.congress.gov/product/pdf/R/R43414">https://crsreports.congress.gov/product/pdf/R/R43414</a>.

program (including maximum award amounts and the application window) to all Councils on Aging and other senior services organizations in Bristol County in February of 2025.

#### 2.3.3 Municipal Fiber Grant

The Massachusetts Division of Local Services is offering municipalities with the opportunity to apply for the Municipal Fiber Grant program, which offers assistance for the construction of municipally-owned fiber networks. Through this grant, the state hopes for municipalities to achieve certain goals of improving operations or improving disaster recovery and resiliency. Examples of this may include prevention of cyber security risks in local government, providing room for growth in internet bandwidth as municipalities grow, and supporting various infrastructure that rely on dependable technology for municipal needs including public safety, radio, and emergency operations centers.<sup>24</sup>

All fiber built must be owned by the municipality, and awards are up to \$250,000 per individual municipality, or \$500,000 for multi-jurisdictional municipalities. In 2024 Taunton received \$242,698 through this program for expansion of the city's existing fiber optic infrastructure. The next grant window opens on March 10, 2025, and will close on April 10, 2025.<sup>25</sup>

### 2.3.4 The Federal Communications Commission's E-Rate program can bring discounted services to schools and libraries in the area

The Federal Communications Commission's E-Rate program was created in 1996 to enhance access to advanced telecommunications and information services for all public and nonprofit elementary and secondary school classrooms and libraries. <sup>26</sup> E-Rate is one of four programs comprising the Universal Service Fund (USF) and is funded by fees paid by telecommunications companies to fulfill the Congressional goals of universal service.

E-Rate is a \$4.27 billion federal funding program managed by the Universal Service Administrative Company (USAC) that approves and provides subsidy discounts for telecommunications and information services for schools and libraries. In late 2023, the FCC made the latest addition to the list of eligible services by approving subsidies for Wi-Fi services on school buses as an eligible program expense to help close the "homework gap" for students with limited broadband access at home.

Eligible schools and libraries identify goods or services they need and submit a request for competitive bids to USAC, which then posts these requests on its website for vendors to bid on. After reviewing the vendors' bids, the school or library selects the most cost-effective eligible products and services using price as the primary factor. It then applies to USAC for approval of the desired purchases.

Funds are awarded as discounts ranging from 20 to 90 percent of the eligible costs and discount levels are based on the poverty level of the schools. Rural schools and libraries may also receive a higher discount. Recipients must pay a portion of the service costs. Often, schools and libraries will

<sup>&</sup>lt;sup>24</sup> "About the Municipal Fiber Grant Program," Mass.gov, <a href="https://www.mass.gov/info-details/about-the-municipal-fiber-grant-program">https://www.mass.gov/info-details/about-the-municipal-fiber-grant-program</a>.

<sup>&</sup>lt;sup>25</sup> "Municipal Fiber Grant Program FAQ," Mass.gov, <a href="https://www.mass.gov/info-details/municipal-fiber-grant-program-faq#what-kind-of-projects-are-eligible?-">https://www.mass.gov/info-details/municipal-fiber-grant-program-faq#what-kind-of-projects-are-eligible?-</a>.

<sup>&</sup>lt;sup>26</sup> Universal Service Administrative Co., E-Rate, <a href="https://www.usac.org/e-rate/">https://www.usac.org/e-rate/</a>.

form consortia to centralize and manage the E-Rate application, reporting, and budgeting processes with a central point of contact.<sup>27</sup>

Eligible schools and libraries in Massachusetts received \$10.1 million in E-rate disbursements in 2023. The Massachusetts Board of Library Commissioners tracks E-Rate participation by libraries and library networks and provides information and resources about the program. The Department of Elementary and Secondary Education's Office of Digital Learning provides similar outreach and education for schools. While Massachusetts does not manage a state-wide consortium, several of the state's library networks and school districts participate in E-Rate. Taunton Public Library is run by the SAILS Library Network Consortium, which subsidizes the library's internet costs with E-Rate funds.

As of December 2024, the E-Rate application window has not opened for Fiscal Year 2025. Interested entities should monitor <u>USAC's E-Rate</u> webpage for the upcoming application window announcement.

<sup>&</sup>lt;sup>27</sup> Universal Service Administrative Co., E-Rate, Consortia, <a href="https://www.usac.org/e-rate/applicant-process/before-you-begin/consortia/">https://www.usac.org/e-rate/applicant-process/before-you-begin/consortia/</a>.

<sup>&</sup>lt;sup>28</sup> Universal Service Administrative Co., E-Rate FRN Status Tool FY2016+, <a href="https://opendata.usac.org/E-Rate/E-Rate-FRN-Status-Tool-FY2016-/8xzh-ytkh">https://opendata.usac.org/E-Rate/E-Rate-FRN-Status-Tool-FY2016-/8xzh-ytkh</a>.

<sup>&</sup>lt;sup>29</sup> E-rate in Massachusetts Libraries, <a href="https://mblc.state.ma.us/programs-and-support/e-rate/index.php">https://mblc.state.ma.us/programs-and-support/e-rate/index.php</a>.

<sup>&</sup>lt;sup>30</sup> Technology Planning and Sustainability, E-Rate, https://www.doe.mass.edu/odl/planning-funding/E-rate/.

#### 3 Recommendations

CTC recommends the City and its stakeholders explore the following strategies and pursue available funding sources to help close digital equity gaps in Taunton. Most recommendations involve work that established, proven, and trusted community partners could perform.

Table 1 and the following subsections summarize the major recommendations of this report. The first recommendation—for setting up an annual or biannual City-wide digital equity meeting—would create an entity within Taunton comprised of the City and its departments, local stakeholders, and any other entities. Taken together they would be tasked with facilitating coordination, setting priorities, and making funding recommendations.

**Table 1: Summary of recommendations** 

Recommendation	Access and affordability	Devices	Skills	Privacy/ security	Potential annual cost
Convene annually or biannually to harmonize local digital equity efforts and support outreach to funders	х	х	х	Х	N/A
Consider setting up a modest City grant fund to fill small gaps and reduce reliance on uncertain or finite state or federal funding streams	X	Х	X	Х	\$30,000
Consider contracting for digital navigation services to help residents with skills development and enrollment in low-cost internet subscription plans	X	Х	X	X	\$62,400 (estimate is based on 20 hours per week for two years—or 40 hours a week for one year—at \$30/hour)
Establish a partnership between Taunton Public Schools, Bridgewater State University, and the Council on Aging so that interested students can provide tech support at the COA Community Center's computer lab	Х		Х		~\$5,000 for promotional materials and training
Consider funding the purchase of desktop computers at the Council on Aging's computer lab to host digital literacy		Х			~\$9,000 (approximately \$6,000 for 6 desktops, and \$3,000 for 6

Recommendation	Access and affordability	Devices	Skills	Privacy/ security	Potential annual cost
classes					laptops)
Consider funding the purchase of 12 new laptop devices for the Boys and Girls Clubs of Metro South for their Wi-Fi equipped clubhouse		х			~\$6,000 for 12 laptops
Consider funding Wi-Fi installation and purchase of 12 computers and a printer at Taunton Housing Authority development		Х			Obtain cost estimate for Wi- Fi in community space; \$12,800 for computers and printers
Consider purchasing 6 laptops for Girls Inc. planned Technology Room		Х			\$5,000
Consider purchasing 10 laptops for Old Colony YMCA's planned Technology Room		Х			\$5,000
Expand partnerships with device-provision and digital literacy training entities to ensure all Taunton residents have access to classes and devices	X	X	X		Approximately \$1,500 per learner
Explore cybersecurity programming/partnership opportunities				Х	Programs are state-funded and free to individuals and entities

### 3.1 Form a Citywide Digital Equity Coalition and convene annual or biannual meetings to harmonize efforts and support outreach to funders

City government is well suited to implementing some solutions, especially with respect to infrastructure, staffing, and certain kinds of programs, but it cannot address all challenges related to digital equity: connecting residents with subsidy programs, providing devices, assisting with device maintenance and updates, and helping people develop better computer skills.

But an important role the City of Taunton could play is in forming a Digital Equity Coalition to convene the many organizations already providing or planning to provide services in Taunton. Already, entities including the Housing Authority, Taunton Public Schools, Council on Aging, and Taunton Public Library, and several others are already engaged in various digital equity efforts, some of them covering overlapping populations. A coalition meeting annually or biannually—with the structure to

encourage members of the Coalition to distribute timely and relevant information and opportunities throughout the rest of the year—would help inform a holistic programmatic strategy and make recommendations to funders and philanthropies.

Such coalitions are critical to engage stakeholders and drive change. As resources permit, including the gap funding program discussed below, the City could expand the Coalition and incorporate a broader set of organizations that serve the residents of Taunton with critical support services but are not currently directly engaged in this effort. By working with MBI, and directly with regional entities, the City could expand partnerships with libraries, senior/aging groups, social services distribution agencies, and public health entities to coordinate efforts.

### 3.2 Consider setting up a modest City grant fund to fill small gaps and reduce reliance on uncertain or finite state or federal funding streams

The City of Taunton could benefit from using local resources to create a small grant fund to address specific gaps in digital equity and inclusion. The City could consider creating a modest grant fund of perhaps \$30,000, with awards of approximately \$2,500 to \$5,000 to local nonprofits and community organizations to support existing programs and provide seed funding for new ones. The City should reevaluate the total grant fund amount each year and consider incremental increases as additional funds become available.

A simple grant application, organized and managed by the City, could allow local organizations serving Taunton to provide specific proposals for training, enrollment support for affordability programs, or device subsidy and assistance programs. The City could develop metrics and reporting on timelines, financial accountability, and program results that will demonstrate the effectiveness of the use of these awarded funds and how they help meet digital equity goals and objectives.

As an example of how this has been implemented on a large scale, the City of Boston has been operating its Digital Equity Fund since 2017. Boston's Digital Equity Fund awards grants to local organizations for various digital equity-related programming, including digital literacy and education for individuals to learn how to use the internet and develop digital tools for personal or employment-based needs, device and internet access and affordability, and digital navigation assistance to support individuals in accessing telehealth, government services, and other programs that exist online.<sup>31</sup> In its first year of operation the Digital Equity Fund had \$35,000 to offer local organizations. In 2024, this grant fund grew to \$1,418,000 to be distributed among 34 community-based organizations in early 2025.

## 3.3 Consider contracting for digital navigation services to help residents with skills development and enrollment in low-cost internet subscription plans

The City may wish to consider contracting with a vendor who can provide seniors and other Taunton residents with technical and digital literacy support, as well as enrollment assistance in low-cost broadband services. A person providing such services is often called a "digital navigator."

<sup>&</sup>lt;sup>31</sup> "Digital Equity Fund," City of Boston, <a href="https://www.boston.gov/innovation-and-technology/2023-digital-equity-fund#about-the-fund">https://www.boston.gov/innovation-and-technology/2023-digital-equity-fund#about-the-fund</a>.

Although the City may not be in a position to add a new staff member, it can identify potential partners following the outcome of an MBI Request for Information (RFI) which is designed to provide a list of qualified service providers and vendors providing services or operating programs that promote digital equity in Massachusetts. <sup>32</sup> Digital navigation services fall under the education, outreach, and adoption category in this RFI. Based on MBI estimates, the hourly wage for digital navigation services may be between \$20 and \$30.

Funding assistance could potentially come from an available MBI implementation grant, foundations, or potentially other sources if no funds are available from the City budget. At \$30 hourly, the cost of providing 40 hours of support weekly to City residents would come to \$62,400 for one year. If Taunton only had this level of funding available from a grant, another option would be to spread the funds over two years at an intensity of 20 hours per week. This would mean the program would last longer and perhaps be easier to extend to additional years if new funds became available.

Several entities have expressed interest in receiving digital navigation support, as summarized below.

- Council on Aging: A representative at the COA stated that seniors call in frequently asking about discounted internet service options, but staff are not aware of what digital services may be currently available. The same representative stated that staff notice most seniors have cell phones and have access to computers but are not confident using devices beyond the basic telephone operation. Having a Digital Navigator available to come to the Senior Center once a week, bi-weekly, or less frequently, to offer informational and enrollment assistance in low-cost broadband programs and other applications online, could be extremely helpful for its senior population.
- Taunton Housing Authority: The Housing Authority is currently building a community center,
  which will have computers and internet access. The planned completion of this project will
  be in 2025. The Housing Authority could benefit from having a Digital Navigator stationed at
  this community center once or twice a week to provide enrollment assistance in low-cost
  broadband programs and other applications online and offer technical support for residents.
- Taunton Public Schools: The schools do not currently have a dedicated staff member supporting students and their families on digital equity-related topics, including information sharing and enrollment support in low-cost internet programs. As new students enter the Taunton school system each year, the school district could benefit from having a digital navigator available at back-to-school and other school- or district-wide events to assist students and their families with various online applications, enrollments (including enrollment in low-cost broadband internet programs), and school registration.
- Community Counseling of Bristol County (CCBC): CCBC offers behavioral health, child
  and family outpatient care, acute care, community support, and rehab and recovery
  services. CCBC could benefit from having a Digital Navigator visit its offices on a regular

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<sup>&</sup>lt;sup>32</sup> "Digital Equity Resource List Request for Information," MBI, https://masstech.org/sites/default/files/2025-02/RFI%20No.%20205-MBI-07%20-%20Bidders%20Conference%20Slides.pdf.

basis to provide individuals in outpatient care with enrollment assistance in low-cost broadband programs and other applications or government resources that are online.

• Boys and Girls Clubs of Metro South (BGCMS): BGCMS has a dedicated space equipped with Comcast internet services and 12 computers, that they call a Lift Zone. This room is accessible to the public outside of regular program hours, ensuring that community members have consistent internet access. This space also hosts a range of classes designed to bridge the community's digital skills gap for youth, teens, and their families. BGCMS would benefit from having a Digital Navigator visit this space weekly or bi-weekly to assist individuals and families with their devices and provide enrollment assistance in low-cost broadband programs and other digitally based applications or government resources.

# 3.4 Establish a partnership between Taunton Public Schools, Bridgewater State University, and the Council on Aging so that interested students can provide tech support at the COA Community Center's computer lab and receive volunteer hours

Students at Taunton Public Schools are required to spend 15 hours on volunteer activities to graduate. And the Council on Aging is frequently asked by its senior patrons how to operate devices and navigate resources online. The Council on Aging is interested in partnering with Taunton schools to invite interested students to assist with its digital literacy classes that occur once a month and assist with one-on-one device and internet training at the Council on Aging resource center when renovations are completed. The City may also explore offering the use of interns from Bridgewater State University to conduct training on various software platforms and general computer operations.

To conduct this volunteer program at the COA's community center, a small grant of \$2,000 could be provided to the COA for the development and printing of promotional materials, and for the necessary training of student volunteers. Additionally, a small sum of \$1,000 could be shared with the high school for the printing and distribution of promotional materials related to this volunteer opportunity. Stipend amounts ranging up to \$2,000 would also be considered to pay for the college intern's time to conduct the training while high school interns could be awarded volunteer hours for their efforts.

### 3.5 Consider funding the purchase of desktop computers at the Senior Center's computer lab to host digital literacy classes

Taunton's Department of Human Services/Council-on-Aging (COA) offers a comprehensive program of activities designed to satisfy the physical, economic, recreational, and psychological needs of the residents of Taunton. The COA offers individuals aged 60 and above with information and assistance for accessing services in-person at its Senior Center and through its newsletter.

The COA's Senior Center has a community room that has been under renovation for a year and reopened in March. The community room will be a space at the Senior Center that will offer activities and programming on site.

A COA representative stated that the newly revamped Senior Center is equipped with Wi-Fi, and that they would like to purchase computers and laptops for public use but the COA does not have the financial resources to purchase these items.

To fund the purchase of these devices, the COA should consider applying for Bristol Elder Services' grant, which is available for senior service entities to develop programs in nutrition, supportive services (including related to technology), caregiving, and preventative services for individuals aged 60 and over (see Section 2.3.2 for more detail on this grant). Past awardees have used these funds to develop digital literacy and, education programs, such as "how to operate a smartphone," and telehealth education. Bristol Elder Services will be circulating all details of this grant (including maximum award amounts and application window) to all Council on Aging and senior services organizations in Bristol County in February of 2025, and the deadline to apply for this grant will be in March 2025.

If the COA is not awarded this grant by Bristol Elder Services, the City should consider funding the purchase of six desktop computers and six laptops for the Senior Center. MBI has suggested the cost of one desktop and a monitor is \$926. The purchase of six desktops for this space would cost approximately \$6,000. Additionally, the cost of six laptops is approximately \$3,000 (\$500 per device).

### 3.6 Consider funding the purchase of 12 new laptop devices for the Boys and Girls Clubs of Metro South Taunton Clubhouse

The Boys and Girls Clubs of Metro South (BGCMS) has three clubhouse sites, one of which is in Taunton. A representative from the Taunton Clubhouse location stated that a number of club families lack device access and availability at home.

The Taunton Clubhouse has a Lift Zone in its community room, which offers Comcast internet services and 12 computers that are always available to the public (including during non-program hours).

These Lift Zones currently offer "21st Century" classes <sup>33</sup> (which has 50 individuals enrolled currently), workforce development classes (resume and job search training) for teens, financial literacy, and degrees to diplomas. A lot of these classes are systems that help BGCMS address digital skills gaps among the community. While individuals can bring in their own devices, either for personal use or for use during these classes, the 12 desktop computers that are available are frequently being used, often all at once.

BGCMS would like to purchase more devices, particularly 12 laptops, for individuals to use within the Taunton Clubhouse Lift Zone so that more individuals can participate in classes, access the internet for homework, or use the internet for other activities.

The City should consider purchasing 12 laptops for the BGCMS Taunton Clubhouse, which would cost approximately \$6,000 (\$500 per device.

## 3.7 Consider funding Wi-Fi installation and purchase of 12 computers and a printer at Taunton Housing Authority community room

The Taunton Housing Authority operates 14 buildings with 616 housing units. In its larger buildings, the housing authority has community rooms, one of which is outfitted with six desktop computers,

<sup>&</sup>lt;sup>33</sup> "21st Century Community Learning Center," Boys & Girls Clubs of Metro South, https://www.bgcmetrosouth.org/21st-century-community-learning-center.

a printer, and Wi-Fi for its residents. This community room also hosts family time, where adults can receive direct assistance from staff to develop resumes and search and apply for jobs online, and children can complete homework and browse the internet.

With the success of this community room, the housing authority would like to offer similar programming at another building on Paul Bunker Drive, which is currently under development for staff offices and a community center for all housing authority residents.

The City should consider funding Taunton Housing Authority's community center space so that it is equipped with publicly available Wi-Fi, 12 desktop computers, and two printers for all residents to use. Additionally, the housing authority could consider working with "train-the-trainer" entities like Tech Goes Home so that one or a few housing authority staff can offer digital literacy classes to residents in this space (see recommendation 3.10 below). Additionally, should the City decide to hire a Digital Navigator (see recommendation 3.3), the navigator could offer support services to housing authority residents in this community space.

MBI has suggested the cost of one desktop and a monitor is \$926. The purchase of 12 desktops for this community space would cost approximately \$12,000. Additionally, the cost for two LaserJet printers is approximately \$800 (\$400 per printer).

### 3.8 Consider purchasing six laptops for Girls Inc. of Taunton for use in it after-school and technology programs

Girls Inc is a national non-profit that focuses on preparing young women for success. It strives to provide young women with the resources, support and training necessary to become the future leaders, change makers, and role models.<sup>34</sup>

A representative at Girls Inc of Taunton indicated that \$5,000 would allow the purchase of new laptop computers. The City may wish to assist Girls Inc. with the purchase of these devices so that individuals and families in Taunton can use them for tasks like filling out job applications and online forms and other necessities.

### 3.9 Consider purchasing 10 laptops for Old Colony YMCA's planned Technology Room

The Old Colony YMCA has seven branches, one of which is in Taunton. A significant number of its members are youth and families, many of which do not own a laptop, desktop, or tablet at home.

The Taunton branch would like to create a technology room, where individuals and families can go to and use laptops to access the internet and perform necessary tasks online. To do this, the branch would like to purchase 10 laptops to equip this space but does not currently have the budget to do so.

A representative at Old Colony YMCA stated that a small sum of \$5,000 would satisfy this need. The City should consider assisting Old Colony YMCA with the purchase of these devices, so that

<sup>&</sup>lt;sup>34</sup> "Who we are," Girls Inc., https://www.girlsinc.org/who-we-are.

individuals and families in Taunton can have the ability to conduct necessary or desired tasks like job applications, online forms, email, and other necessities.

### 3.10 Expand partnerships with device-provision and digital literacy training entities to ensure all Taunton residents have access to classes and devices

Device access is limited in Taunton, with the main distributors being the Taunton Public School system through their 1:1 Chromebook distribution program for middle and high school students. Other entities engaged for this report highlighted two issues: a lack of devices at their organizations and a lack of awareness on how to engage and partner with third-party organizations focused on device distribution.

Taunton residents lag both the state and the nation in ownership of desktops and laptops, tablets, and smartphones. ACS data show that 9 percent of Taunton households lack a device of any kind, and that 25 percent of Taunton households do not own a desktop or laptop computer. There are several device donation, distribution, and education organizations that are present in Massachusetts, which could be strong community partners with local entities.

Tech Goes Home (TGH) is an organization that partners with schools, healthcare providers, and community organizations to provide curated technology-based support through device distribution, internet access, digital literacy, and education. Upon successful completion of a TGH course through a community partner, students are provided with a device for personal use. Generally, the cost is \$1,500 per person. TGH is a longstanding partner with MBI, which has partnered to fund and connect TGH with community-based organizations across the state.

Another device donation and distribution program is TEK Collaborative, <sup>35</sup> an Amesbury-based nonprofit that refurbishes and supplies computers to those in need.

Because MBI has worked with TGH on many occasions, and is familiar with TEK Collaborative, it could help to facilitate partnerships with a number of these entities.

#### 3.11 Explore cybersecurity programming/partnership opportunities

Concerns about online safety and privacy in Taunton are significant, with 83 percent of Taunton respondents to the MBI survey stating they are either somewhat concerned or very concerned about their online safety, and 91 percent of Taunton respondents saying their main concern online is having personal data stolen or used without their consent.

MBI's State Digital Equity Plan states that a future action to address online safety will include the development of a statewide cybersecurity curriculum. Additional actions will include training existing digital navigators, so they support, protect, and inform clients about their online safety, and embedding cybersecurity awareness into youth digital literacy programming.

<sup>&</sup>lt;sup>35</sup> In response to the digital equity needs illuminated by the Covid 19 pandemic, TEK Collaborative was established to help close the digital divide by providing adequate internet enabled devices at no cost to those in need. TEK Collaborative forms strategic partnerships with businesses, organizations, schools, and government to create an ecosystem of device access, internet access, and education.

The Executive Office of Technology Services and Security's (EOTSS) Office of Municipal and School Technology operates a Municipal Cybersecurity Awareness Grant Program (MCAGP) that educates participants about cyber-criminal activity and how to detect potential cyber-attacks to keep residents, families, and organizations safe.<sup>36</sup> This resource is free to those participating. Information on the MCAGP should be shared with schools, City departments, the library, Housing Authority, and other entities eligible to receive this training at no cost.

<sup>36</sup> "About the Municipal Cybersecurity Awareness Grant Program," Mass.gov, <a href="https://www.mass.gov/info-details/about-the-municipal-cybersecurity-awareness-grant-program#how-to-apply-">https://www.mass.gov/info-details/about-the-municipal-cybersecurity-awareness-grant-program#how-to-apply-</a>.

## 4 Examples of MBI implementation grant projects include housing authority Wi-Fi buildouts, device provision programs, and curriculum development

MBI launched its direct grant program, the Municipal Digital Equity Implementation Program (MDEIP)—for municipalities to access implementation funds to initiate local programs. This is a \$6 million grant fund that provides participating municipalities with up to \$100,000 to make local digital equity investments and execute projects that will increase access, adoption, and usage of the internet.<sup>37</sup> This funding can go toward five areas of digital equity:

- 1. Digital literacy
- 2. Devices
- 3. Education, outreach, and adoption
- 4. Public space improvements
- 5. Apartment Wi-Fi

Municipalities interested in applying for this digital equity implementation opportunity must complete a two-step application process after submitting a digital equity study to MBI. <sup>38</sup> Applications will be reviewed by MBI on a rolling basis, and the final deadline for submissions is July 31, 2025.

Any municipality that has participated in the Municipal Digital Equity Planning Program or has a preexisting local digital equity plan or related document can apply for this implementation funding. If desired, the City of Taunton can start its application for these funds immediately, using this report and ongoing conversations with local organizations as a guide.

The total award amount in the first round of MBI's implementation grant was \$1,270,258, which was split between 18 municipalities and will be put toward the five initiative areas (digital literacy; devices; education, outreach, and adoption; public space improvements; and apartment Wi-Fi).

Examples of funded projects include the following, from CTC's experience serving these municipalities:

**Watertown:** The City of Watertown has put its funding toward one initiative for the Watertown Housing Authority. With its implementation funds, the City will support up to two years of operating expenses to match against either the apartment Wi-Fi or wiring retrofit programs (see Section 2.2.2.1 for more information) in Watertown Housing Authority units.

Lynn: The City of Lynn put its funding toward three initiatives:

1. Lynn Community TV received funding for Wi-Fi support and upgrades, and digital literacy training for the community.

<sup>&</sup>lt;sup>37</sup> "Municipal Digital Equity Implementation Program", MBI, <a href="https://broadband.masstech.org/digital-equity-implementation">https://broadband.masstech.org/digital-equity-implementation</a>.

<sup>&</sup>lt;sup>38</sup> "Municipal Digital Equity Implementation Program," MBI, <a href="https://broadband.masstech.org/digital-equity-implementation">https://broadband.masstech.org/digital-equity-implementation</a>.

- 2. New American Association of Massachusetts (NAAM)—a nonprofit that primarily serves refugees, political asylees, and migrants—received funds to purchase devices to distribute to its NAAM community that attend its free English as a second language (ESL) class.
- 3. Pathways—a nonprofit organization that provides adult education, skills training, and English literacy classes—received funds to support the development of an eight-week class curriculum that will serve 15 individuals per cohort.

#### **New Bedford:** The City of New Bedford has put its funding toward two initiatives:

- 1. The New Bedford Council on Aging (COA) is receiving support from this grant to equip its new computer lab with the necessary devices and staffing to offer digital literacy classes. In total, this grant funds the purchase of 12 desktop computers, 12 monitors, and a smartboard; and hiring of a digital literacy and skills instructor.
- 2. The Global Learning Charter Public School (GLC) opened a science, technology, engineering, art, and math (STEAM) Education building for its high school students, with a Thinkabit Lab. Funding is being dedicated to the growth of the Thinkabit Lab, to support the acquisition of new equipment, software licenses, professional development for staff, and the employment of part-time trainers or stipends for existing GLC employees.

#### **Fairhaven:** The Town of Fairhaven has put its funding toward three initiatives:

- 1. The Millicent Library and Fairhaven Council on Aging are receiving funds to develop their partnerships with Tech Goes Home (TGH). TGH is an organization that partners with schools, healthcare providers, and community organizations to provide curated technology-based support through device distribution, internet access, digital literacy, and education. Through its "train-the-trainer" approach to digital literacy education, students are provided with a device for personal use after successful completion of their course at a community partner location.
- 2. Community Connections—a nonprofit community agency that offers support to adults with disabilities—is receiving funding to purchase 12 new devices to satisfy the demand by residents who participate in the organization's Workplace Readiness Curriculum, which teaches individuals how to write a resume, apply for a job, and learn how to be a positive and helpful employee.
- 3. Fairhaven TV (FHTV) is receiving funds for the purchase of audio assistant devices that can serve up to eight individuals at one time.

Other municipalities are using their round one grant funds to support various local entities and municipal projects. See **Error! Reference source not found.** for a full list of all participating municipalities' initiatives and program plans.

Table 2: List of all round one Implementation Grant awardees and the entities or programs receiving these funds

Initiative area	Municipality	Entities/programs receiving funds		
	Charlton	Library		
	Somerville	Somerville Housing Authority		
	Montague	Council on Aging		
	Adams	Library and Council on Aging		
District literary	Lanesborough	Library and Council on Aging		
Digital literacy	Worcester	Library		
programs –	Peabody	Citizens Inn Shelters		
	Easthampton	(E-Media, LFA)		
	Fairhaven	Library and Council on Aging		
	Lynn	Lynn Community TV and Pathways		
	New Bedford	Council on Aging and Thinkabit Lab		
	Charlton	Library		
	Florida	Florida Public Schools		
	Cheshire	Library and Council on Aging		
<b>.</b> .	Adams	Library and Council on Aging		
Device	Lanesborough	Library and Council on Aging		
purchasing and — distribution —	Worcester	Library		
	Greenfield	Library		
programs –	Easthampton	E-Media		
	Fairhaven	Community Connections and Fairhaven TV		
	Lynn	New American Association of Massachusetts		
	New Bedford	Council on Aging and Thinkabit Lab		
Education,	Somerville	Somerville Housing Authority		
outreach, and	Pittsfield	Wayfinding and Digital Equity Ambassador		
adoption	Greenfield	Accessibility of public resources		
programs	Peabody	Citizens Inn		
	Lynn	Lynn Community TV		
Public space	Pittsfield	Public Park		
improvement	Cheshire	Transfer station hotspot		
programs	North Adams	Library		
	Adams	Library and outdoor center		
	Lanesborough	Library and Council on Aging		
	Lynn	Lynn Community TV		
Apartment Wi-	Greenfield	Greenfield Housing Authority		
Fi programs	Watertown	Watertown Housing Authority		
	Peabody	Citizens Inn Shelters		

#### 5 Broadband availability conditions and participation in the ACP in Taunton

This section provides an analysis of current broadband conditions in the City of Taunton related to infrastructure availability, level of competition, uptake of services (and of available subsidies) by residents, and device ownership. Data is based on publicly available information from the U.S. Census Bureau, the American Community Survey (ACS), and the Federal Communications Commission (FCC).

### 5.1 Taunton has ubiquitous wired broadband coverage from Comcast, significant fiber coverage from Verizon Fios, and some fiber coverage from TMLP

CTC reviewed FCC data and researched websites of broadband providers operating in Taunton to collect market data on residential broadband pricing, availability, and level of competition.

Comcast provides high-speed cable internet service to nearly all residential locations (99.4 percent) in City. Fiber service from Verizon Fios reaches approximately 15,131 (or 89.6 percent of) locations in City. Fixed wireless services (distinct from mobile services) are available from T-Mobile, Verizon Wireless, and AT&T to many households (4,668 locations, 463 locations, and 1,442 locations respectively).

Verizon does not offer service to approximately 10.3 percent of residential locations in Taunton, which matches the percentage of locations that lack access to more than one wireline broadband provider. Taunton Municipal Light Plant has also not yet deployed its fiber services at locations served only by Comcast. It can be challenging for fiber providers to service multi-dwelling units (MDUs), often due to property owners not allowing permission to construct. As a result, any such locations would have only one high-speed wireline service (Comcast) and some residents may still use DSL—which can be costly and provides speeds far below the threshold of served as defined by the FCC.<sup>39</sup>

Verizon DSL service was an option in Taunton over its legacy copper network, and it is possible that some Taunton residents still use this service. However, a representative at Verizon stated that the company is no longer offering its DSL service to new customers. Verizon is still reporting its coverage for existing DSL customers to the FCC as required; however, the FCC is not making this data publicly available. Table 3 provides an analysis of FCC data for Taunton. FCC data are based on reports of service availability from service providers and show a total of 16,895 "broadband serviceable locations" (BSL), which generally means addresses (which may contain one or more units or apartments in Taunton).<sup>40</sup> Table 4 provides an analysis of the competitive landscape in Taunton.

<sup>&</sup>lt;sup>39</sup> Served speed is defined by the Federal Communications Commission (FCC) as a minimum of 100/20 Mbps. Underserved is defined as reported speeds of between 25/3 Mbps and 100/20 Mbps.

<sup>&</sup>lt;sup>40</sup> The FCC Broadband Data Collection reporting uses the term "broadband serviceable location (BSL)" to represent address level information. A BSL is shown as a single served address for locations that may have more than one household or unit, as is the case with duplexes and multi-tenant or apartment buildings. In cases where an address or location is serviced by a single provider or technology, an assumption can be made that the same is true for all households or units at that location.

Table 3: Broadband service in Taunton from FCC data as of June 2024

Tech	ISP	Number of locations	Number of locations (percent)	
		Residential service: 16,895	Residential service: 100%	
		16,806	99.4%	
	Comcast	16,562 locations with speeds	98.0% with speeds up to	
Cable	(Xfinity)	at least 1,200/35	1,200/35	
	(Allility)	244 locations with speeds at	1.4% with speeds at least	
		least 2,000/200	2,000/200	
		5,720	33.9%	
Licensed	T-Mobile,	1,749 at or above 100/20	10.4% with speeds up to	
Fixed	AT&T, or	Mbps*	100/20 Mbps*	
Wireless	Verizon "5G	177 at 50/5 Mbps	1% at 50/5 Mbps	
Wiletess	Home Internet"	3,794 at 25/3 Mbps**	22.5% at 25/3 Mbps**	
		0 at 10/1 Mbps	0% at 10/1 Mbps	
DSL/Copper	1	N/A	N/A	
	Comcast			
	(Xfinity),	15,600	92.3%	
Fiber	Verizon (Fios),	Verizon: 15,131 locations	Verizon: 89.6%	
FIDEI	Taunton	Comcast: 58 locations	Comcast: 0.3%	
	Municipal Light	TMLP: 411 locations	TMLP: 2.4%	
	Plant (TMLP)			

Table 4: State of high-speed broadband competition in Taunton per FCC data

Availability of wireli	ne broadband service	Residential service locations	Residential service locations (percent)
Locations where 100/	Competition from two or more wireline providers	15,164	89.7%
Mbps download, 20 Mbps upload (100/20) or higher is available	Fiber available in competition areas	15,164	89.7%
iligilei is avaitable	Only one wireline provider	1,725	10.2%
Served <u>only</u> by lic	ensed fixed wireless	0	0%
but can get at least 25/3	-no options at 100/20 Mbps 3 (wireline or licensed fixed eless)	4	.02%
No 25/3 or greater (wireling	ne or licensed fixed wireless)	2	.01%
Total l	ocations	16,895	

#### 5.1.1 Cable service

Figure 1 shows Comcast's service availability in Taunton, showing nearly ubiquitous coverage by Comcast. There are only 89 residential locations without Comcast service. All locations and units

are served by up to 1200/35 Mbps. As detailed in Table 1 above, 244 locations are served at 2000/200 Mbps, showing that Comcast is making network upgrades in some areas.

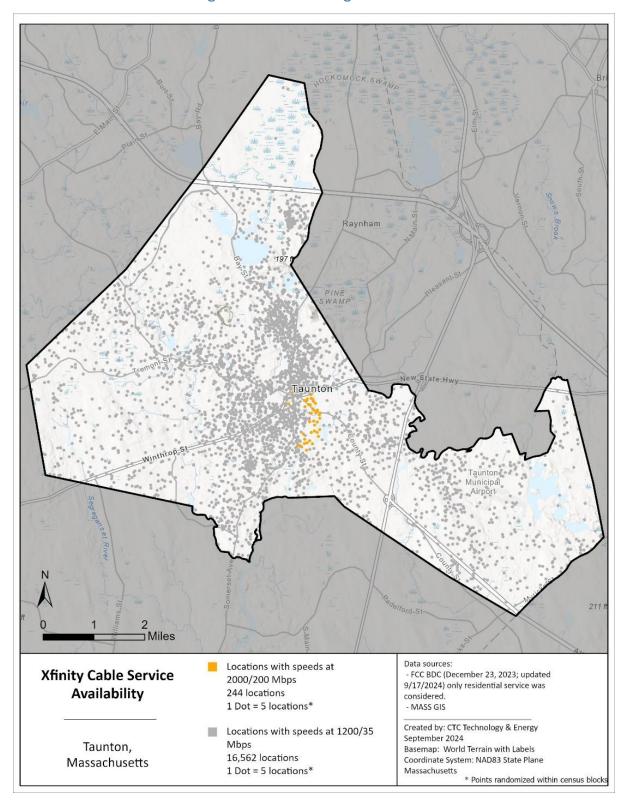


Figure 1: Cable coverage in Taunton

#### 5.1.2 Fixed wireless service

Residents have the option to subscribe to "5G Home Internet" services from Verizon, AT&T, and T-Mobile. These are known as "licensed fixed wireless" or LFW services because they use licensed spectrum under the exclusive control of the respective companies. The FCC notes that mobile wireless providers have been making these offerings an increasingly attractive alternative to services such as Comcast, given the more competitive pricing.<sup>41</sup> Yet these remain a complement of, and not a full replacement to, services such as Comcast. Providers can throttle or reduce capacity in favor of mobile voice and data traffic during times of congestion. And the delivered speeds can vary greatly depending on distance from the wireless equipment or interferences in the line of sight in the environment.

In these figures, the dots represent five locations and are positioned randomly within census blocks. (The dots do not represent specific addresses.)

Figure 2 shows reported fixed wireless coverage levels by available speed. FCC data shows that approximately 5,720 (or 33.9 percent of all) locations in Taunton are served by fixed wireless, and most locations are served by slow speed tranches—up to 25/3 Mbps and 50/5 Mbps. Only 1,749 (or 10.4 percent of) locations can receive served speeds of 100/20 Mbps or above. However, even this reported coverage may overstate what is actually available.

Figure 3 shows that approximately 4,668 locations in Taunton can receive service from T-Mobile, 463 locations can receive service by Verizon, and 1,442 locations are served by AT&T, as reported in the FCC data.

The quality of the coverage will significantly vary depending on how far away the location is from the equipment or whether there are barriers that could block or weaken a signal, such as trees and buildings. Many premises may not receive the reported level of service on a consistent basis.

In these figures, the dots represent five locations and are positioned randomly within census blocks. (The dots do not represent specific addresses.)

<sup>41 &</sup>quot;2020 Broadband Deployment Report," FCC, https://docs.fcc.gov/public/attachments/FCC-20-50A1.pdf.

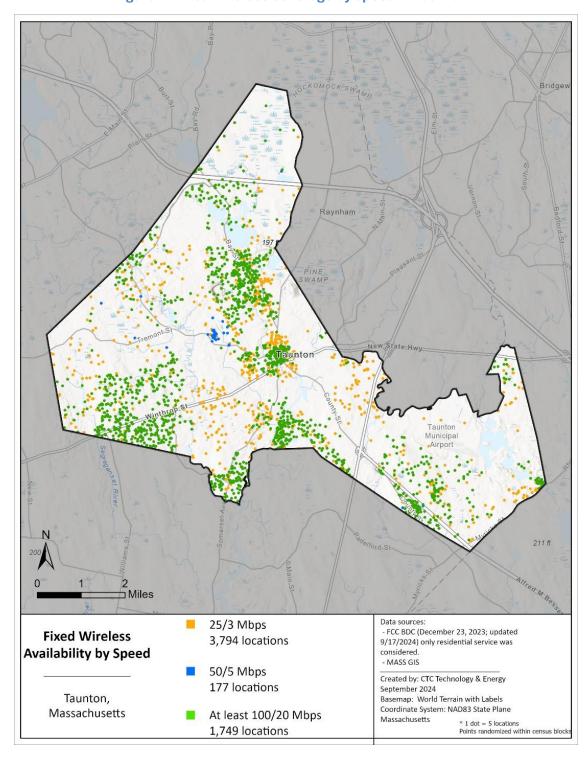


Figure 2: Fixed wireless coverage by speed in Taunton<sup>42</sup>

 $<sup>^{42}</sup>$  As reported to the FCC using the federal Broadband Data Collection rules, gaps in speed ranges reflect no reported locations at speeds between the ranges.

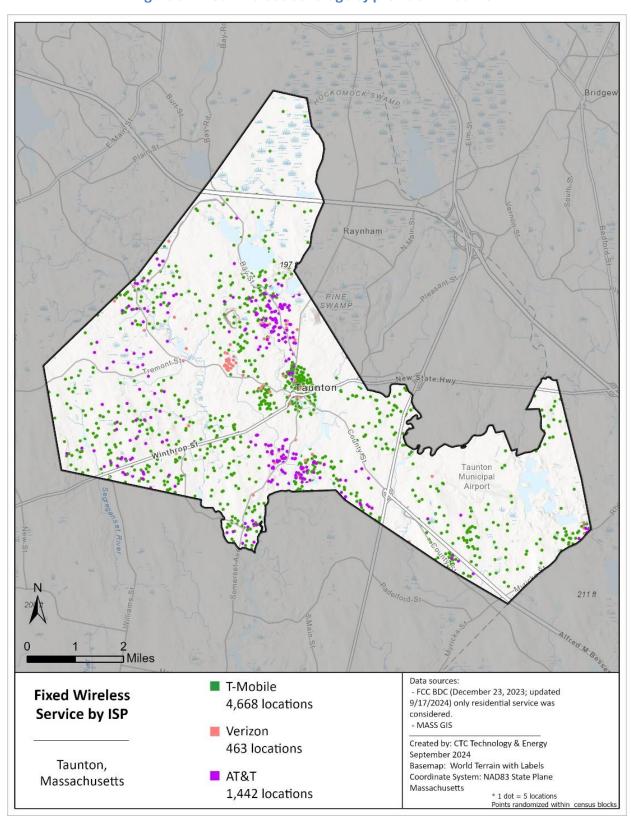


Figure 3: Fixed wireless coverage by provider in Taunton

## 5.1.3 Fiber service

Taunton has significant residential fiber coverage, with 92.3 percent of residential locations receiving services from either Verizon Fios or TMLP. In addition, a few locations receive fiber service from Comcast that may be business locations. Figure 4 shows where these providers offer fiber service in Taunton.

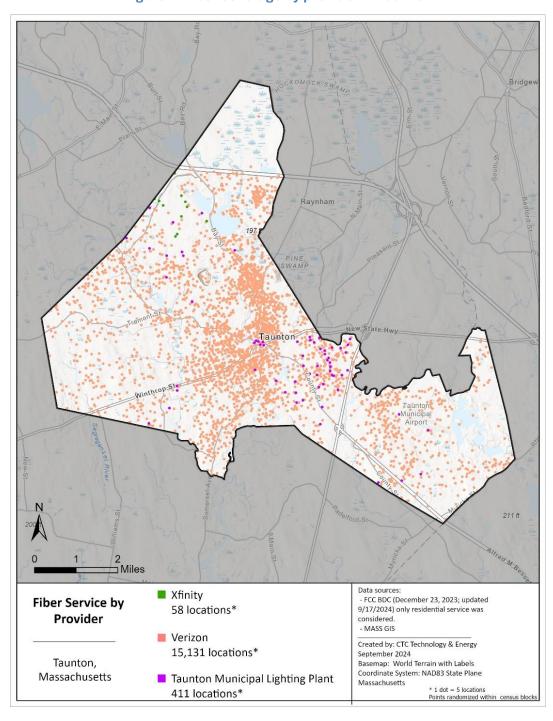


Figure 4: Fiber coverage by provider in Taunton

# 5.2 Approximately 9.2 percent of Taunton households rely on mobile services alone

As noted later in Section 5.5.1, roughly 2,199 (or 9.2 percent of) Taunton households reported in the ACS survey that they are solely using a cellular internet service for broadband connectivity at home, which is higher than the state at 8.8 percent but below the national rate of 11.2 percent. This points to the likelihood that some consumers find current costs of home internet unaffordable, making some choose to rely on cellphone data plans or hotspots to access the internet.

The FCC has repeatedly noted that mobile service is an inadequate substitute for fixed broadband services;<sup>43</sup> however, an estimated 11.2 percent of U.S. adults continue to rely on their smartphones and mobile data plans as the only source of home broadband connectivity<sup>44</sup>—a trend that is more common among young adults and low-income households.<sup>45</sup>

# 5.3 When the ACP was available, 39 percent of eligible households enrolled in the program

The Affordable Connectivity Program (ACP), which once provided a \$30 monthly subsidy toward some home internet subscriptions, presented an opportunity for many low-income residents to purchase broadband more affordably. Although this program has now ended, its rate of enrollment in the City provides an indication of the need for (and enrollment support in) other low-cost internet options for Taunton residents.

FCC data reported by zip code showed that 4,254 households in Taunton were receiving the ACP subsidy, which is 39 percent of the estimated 10,912 eligible households in the City. 46 While the enrollment rate of eligible households was low at the end of the program, the percent of those enrolled increased by approximately 15.3 percentage points over the final year of the ACP. This may reflect the positive results of local efforts designed to increase enrollment. This data is shown in Table 5.

Residents may need continued help enrolling in low-cost programs offered by the City's broadband providers, as described in the next subsection. While outreach may help a number of residents enroll in local providers low-cost programs, there will also be some that are uninterested or unwilling. While outreach may help many residents enroll in local providers' low-cost programs, some will remain uninterested or unwilling. This may be the case if a household cannot afford internet even if it receives a low-cost subscription to service, feels no need to use the internet, receives satisfactory service from a cellular provider, or receives free internet access through a communal source.

<sup>&</sup>lt;sup>43</sup> E.g., 2020 Broadband Deployment Report, para 11.

<sup>44 &</sup>quot;American Community Survey," US Census,

 $<sup>\</sup>frac{\text{https://data.census.gov/table/ACSST5Y2022.S2801?q=internet\&g=010XX00US\_040XX00US25\_060XX00US25\_050XX00US25\_060XX00US25\_0$ 

<sup>&</sup>lt;sup>45</sup> Andrew Perrin, "Mobile Technology and Home Broadband 2021."

<sup>&</sup>lt;sup>46</sup> Estimates of total number of eligible households are calculated by The Benton Institute for Broadband & Society through its ACP tool, using 2021 American Community Survey reported data on household income, food stamp recipiency, Medicaid recipiency, supplemental security income, and public assistance income. "The Affordable Connectivity Program Enrollment Performance Tool," Benton Institute for Broadband & Society, <a href="https://www.benton.org/acp\_tool">https://www.benton.org/acp\_tool</a>.

Table 5: ACP enrollment in Taunton<sup>47</sup>

Date	Eligible households enrolled	Enrolled households	Eligible households <sup>48</sup>	Unenrolled eligible households
January 2023	23.7%	2,586	10,912	8,326
June 2023	30.6%	3,335	10,912	7,577
January 2024	38.9%	4,254	10,912	6,658

# 5.4 Taunton residents can obtain low-cost services, including some that were free with the ACP benefit, but initial prices may rise after promotional periods end

All broadband providers in Taunton participated in the now-expired ACP, either directly or through affiliates. Although the ACP is now gone, Comcast, Verizon, and AT&T (but not T-Mobile and Taunton Municipal Light Plant) still offer their own low-cost programs to eligible low-income households. People who were previously enrolled in ACP may need assistance navigating and pursuing these low-cost internet service options, which are included in the following subsections.

For those who do not qualify for a discounted plan, the minimum cost of a monthly wireline broadband subscription is \$49.95 after the promotional prices. For example, residents can obtain initial pricing from Comcast of \$30 per month but these prices rise sharply following the promotional period. For existing wireless options, Taunton residents can pay a minimum of \$50 a month for residents seeking home internet services and can be as low as \$30 a month for existing T-Mobile 5G Wireless customers.

### 5.4.1 Comcast cable service offerings and prices

Table 6 shows Comcast's service offerings in Taunton. Options that had been free to those enrolled with ACP and/or are designed for eligible low-income households are shaded green.

Table 6: Comcast (Xfinity) advertised service plans in Taunton (low-income programs in green)

Package	Internet speed	Monthly cost	Terms
Internet Essentials	75/10 Mbps	\$14.95	Available to eligible low-income customers following an application process and subject to certain conditions. Internet Essentials also includes added benefits; customers can purchase a refurbished computer for \$149.99.
Internet Essentials Plus	100/20 Mbps	\$29.95	Available to eligible low-income customers following an application process and subject to certain conditions. Internet Essentials also includes added benefits; customers can

https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/.

<sup>&</sup>lt;sup>47</sup> "ACP Enrollment and Claims Tracker," USAC, data as of June, 2024,

<sup>&</sup>lt;sup>48</sup> "ACP Tool," Benton Institute for Broadband & Society, https://www.benton.org/acp\_tool.

Package	Internet speed	Monthly cost	Terms
			purchase a refurbished computer for \$149.99.
Connect More	300/20 Mbps	\$40 for the first 12 months, then \$90/mo.	Pricing guaranteed for 12 months. No term contract. Can apply \$10/mo. automatic payments and paperless billing discount with a stored bank account. Optional modem or gateway lease for \$25/mo. Professional installation fee of \$100.
Fast	500/20 Mbps	\$55 for the first 12 months, then \$105/mo.	Pricing guaranteed for 12 months. No term contract. Can apply \$10/mo. automatic payments and paperless billing discount with a stored bank account. Optional modem or gateway lease for \$15/mo. Professional installation fee of \$100.
Gigabit	1,000/20 Mbps	\$70 for the first 12 months, then \$115/mo.	Pricing guaranteed for 12 months. No term contract. Can apply \$10/mo. automatic payments and paperless billing discount with a stored bank account. Optional modem or gateway lease for \$15/mo. Professional installation fee of \$100.
Gigabit Extra	1,200/40 Mbps	\$85 for the first 12 months, then \$120 plus \$15/mo. router rental fee	Pricing guaranteed for 12 months. No term contract. Includes \$10/mo. automatic payments and paperless billing discount with a stored bank account. Discount is \$5/mo. when using a stored credit card. Professional installation fee of \$100.
Gigabit X2	2,000/200 Mbps	\$105 for the first 12 months, then \$120/mo.	Pricing guaranteed for 12 months. No term contract. Can apply \$10/mo. automatic payments and paperless billing discount with a stored bank account. Optional modem or gateway lease for \$15/mo. Professional installation fee of \$100.

## 5.4.2 Fiber service offerings and prices

Verizon offers a reduced cost program for any new or existing Verizon customer on any fixed wireless or fiber residential internet plan. Eligibility for Verizon Forward is limited to those that participate in Lifeline (income is 135 percent or less than the Federal Poverty Guidelines or uses SNAP or Medicaid), participates in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), or who received a Federal Pell Grant within a year prior to application.

Table 7 outlines Verizon's Fios fiber plans, which are generally less expensive than those offered by Comcast for similar download speeds. Additionally, Fios offers symmetrical download/upload speeds regardless of plan.

Verizon offers a reduced cost program for any new or existing Verizon customer on any fixed wireless or fiber residential internet plan. Eligibility for Verizon Forward is limited to those that participate in Lifeline (income is 135 percent or less than the Federal Poverty Guidelines or uses SNAP or

Medicaid), participates in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), or who received a Federal Pell Grant within a year prior to application.<sup>49</sup>

Table 7: Verizon Fios advertised service plans

Package	Internet speed	Monthly cost	Notes
5G Home Internet (Verizon Forward Program) <sup>50</sup>	Can be applied to any Fios package	\$30 discount to regular price of subscriptions	Eligibility includes Federal Pell Grant recipient within the last year, qualify for Lifeline (through participation in SNAP, Medicaid, or have income be 135% below FPL), and WIC. Wireless router included; available to existing customers. Can use Lifeline discount if applicable.
Fios 300	300/300 Mbps	\$59.99	Pricing guaranteed for 24 months. No term contract. Router included. Possible \$99 set up fee, location dependent. \$10 off monthly bill with auto pay & paper-free billing.
Fios 500	500/500 Mbps	\$84.99	Pricing guaranteed for 36 months. No term contract. Router included. Possible \$99 set up fee, location dependent. \$10 off monthly bill with auto pay & paper-free billing.
Fios 1 Gig	940/880 Mbps	\$99.99	Pricing guaranteed for 48 months. No term contract. Router and whole-home Wi-Fi included. \$10 off monthly bill with auto pay & paper-free billing. Order online to waive \$99 set up charge.
Fios 2 Gig	Download and upload average speed of 1.5-2.3 Gbps	\$119.99	Pricing guaranteed for 48 months. No term contract. Router and whole-home Wi-Fi included. \$10 off monthly bill with auto pay & paper-free billing. Order online to waive \$99 set up charge.

Taunton Municipal Light Plant (TMLP) started deploying its fiber services to locations in Taunton in 2021, after completing its fiber backbone around Taunton, Raynham, and Berkley.<sup>51</sup> TMLP is asking residents to show their interest in receiving its fiber services by signing their address up on their website. Once there is adequate interest in a neighborhood or area, TMLP deploys its fiber to those Taunton homes in what representatives call "fiberhoods." TMLP does not currently offer a low-cost program for eligible low-income subscribers but its base package, available to all, is more affordable than the base package for Comcast and Verizon Fios.

<sup>&</sup>lt;sup>49</sup> "Verizon Forward," Verizon, <a href="https://www.verizon.com/discounts/verizon-forward/">https://www.verizon.com/discounts/verizon-forward/</a>.

<sup>&</sup>lt;sup>50</sup> "Verizon Forward," Verizon, <a href="https://www.verizon.com/discounts/verizon-forward/">https://www.verizon.com/discounts/verizon-forward/</a>.

<sup>&</sup>lt;sup>51</sup> "Who We Are," Taunton Municipal Light Plant Online Internet Services, https://internet.tmlp.com/Home/About.

Table 8: Taunton Municipal Light Plant advertised service plans

Package	Internet speed	Monthly cost	Notes
Residential 100	100/100 Mbps	\$49.95	Equipment lease included. Two-year agreement required. Installation included.
Residential Gigabit	1/1 Gbps	\$69.95	Equipment lease included. Two-year agreement required. Installation included.

## 5.4.3 Fixed wireless service offerings and plans

T-Mobile did not participate in ACP directly for either its 5G Home Internet or mobile data plans. Only T-Mobile affiliates—Metro by T-Mobile and Assurance Wireless—participated in ACP and offered discounts on mobile data plans. Taunton residents that qualified for ACP were required to sign up with prepaid provider Metro by T-Mobile for 5G Home Internet and could apply the ACP discount to the bundled 5G prepaid mobile plan. Metro by T-Mobile offers a 5G Home Internet plan and a mobile prepaid voice and data plan for \$50 a month.

Table 9 shows pricing for T-Mobile's 5G Home Internet service plan at \$50/month for 5G Home Internet-only service. T-Mobile will provide 5G Home Internet at \$30/month if it is bundled with a cellular plan that costs between \$60 and \$100 per month for a single line. <sup>52</sup> T-Mobile prices its 5G Home Internet plans regardless of provided speeds; as noted above, Table 3 shows how these speeds vary widely.

T-Mobile did not participate in ACP directly for either its 5G Home Internet or mobile data plans.<sup>53</sup> Only T-Mobile affiliates—Metro by T-Mobile and Assurance Wireless—participated in ACP and offered discounts on mobile data plans. Taunton residents that qualified for ACP were required to sign up with prepaid provider Metro by T-Mobile for 5G Home Internet and could apply the ACP discount to the bundled 5G prepaid mobile plan. Metro by T-Mobile offers a 5G Home Internet plan and a mobile prepaid voice and data plan for \$50 a month.<sup>54</sup>

<sup>&</sup>lt;sup>52</sup> See T-Mobile Home Internet webpage, <a href="https://www.t-mobile.com/home-internet/plans?INTNAV=tNav%3APlans%3AHomeInternetPlan">https://www.t-mobile.com/home-internet/plans?INTNAV=tNav%3APlans%3AHomeInternetPlan</a> (accessed November 19, 2023).

<sup>&</sup>lt;sup>53</sup> See T-Mobile Newsroom, February 8, 2023 Press Release, "Taking part in ACP- through both Assurance Wireless and Metro by T-Mobile – is just one way that T-Mobile demonstrates its commitment to bringing wireless access to everyone." <a href="https://www.t-mobile.com/news/community/t-mobile-expands-acp">https://www.t-mobile.com/news/community/t-mobile-expands-acp</a>; See also, T-Mobile website, "T-Mobile is proud to participate in the new federal Affordable Connectivity Program, which offers internet service payment assistance to eligible households. We are making the program available through Metro by T-Mobile and Assurance Wireless." <a href="https://www.t-mobile.com/brand/affordable-connectivity-program?INTNAV=fNav%3AAdditionalSupport%3AAffordableConnectivity-program?INTNAV=fNav%3AAdditionalSupport%3AAffordableConnectivity-program.">https://www.t-mobile.com/brand/affordable-connectivity-program?INTNAV=fNav%3AAdditionalSupport%3AAffordableConnectivity-program.</code>

<sup>&</sup>lt;sup>54</sup> Metro by T-Mobile 5G Home Internet, <a href="https://www.metrobyt-mobile.com/plans/home-internet">https://www.metrobyt-mobile.com/plans/home-internet</a> (accessed November 19, 2023). Customers that are not participating in autopay will pay \$25/month. Customers must also purchase a modem for a one-time fee of \$49.99.

Table 9: T-Mobile fixed wireless advertised service plans in Taunton

Package	Internet speed	Monthly cost	Notes
Home Internet Unlimited	72-245 Mbps download/15-31 Mbps upload	\$55/mo., or \$30/mo. when bundled with cell plan	Pricing does not include a \$5/mo. autopay discount. Includes unlimited data and gateway router at no charge. One-time \$35 device connection charge at sign up.
Home Internet Plus	72-245 Mbps download/15-31 Mbps upload	\$75/mo., or \$50/mo. when bundled with cell plan	Pricing does not include a \$5/mo. autopay discount. Includes unlimited data and gateway router at no charge. One-time \$35 device connection charge at sign up.  *Includes Wi-Fi mesh access point and 24/7 interactive video support for connected devices.

Table 10 shows Verizon Wireless' 5G Home Internet service plans. Verizon does not require users to subscribe to Verizon Wireless mobile plans to get these home internet options, but significant discounts are only available if the fixed wireless service is bundled with a Verizon mobile plan and handset. These plans include a Verizon Forward program which can provide discounted service by up to \$30 per month to any Verizon Wireless package.

Table 10: Verizon Wireless fixed broadband service plans (low-income program in green)

Package	Internet speed	Monthly cost	Notes
5G Home Internet (Verizon Forward Program) <sup>55</sup>	Can be applied to any 5G package	\$30 discount to regular price of subscriptions	Eligibility includes Federal Pell Grant recipient within the last year, qualify for Lifeline (through participation in SNAP, Medicaid, or have income be 135% below FPL), and WIC. Wireless router included; available to existing customers. Can use Lifeline discount if applicable.
5G Home Internet	50/5 to 85/10 Mbps	Discounted price \$35/mo.; regular price \$60/mo.	\$10 discount available with Autopay and paperless billing. \$15 discount when bundled with postpaid Verizon cellular plan and 5G phone. Pricing guaranteed for 24 months. Wireless Router included. Pricing for wireless plan and phone not included here.
5G Home Internet Plus	85/10 to 250/20 Mbps	Discounted price \$45/mo.; regular price \$80/mo.	\$10 discount available with Autopay and paperless billing. \$25 discount when bundled with postpaid Verizon cellular plan and 5G phone. Pricing guaranteed for 36 mos. Wireless Router included. Pricing for wireless plan and phone not included here.

<sup>&</sup>lt;sup>55</sup> "Verizon Forward," Verizon, <a href="https://www.verizon.com/discounts/verizon-forward/">https://www.verizon.com/discounts/verizon-forward/</a>.

Table 11 shows pricing for Internet Air—AT&T's new residential fixed wireless service at \$65/month. Like T-Mobile, AT&T has a fixed price for this plan regardless of actual and varied speeds received by individual households. AT&T states that it may temporarily slow data speeds if networks are busy. The company claims easy self-installation of Internet Air in under 15 minutes. AT&T Internet Air was eligible for the ACP.<sup>56</sup>

Table 11: AT&T fixed wireless advertised service plans in Taunton

Package	Internet speed	Monthly cost	Notes
Internet Air	75-225 Mbps download/10-30 Mbps upload*	\$65	Can receive \$5/mo. discount with autopay available after two bill cycles. No contract. \$9.99 late payment fee, and no fee for early termination. \$10/mo. for up to 5 extenders. Number of extenders determined at the sole discretion of AT&T.

<sup>\*</sup> Speeds are estimated and rounded. Quoted download speeds were 75-225 Mbps with claims that 50% of customers experience speeds in this range and the remaining customers could receive service faster or slower than this range. Upload speeds were quoted as 10-30 Mbps.

# 5.5 American Community Survey data reveal that low-income Taunton residents face gaps in subscriptions and device ownership

Data on internet adoption and device ownership is important to fully understanding the nature of the digital divide in Taunton. ACS survey data show that Taunton lags the state and national averages in internet adoption and device ownership. While high-speed broadband services are available throughout Taunton, many households do not subscribe or own devices necessary to fully use these services—and those lacking subscriptions or devices are largely lower-income households.

The ACS is conducted yearly and nationwide by the U.S. Census Bureau. However, it is important to note a five-year sampling period (2016 to 2021)<sup>57</sup> that may not accurately illustrate most recent trends.

A preliminary analysis of the ACS data found in Taunton:

- 25 percent of households lack a wireline internet subscription.
- 82.5 percent of households that lack a wireline internet subscription also earn less than \$75,000 annually.
- 24.9 percent of households do not own a desktop or laptop computer device.

<sup>&</sup>lt;sup>56</sup> "Say Hello to AT&T Internet Air! Plug-And-Play Home Wi-Fi Installed in Less Than 15 Minutes," AT&T, https://about.att.com/blogs/2023/internet-air.html.

<sup>&</sup>lt;sup>57</sup> The U.S. Census Bureau does not release data for communities the size of Taunton for sampling periods less than five years in order to keep margins of error to a minimum.

# 5.5.1 Taunton lags state adoption rates for residential wireline internet subscriptions, and low-income residents face significant gaps

According to ACS data, 85.3 percent of Taunton households subscribe to residential internet services. Most of these subscriptions, 75.0 percent, are via wireline technology (cable or fiber). The City lags the state and nation in subscriptions to internet of any kind and lags the state but leads the nation in wireline services, as shown in Figure 5.

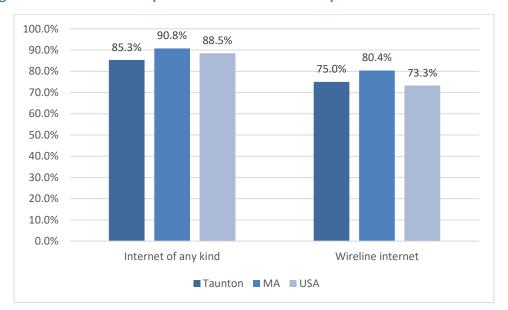


Figure 5: Internet subscription rates in Taunton compared to the state and nation

An estimated 5,947 (or 25 percent of) households lack residential wireline internet service (Figure 6). Of those households without wireline service, roughly 2,199 (or 9.2 percent) are solely using a cellular internet service from their homes. Lower income households may use their cellular connection and smartphone in lieu of a more robust connection. However, reliance on cellular service will not enable all members of a household to participate in the digital economy, because of data caps and the potential for the service to be throttled in times of mobile network congestion.

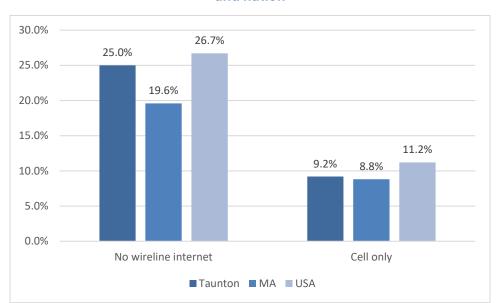


Figure 6: No access to wireline internet and mobile-only subscriptions compared to the state and nation

# 5.5.2 Most Taunton households that lack wireline internet access earn less than \$75,000 per year

In Taunton, most of the households lacking an internet subscription are lower-income households. Whereas 94.7 percent of households making more than \$75,000 subscribe to wireline internet services, only 80.5 percent of households making between \$20,000 and \$75,000, and 63.8 percent of those earning less than \$20,000 do so. <sup>58</sup> After accounting for the total number of households across all three income brackets, an estimated 82.5 percent of (or 2,895 out of 3,511) households without an internet subscription earn less than \$75,000 per year. Figure 7 shows subscription rates by income bracket.

<sup>&</sup>lt;sup>58</sup> For both of these income brackets, some households are likely able to afford service yet choose not to purchase it because they simply are not interested. For this reason, a 100 percent subscription rate does not represent the ideal or goal rates for any given population.

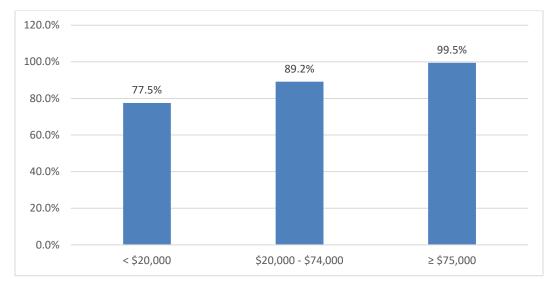


Figure 7: Wireline internet subscription rates by income level

# 5.5.3 Taunton lags both state and national rates in device ownership rates across all types of devices

ACS data show that 75.1 percent of households in Taunton own one or more computing devices, a figure that lags both the state and national figures. Similarly, 84.3 percent of Taunton households own a smartphone, and 60.8 percent of households own a tablet, which also lags the state and the national ownership rates. Access to affordable devices that meet a household's needs is a critical element of the effort to expand broadband access to any community. Looking across different types of devices, including desktop, laptop, smartphone, and tablet ownership, Taunton's ownership rates show that the City is ahead of the state and nation with access to all device categories (Figure 8).

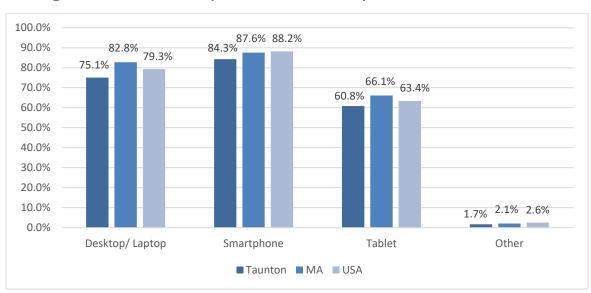


Figure 8: Device ownership rates in Taunton compared to the state and nation

Figure 9 shows that 9.3 percent of (or 2,225) Taunton households lack a device, which is noticeably higher than both the state and national averages. Additionally, 24.9 percent of (or 5,924) households

in Taunton do not have a laptop or desktop leaving these residents to rely on smartphones or tablets and making it difficult to fully engage in the digital economy or successfully learn and work from home.

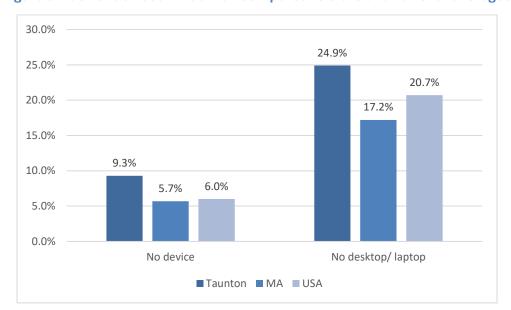


Figure 9: Lack of devices in Taunton compared to state and national averages

Additional device barriers may exist even after device ownership numbers are improved. For example, for households with many individuals, a single desktop or laptop will likely not deliver sufficient capacity for all members of the household to meaningfully use the internet. Further, ownership of a device is not sufficient to ensure full access to the benefits of broadband. Many households will require digital literacy training and access to technical support to maximize the benefits of these services.

# 6 Taunton stakeholders report successful programs that could be expanded if funding allowed

The City of Taunton and CTC convened and facilitated stakeholder meetings to gather feedback about the digital needs and challenges in Taunton. CTC also prepared and disseminated an online questionnaire to participants in these meetings (see Appendix B). The questionnaire was designed, in part, to facilitate orderly data collection about existing programs underway, the services offered, populations served, existing capacity, remaining gaps, and the potential for expanding these programs.

The following subsections identify the organizations engaged with, and summarize the insights provided by each stakeholder during the meetings and in questionnaire responses if provided.

Recommendations developed from a synthesis of stakeholder data, survey data, and other research performed for this study are provided in Section 3.

# 6.1 Council on Aging

The Department of Human Services/Council-on-Aging is a comprehensive program of activities designed to satisfy the physical, economic, recreational, and psychological needs of the citizens of Taunton. The Taunton Council on Aging's Senior Center offers individuals aged 60 and above with information and assistance for accessing services in-person, by telephone, and through its monthly newsletter. These services include fitness programs, health services, social and recreational programs, and general services. One targeted service is named the 'File of Life' program, which details medical history on a card in a red folder labeled 'File of Life' to inform emergency personnel of an individual's medical details, and information and referral services to various human and social services programs.<sup>59</sup>

The COA recognizes that the main digital equity gap for Taunton seniors is a lack of knowledge on how to use technology and limited computer literacy. This has consequences in their limited ability to obtain health benefits, conduct financial transactions, and be socially engaged.

The Senior Center has a community room that has been under renovation for a year and reopened in March. The community room will offer social activities and recreational programming. Computers and laptops will be available for use, but these have not been purchased yet.

A representative at the COA stated that seniors call in asking about discounted internet service options, but staff are not aware of what pricing service options may be available. Instead, staff direct individuals to the local public library where computers and staff are readily available to assist them or to contact their cable or phone carriers directly.

Staff at COA have expressed that most seniors have cell phones, and may have access to computers, but are not confident using devices beyond basic phone operation. To bridge this technology gap, the COA has reached out to area school administrators to engage student volunteers from local high and trade schools for assistance in providing digital skills tutoring to seniors once the Center's renovations are completed.

<sup>&</sup>lt;sup>59</sup> "General Services," Taunton Council on Aging, <a href="https://www.taunton-ma.gov/461/General-Services">https://www.taunton-ma.gov/461/General-Services</a>.

# 6.2 Boys and Girls Clubs of Metro South

The Boys and Girls Clubs of Metro South (BGCMS) offers educational, social, and well-being-based programming for kids and teens ages 6 and 18. BGCMS operates two clubhouse sites, one of which is in Taunton, and three summer camps, two of which are located in Taunton.

The Taunton Clubhouse features a Comcast Lift Zone from, a dedicated space equipped with Comcast internet services and 12 computers. This room is accessible to the public, outside of regular program hours, ensuring that community members have consistent internet access. During club hours, enrolled youth use the space for various programs.

Lift Zones hosts a range of classes designed to bridge the community's digital skills gap. Current offerings include 21st century skills classes (which have 50 middle school-aged youth enrolled), workforce development classes (resume and job search training) for teens, financial literacy, career launch and degrees to diplomas programs. A lot of these classes help BGCMS address the digital divide in the greater community. The 12 computers available are used for these classes, and individuals can also bring in their own devices. Programs and classes are offered Monday through Thursday and foster both academic and personal growth. BGCMS would like to purchase more devices for individuals to use within the Lift Zone, as all 12 devices are often used at the same time.

A representative at BGCMS stated that several club families lack device access and availability at home, but that those kids do use devices at the Lift Zone.

# 6.3 Old Colony YMCA

Old Colony YMCA has seven branches, one of which is in Taunton. Memberships are available for households (either 1 or 2 adults and up to 10 children aged 0 to 26), adult individuals, seniors (age 62 and over), young adults (age 19 to 26), and teens (age 12 to 18). <sup>60</sup> Services available include personal training, group exercise, childcare, swim lessons, and play spaces with a KidZone.

A representative at the Old Colony YMCA stated that some families that participate in childcare do not own a computer (laptop or tablet) due to affordability challenges.

Old Colony YMCA would like to develop a new Technology Room that would be accessible to its families and other members. To do this, Old Colony YMCA would need \$5,000 to purchase ten laptops that individuals can use in the designated room.

### **6.4 Taunton Housing Authority**

The Taunton Housing Authority was established in 1948. The authority operates 14 buildings, nine of which are dedicated elderly and disabled housing, and five are for families. There are a total of 616 units—451 of which are for senior and disabled residents, and 165 are for families. The authority also manages affordable units in seven partnership properties, of which one is for families of incomes between 0 to 60 percent of Taunton's Area Median Income, one is a mixed-income development, one is for elderly and disabled residents, two are for individuals with special needs,

<sup>60 &</sup>quot;Taunton Membership," Old Colony YMCA,

https://oldcolonyymca.my.site.com/s/membership?l=a2SRi000001trXtMAI.

<sup>&</sup>lt;sup>61</sup> "Managed properties," Taunton Housing Authority, <a href="https://www.tauntonhousing.com/managed-properties">https://www.tauntonhousing.com/managed-properties</a>.

one is dedicated for project-based Section 8 units, and one is a transitional homeless shelter for men and women.<sup>62</sup>

Taunton Housing Authority has a computer room in its Pellitier Place development with six new computers and a printer. In this computer room, there is organized family time where adults can get assistance with job applications, completing a resume, and children can use the computer center for completing homework.

It is also in the process of rebuilding offices on Paul Bunker Drive into a community center, which will have computer access. The planned completion of this project will be in 2025. The community center will offer a space for children to spend time, laundry facilities, library, computers, and ten-person resident services team for residents. To complete this project, the housing authority will need to purchase computers and establish internet access.

The housing authority has offered digital skills classes to its residents in the past, but these classes have stopped. A representative of the authority stated that if computers were purchased for the community room and community center it would be able to offer these classes again.

# 6.5 Community Counseling of Bristol County

Community Counseling of Bristol County (CCBC) is a behavioral healthcare nonprofit that offers services that address adult behavioral health, child and family outpatient care, acute care, community support, and rehab and recovery.<sup>63</sup>

A representative at CCBC stated that the struggle she sees most is the lack of access to a laptop or a computer. Many individuals served at CCBC rely primarily on their cell phone to access services and mainstream resources online (SNAP and healthcare). Additionally, the end of the ACP was a noticeable challenge for individuals at CCBC, making it hard for them to maintain internet services at home.

CCBC has case managers that provide enrollment assistance in government services and low-cost broadband programs. However, those in the outpatient program do not have these resources as they do not have a case manager.

CCBC has the Peer Center for those struggling with substance abuse, which is equipped with a small computer lab. Staff are looking to offer digital skills and literacy classes in resume building, Microsoft Excel, and other topics, at the computer lab. Staff support for these classes would be useful to get these classes started. Currently, there are four computers at this lab with room for additional equipment.

CCBC also has a Club House, which has a computer lab with six devices.

## **6.6 Taunton Public Schools**

There are 13 schools in the Taunton Public School district, with just over 8,000 students. Approximately 15 percent of the student body is of English Second Language, 67 percent are

<sup>&</sup>lt;sup>62</sup> "Partnership properties," Taunton Housing Authority, <a href="https://www.tauntonhousing.com/partnership-properties">https://www.tauntonhousing.com/partnership-properties</a>.

<sup>63 &</sup>quot;Services," CCBC, https://www.comcounseling.org/#services.

students of high needs, and 58 percent are students of low-income. There are 10 Community Facilitators, including bilingual facilitators, which connect students and families to community resources.

The school district offers a 1:1 Chromebook program. Providing 1:1 technology supports the implementation and use of the district's curriculum as many of those resources are digitally based. The district believes the use of technology creates classrooms and schools "without walls". Students can collaborate with peers who are not physically present within their classroom and at the high school level and participate in dual enrollment courses at Bristol Community College and four-year institutions such as UMass Dartmouth and Bridgwater State University while physically present in the high school.

Currently, Elementary-aged students do not take their computers home after school, but middle and high school students are permitted, and are able to loan out said computers over the summer recess.

The superintendent stated that the affordability of broadband service at home can be a challenge for Taunton Public School families. To address this, the school district offers a hotspot program for any student household that would not otherwise have access to the internet at home.

Digital skills training is embedded into each grade level by the requirement of using Chromebooks in class and to do homework. At the high school, more in-depth digital-based classes include programming and web development, information technology, and coding.

# **6.7 Taunton Public Library**

The Taunton Public Library is located on Pleasant Street and is open to the public six days a week. The library provides free internet access from Taunton Municipal Light Plant throughout the entire building, access to eight publicly available computers (six in its reference department and two in youth services), and printing services for patrons.

The library reference desk provides digital and tech-related support. Staff are well versed in assisting individuals with their device needs, online form and application support, assistance with online job searching, and resume creation in Microsoft Word.

There are several online resources available for library patrons, including Overdrive/Libby for downloading eBooks, audiobooks, magazines, Hoopla for downloading movies, music, and eBooks, and Kanopy for video and movie streaming. Various databases are also available for patrons to access including Ancestry.com, MA Library Databases, Peterson's Test Prep (offering peer-reviewed articles, primary source documents, videos, and other content), and Universal Class that offers access to over 600 online courses spanning from accounting, to career training, science, web development, and more.

For children, the library offers a wide array of free youth programs. Programming includes movie screenings, story time, play groups, themed events, and online education from Educate Station. Education Station is a digital education platform that provides full Pre-K through Fifth Grade curriculums online in Math, Science, English, Social Studies, and social-emotional learning, and provides hundreds of worksheets available for download. The youth services department has two computers for public use, and four Launchpad tablets to support this programming.

The library owns two 3D Printers—one Ender 3 Pro, and one Ender 5 plus—for library patrons' projects. There are staff available to teach and assist patrons throughout all steps of the design to printing process.<sup>64</sup>

Since 2020, the library has operated a hotspot lending program with devices from T-Mobile. The library owns 13 devices, and patrons can rent one device per household for a month at a time. This hotspot program has been successful, and the library has enough hotspots to satisfy its demand.

<sup>64</sup> "3D Printing," Taunton Public Library, <a href="https://www.tauntonlibrary.org/books-media/3d-printing/">https://www.tauntonlibrary.org/books-media/3d-printing/</a>.

# 7 The demise of the ACP was a challenge to low-income households nationally and in Taunton, but there are options for filling this gap

Many households across the country relied on the Affordable Connectivity Program (ACP) to secure and maintain an internet connection at home, and the program's end has been a significant loss for many. A recent Benton Institute for Broadband & Society survey conducted immediately after the ACP ended in April 2024 found that 13 percent of households would disconnect their service without the ACP subsidy, and 36 percent of respondents would downgrade to a cheaper or slower plan. Additionally, nearly half of respondents saw a home internet connection as an uncertainty, implying that they view their internet subscription as a service that may be canceled at any time based on the household's limited budget and varied costs each month. With over 23.2 million households enrolled in the program nationwide, and over 367,000 enrolled in Massachusetts, there are a significant number of households that are now feeling the tremendous impact of the program's end.

At the end of the ACP, Taunton had 4,254 households enrolled, and as many as 6,658 potentially eligible households remained unenrolled. Some unenrolled yet eligible households may have not wished to subscribe, but accelerating enrollment efforts in low-cost programs offered by Taunton's broadband providers would help close the enrollment and affordability gap and reinforce all digital equity programmatic efforts throughout this report.

Date	enrolled		Eligible households <sup>67</sup>	Unenrolled eligible households	
January 2023	23.7%	2,586	10,912	8,326	
June 2023	30.6%	3,335	10,912	7,577	
January 2024	38.9%	4,254	10,912	6,658	

Table 12: ACP enrollment in Taunton over one year<sup>66</sup>

# 7.1 There are ways that Taunton can support residents post-ACP, primarily through enrollment assistance in low-cost internet programs or by pursuing more ambitious subsidy efforts

A variety of low-cost services do exist through existing ISPs in Taunton, which should be promoted through various channels throughout City as described in more detail below. Additionally, there are examples of more ambitious models of subsidy-based programs that have been demonstrated regionally or nationally that can be adopted locally.

<sup>&</sup>lt;sup>65</sup> "Leaving Money on the Table: The ACP's Expiration Means Billions in Lost Savings," Benton Institute for Broadband & Society, <a href="https://www.benton.org/publications/acp-expiration-means-billions-lost-savings">https://www.benton.org/publications/acp-expiration-means-billions-lost-savings</a>. <sup>66</sup> "ACP Enrollment and Claims Tracker," USAC, data as of June, 2024,

https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/.

<sup>&</sup>lt;sup>67</sup> "ACP Tool," Benton Institute for Broadband & Society, <a href="https://www.benton.org/acp\_tool">https://www.benton.org/acp\_tool</a>.

## 7.1.1 ISPs in Taunton offer several low-cost broadband programs

Verizon, Comcast, and T-Mobile offer low-cost programs in Taunton. Low-cost programs can provide significant relief to the 478 households that were previously receiving the ACP, and to the additional 757 households that were eligible for the ACP at the time of the program's end. Taunton can utilize existing resources from local entities and organizations or consider creating a City digital navigator position (as referenced in Section 3.3) to support residents in the process for enrolling in these low-cost programs. A navigator would potentially help residents learn how to access competitive and lower-cost internet solutions by informing consumers about switching from expensive service plans that place a strain on monthly budgets to a more cost-effective plan.

Low-cost programs offered by ISPs in Taunton are:

- **Verizon Forward,** which provides up to a \$30 monthly discount toward any internet subscription for those who are eligible, resulting in service for as low as \$20 per month. Eligibility includes:
  - o Federal Pell Grant recipient within the last year,
  - o Qualify for WIC, or
  - Qualify for the FCC's Lifeline discount of \$9.25 per month toward wireline or wireless service (through participation in SNAP, Medicaid, or other programs; or if income is 135 percent or less than the Federal Poverty Guidelines).<sup>69</sup>
- **Comcast Internet Essentials**, a cable internet plan that provides 75/10 Mbps service for the discounted price of \$14.95 per month for eligible households. <sup>70</sup> Eligibility includes:
  - Participation in assistance programs like the National School Lunch Program, public housing assistance, Medicaid, SNAP, TANF, SSI, Low Income Home Energy Assistance Program, WIC, Federal Pell Grant, Veterans pension, and Tribal assistance, or were enrolled in the Affordable Connectivity Program
  - Have not had Xfinity Internet within the last 90 days
  - o Have no outstanding debt on any Comcast account that is less than one year old
- Comcast Internet Essentials Plus, a cable internet plan that provides up to 100/20 Mbps service for the discounted price of \$29.95 per month for eligible households. Eligibility requirements for Internet Essentials Plus are the same as for Internet Essentials, listed above.

<sup>68 &</sup>quot;Verizon Forward," Verizon, <a href="https://www.verizon.com/discounts/verizon-forward/?cmp=KNC\_H\_P\_COE\_GAW\_FiOS\_99\_99\_BP-9122&abr=CMOGBRPLUS&c=A005126&gad\_source=1&gclid=EAlalQobChMlhoXk08DKiAMVpwGtBh1igA4lE\_AAYASABEgK8nfD\_BwE&gclsrc=aw.ds.</a>

<sup>69 &</sup>quot;Lifeline," FCC, https://www.fcc.gov/lifeline-consumers.

<sup>&</sup>lt;sup>70</sup> "Internet Essentials," Comcast Xfinity, <a href="https://www.xfinity.com/learn/internet-service/internet-essentials">https://www.xfinity.com/learn/internet-service/internet-essentials</a>.

# 7.1.2 Single-payer agreements with ISPs have proven to be successful in closing the digital divide in communities across the country

Single-payer internet arrangements—in which a jurisdictional entity partners with an internet provider to pay for a defined population's monthly internet bill through a bulk purchase agreement—are common approaches nationally and are readily embraced by many ISPs. Taunton could consider a single-payer agreement with a local internet provider, so that a segment of the City's population that is struggling to pay for home internet services each month is able to receive subsidized or free service. Taunton could begin this process by issuing a request for proposals (RFP) from providers in the City to get an understanding of who would be interested in partnering with the City. Successful examples of this include:

- Chicago Connected: The National Digital Inclusion Alliance notes that through a single-payer program called Chicago Connected, more than 40,000 Chicago Public School students and their families have received broadband subscriptions since 2021.<sup>71</sup> Chicago Connected has become nationally recognized as a successful model for other entities nationwide.<sup>72</sup>
- San Francisco/Monkeybrains: The City operates the "Fiber to Housing program," which provides free internet to low-income San Francisco residents, through the Department of Technology and in partnership with the local internet provider Monkeybrains. Fiber to Housing began in 2018 and leverages existing municipal fiber resources and private sector partnerships to operate the program.<sup>73</sup>
- Cruzio Equal Access Program: Cruzio started its Equal Access program in California at the beginning of the pandemic, and the company has raised nearly \$1 million for projects to cover both infrastructure and discounted services. The Equal Access project provides connectivity to students and their families who may not be able to afford internet service. Completed projects are located in the City of Santa Cruz, Live Oak, and Pajaro Valley (all located in Santa Cruz County). These projects were completed through a partnership between Cruzio, the County Office of Education, and Community Foundation Santa Cruz County, as well as the Housing Authority of the County and the Central Coast Broadband Consortium.

<sup>&</sup>lt;sup>71</sup> "Chicago Connected," Chicago Public Schools, <a href="https://www.cps.edu/strategic-initiatives/chicago-connected/">https://www.cps.edu/strategic-initiatives/chicago-connected/</a>.

<sup>&</sup>lt;sup>72</sup> "What Are Single Payer Agreements?" NDIA, <a href="https://www.digitalinclusion.org/blog/2020/08/28/what-are-single-payer-">https://www.digitalinclusion.org/blog/2020/08/28/what-are-single-payer-</a>

 $<sup>\</sup>frac{agreements}{\#:\sim:text=Chicago's\%20single\%2Dpayer\%20agreement\%20exists, families\%20receiving\%20the\%20internet\%20service.$ 

<sup>&</sup>lt;sup>73</sup> "Monkeybrains and Fiber to Housing," Monkeybrains,

https://www.monkeybrains.net/MB\_fiber\_to\_housing.pdf.

<sup>74 &</sup>quot;Previous Projects," Equal Access Santa Cruz, https://equalaccesssantacruz.com/previous-projects/.

# 8 Results from MBI survey completed by Taunton residents show access, device, and skills gaps and major concerns about privacy and security

This report is based on data collected from Taunton residents who responded to a survey instrument created by the Massachusetts Broadband Institute (MBI) and posted online. Both the online and PDF versions were also distributed by other means including posting on the City's website, sharing at the Senior Center, and by word of mouth. More broadly, the survey was made available to anyone who wished to fill it out across the state.

The results presented in this section are based on analysis of information provided in the survey conducted by 254 residents of Taunton. Unless otherwise indicated, the percentages reported are based on valid responses from those who provided an answer and do not reflect individuals who said "don't know" or otherwise did not supply an answer because the question did not apply to them. Key results are noted where appropriate.

The survey sample was self-selected, and as such it is not necessarily representative of the larger population. Because lower-income residents were underrepresented, the report separately highlights answers from respondents reporting households earning less than \$60,000 (the highest income category respondents could check was "\$60,000 or above.")

This report focuses on data collected that is unambiguous with regard to meaning or accuracy, relevant to the topic of digital equity, and provides insights that are potentially actionable. The full survey instrument is posted in Appendix A.

### 8.1 Residential internet service

Respondents were asked about internet connection types and providers. This information provides valuable insight into residents' need for various internet and related communications services.

### 8.1.1 Internet access

Although 97 percent of Taunton respondents reported having either a home internet or mobile subscription, only 68 percent said they have wireline internet service in the home, leaving 32 percent not subscribing. Table 1 highlights the saturation of home internet subscriptions by key demographic groups. The use of wireline internet service does not vary strongly by most demographic groups given the relatively small subsample sizes in most cohorts. Sixty-five percent of respondents under age 45 reported having wireline internet, compared with more than three-fourths of older respondents.

**Percent** having wireline internet Count **TOTAL** 68% 173 Respondent age Less than 45..... 65% 75 76% 58 78% 63

Table 13: Home internet subscriptions by key demographics

	Percent having wireline	
Income	internet	Count
Less than \$60,000	71%	65
\$60,000 or more	71%	93
Education	7370	
HS graduate or less	68%	60
2-year associate degree	83%	30
4-year college/university/bachelor's degree	74%	57
Postgraduate or professional degree	74%	39
Race/ethnicity	<u> </u>	
White, non-Hispanic	75%	140
Racial/ethnic minority	67%	36
Household size		
One HH member	65%	37
Two HH members	82%	39
Three-four HH members	73%	45
Five + HH members	71%	72
Children in household		
No children in HH	77%	96
Children in HH	68%	95
Gender identity		
Man	81%	47
Woman	69%	137
Other gender identity	100%	1
Other demographics		
Identify as person with disability	76%	38
Member of LGBTQIA+ community	64%	14
Serve on active duty in US Armed Forces	100%	7
Live in affordable housing	88%	16

## 8.1.2 Questions for those with home internet service

Respondents subscribing to home internet service were asked a series of questions about their service, including provider used and price paid.

## 8.1.2.1 Home internet service provider

One-half (50 percent) of households with home internet service have Comcast/Xfinity, and 44 percent have Verizon Communications. Two percent have T-Mobile, and two percent have internet service through Taunton Municipal Light Plant. (CTC combined answers in cases where the survey instrument listed the same provider twice, but under different brand or company names.)

### 8.1.2.2 How well home internet service works

Most internet subscribers (75 percent) said their service is good enough to meet their household's needs, but 24 percent said it is not good enough and one percent said they do not know.

#### 8.1.2.3 Internet service cost

Respondents were asked to give the cost of their home internet service, as well as indicate whether or not they bundle internet with TV and/or phone service. Overall, 54 percent of subscribers bundle their internet service.

Respondents pay an average of \$139 per month for bundled internet service and an average of \$86 per month for unbundled internet service (see Figure 10). Sixty percent of those with bundled service pay at least \$100 per month, compared with 34 percent of those with internet-only service.

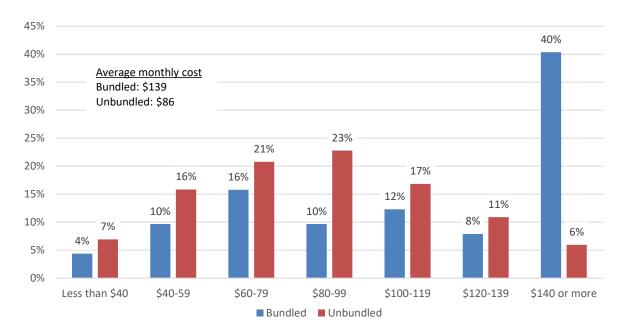


Figure 10: Monthly price for internet service

Respondents were also asked how hard it is to pay their internet bill. Nearly one-half of subscribers said it is not at all hard (18 percent) or not too hard (30 percent) to pay, as illustrated in Figure 11. However, many subscribers said it is somewhat hard (39 percent) or very hard (13 percent) to pay their internet bill.

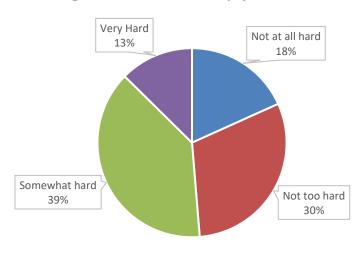


Figure 11: How hard is it to pay internet bill

As shown in Figure 12, 49 percent of those earning less than \$60,000 per year said paying their bill was "somewhat hard," and 14 percent said it is "very hard." Although based on a relatively small number of respondents in the lower-income cohort, this data contributes to our finding that affordability is a significant concern for lower-income residents of Taunton.



Figure 12: How hard is it to pay internet bill by household income

## 8.1.3 Questions for those without any home internet service—subscription or smartphone

Respondents without internet services were asked to indicate the various reasons for this. The survey asked this question only of the very small number of people who lack any kind service (neither a home subscription nor a smartphone), not the larger number who, while they might have a smartphone, do not have home internet subscriptions specifically. As such, this report will use American Community Survey data on this point.

Given that only eight people who responded lack either a home subscription or mobile subscription, the sample is too small to analyze in-depth. Six of the eight individuals cited the high expense as a barrier to having internet service. Seven of the eight respondents without mobile or home internet service access the internet elsewhere outside the home; one individual does not access the internet at any of the locations listed on the questionnaire.

### 8.1.4 Internet subsidy programs

All respondents were asked if they had heard of the Affordable Connectivity Program (ACP), which is available to eligible low-income households. As shown in Figure 13, only 50 percent of respondents with an annual household income of less than \$60,000, and who thus might be in a position to take advantage of the ACP, are aware of this program. This datapoint supports our recommendation that enrollment support efforts be expanded in Taunton.

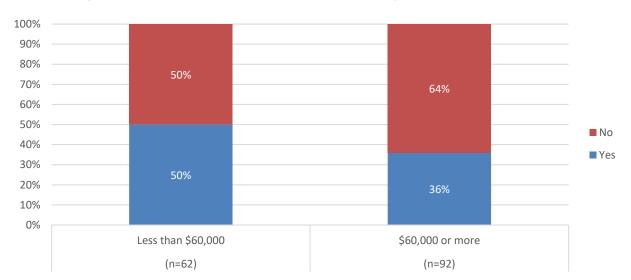


Figure 13: Aware of the Affordable Connectivity Program by household income

## 8.1.5 Computing devices used in household

Respondents were asked a series of questions about access to computing devices and types of devices used. Most respondents (89 percent) said everyone in their household has access to the computing devices they need to meet their everyday needs for internet use. However, those with an annual household income under \$60,000 are less likely than those in higher income households to have sufficient access (82 percent vs 97 percent). Specifically, they are less likely to use a laptop computer to connect to the internet (see Figure 14). This informs our recommendation that device access programs for low-income residents of Taunton be expanded.

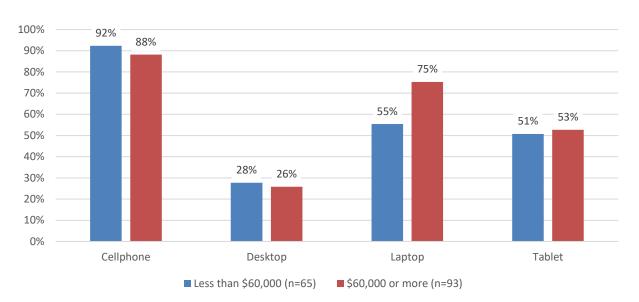


Figure 14: Devices used most of the time to connect to the internet by household income

As shown in Figure 15, just 25 percent of respondents would be able to pay \$500 or more for a laptop or desktop computer. Seventy-seven percent of respondents earning under \$60,000 per year could pay only \$250 or less for a computer, compared with 35 percent of those earning \$60,000 or more per year. Again, this informs our recommendation that device access programs for low-income residents of Taunton be expanded.

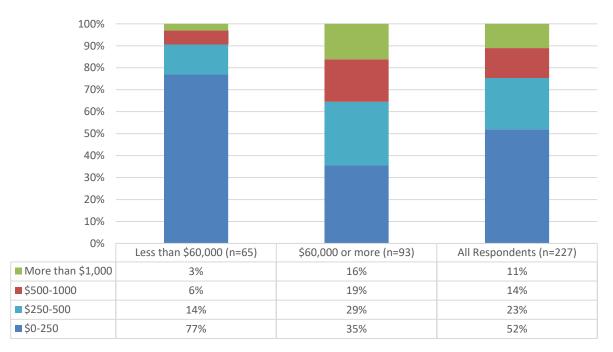


Figure 15: Amount able to pay for laptop or desktop computer

# 8.2 Digital skills

Respondents were asked a series of questions on how skilled they are using the internet in general and for specific activities. This information provides valuable insight into where there may be gaps in abilities and opportunities to educate residents. Almost all (96 percent) respondents said they are able to regularly use the internet for online activities. However, a sizeable percentage of respondents said using the internet is hard/not easy for various tasks, as shown in Figure 16.

Most (91 percent) respondents said using the internet for general searching is easy, and 81 percent said using the internet for searching and applying for a job is easy. Approximately three-fourths said it is easy to use the internet for transportation information (78 percent), participating in their local community (77 percent), and health care or telehealth services (75 percent). Sixty percent of respondents said it is easy to use the internet for searching and applying for benefits or resources.

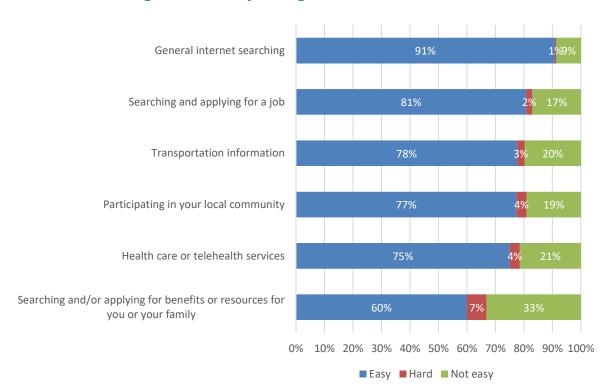


Figure 16: Difficulty in using the internet for various tasks

However, as shown in

Figure 17, respondents with a household income of less than \$60,000 were less likely than those in higher-income households to say using the internet is easy for searching and applying for a job and for searching and applying for benefits and resources. This informs our recommendation that skills programs for low-income residents of Taunton be expanded.

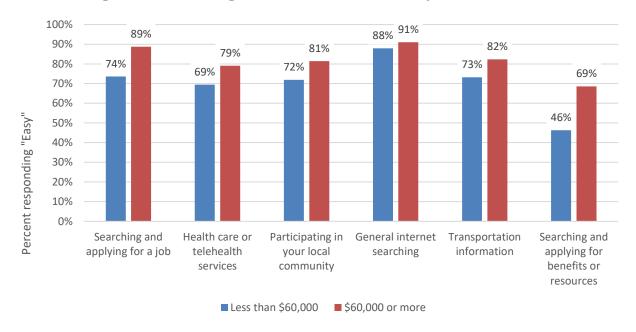


Figure 17: Ease in using the internet for various tasks by household income

Seventy-three percent of respondents were able to indicate the type of digital skills support they would be most interested in. Among this segment of respondents, 57 percent said they would be most interested in a do-it-yourself training module (see Figure 18).

The question did not provide respondents with the opportunity to say they were not interested in taking any kind of class. In other jurisdictions, CTC has found that significant numbers of people, even those lacking skills, are not interested in attending classes. As such, these results should not be taken to mean that Taunton needs to expand skills-training programs at the levels indicated here.

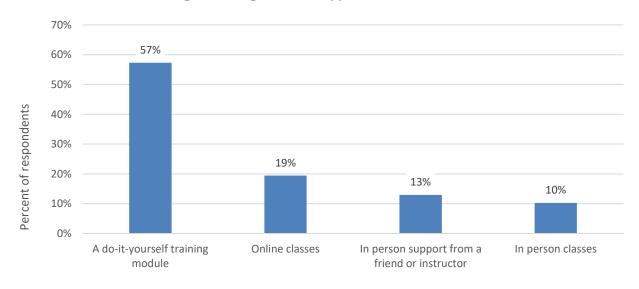


Figure 18: Digital skills support most interested in

# 8.3 Internet safety

Taunton residents across the income and other demographic categories have significant concerns about online safety and privacy. Respondents were asked a series of questions pertaining to individual awareness of, and the use of, measures to secure online privacy and internet safety. Most respondents are either somewhat concerned (38 percent) or very concerned (45 percent) about online safety (see Figure 19). Concern is high across all demographic groups.

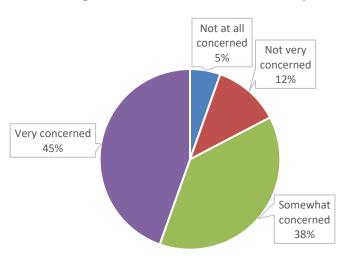


Figure 19: Concern about online safety

Respondents are most concerned about their data being stolen or used without their consent, cited by 91 percent of those who responded to the question (see Figure 20). About two-thirds of respondents are most concerned that they or a loved one could get scammed or tricked, and 63 percent are most concerned they could be tracked or surveilled. Another 54 percent are most concerned about being harassed or abused online.

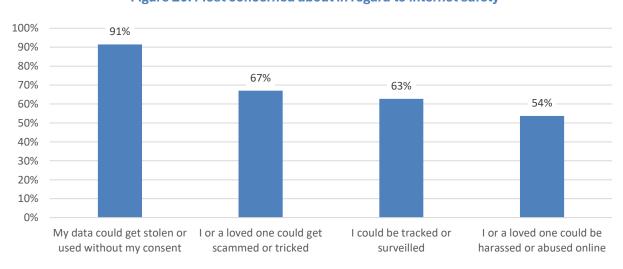


Figure 20: Most concerned about in regard to internet safety

About two-thirds of respondents who answered said they have the tools and resources they need to stay safe online (see Figure 21). (192, or 76 percent, respondents answered this question.) Another

20 percent of respondents said they do not know of any tools or resources to stay safe online, while eight percent said they know of tools or resources, but they do not work.

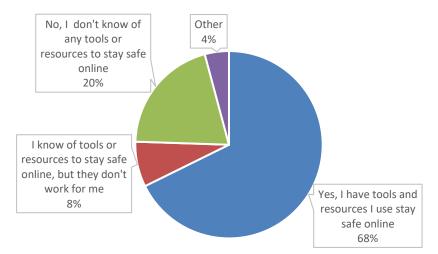


Figure 21: Aware of tools or resources respondents can use to stay safe online

# 8.4 Online accessibility and inclusiveness

Respondents were asked questions related to online accessibility and inclusivity of public resources and services. Most respondents said online government services are somewhat accessible (34 percent) or very accessible (60 percent), as shown in Figure 22.

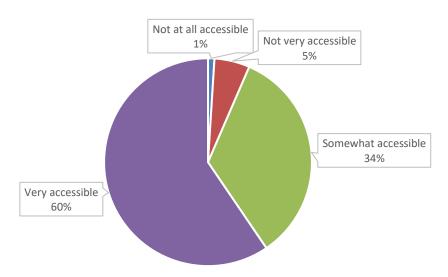


Figure 22: Accessibility of online government services

More than nine in 10 respondents said online government services have worked somewhat well (50 percent) or very well (43 percent), as shown in Figure 23. Online government services are assessed highly across demographic groups.

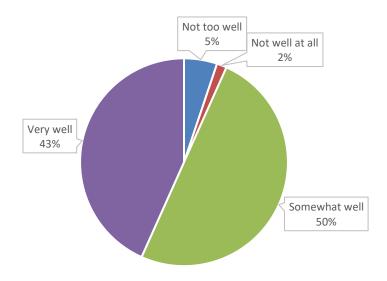


Figure 23: How well online government services have worked

# 8.5 Respondent information

Basic demographic information was gathered from survey respondents and is summarized in this section. Several comparisons of respondent demographic information and other survey questions were provided previously in this report. As shown in Figure 24, 38 percent of respondents are under age 45, 30 percent are ages 45 to 59 years, and 32 percent are ages 60 or older.

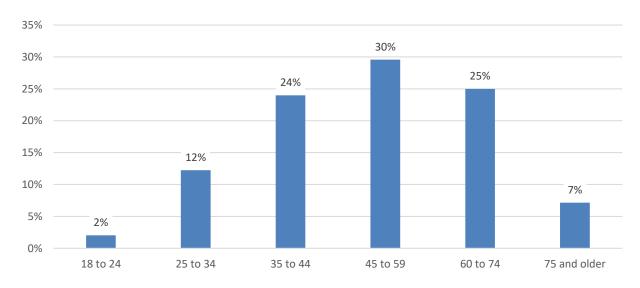


Figure 24: Age of respondents

Three-fourths of respondents identify as a woman, and 25 percent identify as a man (see Figure 25). Fewer than one percent of respondents has another gender identity.

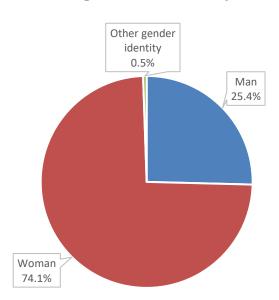
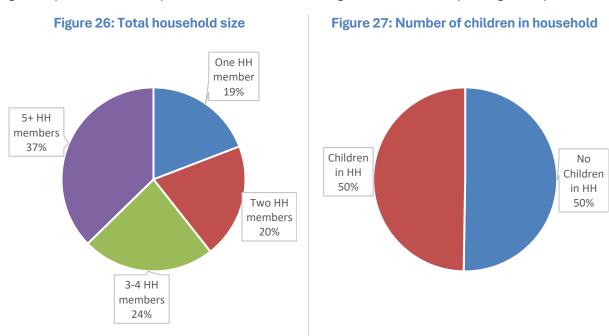


Figure 25: Gender identity

Respondents were asked to indicate the number of adults and children in their household. Twenty percent of households have two members, 24 percent have three or four household members, and 37 percent have five or more household members. Just 19 percent of respondents live alone (see Figure 26). One-half of respondents have children living in the household (see Figure 27).



The respondents' highest level of education attained is summarized in Figure 28. One-third of respondents have a high school education or less, and 16 percent have a two-year associate degree. Another 31 percent of respondents have a four-year college degree, and 21 percent have a postgraduate or professional degree.

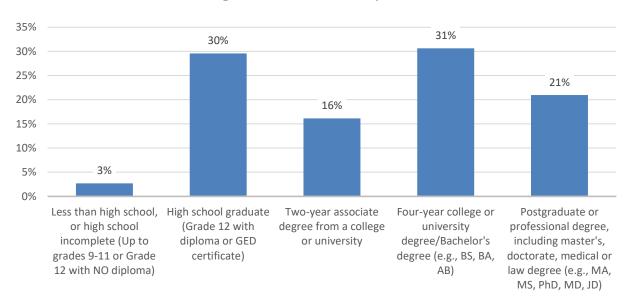


Figure 28: Education of respondent

Respondents were asked to indicate what categories best describe their race (see Figure 29). Sixty-eight percent of all respondents provided this information. Among this segment, 89 percent are White or Caucasian, and eight percent are Black or African American.

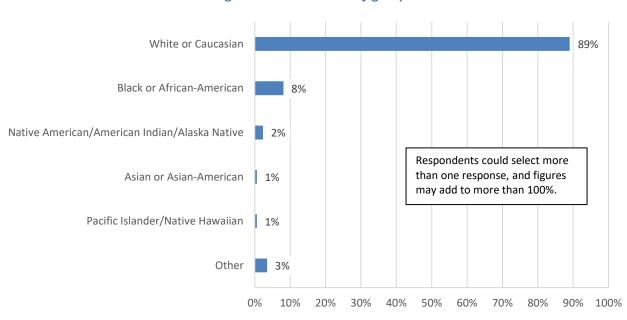


Figure 29: Race/ethnicity grouped

Respondents were also asked to indicate their ethnicity and if they belonged to a North American Indigenous, Native, or Tribal Group. About five percent of respondents said they are of Hispanic, Latino, or Spanish origin. One percent of respondents belong to a North American Indigenous, Native, or Tribal Group. Among those who responded to the race and ethnicity questions, 80 percent are White, non-Hispanic, and 20 percent belong to a racial or ethnic minority group (see Figure 30).

Keep in mind that more than three in 10 respondents cannot be classified (i.e., did not respond to race and ethnicity questions).

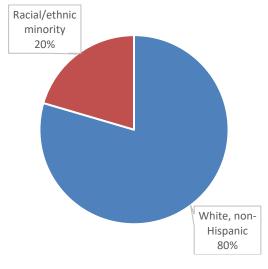


Figure 30: Race and ethnicity

As illustrated in Figure 31, 41 percent of respondents have an annual household income of less than \$60,000, and 59 percent earn \$60,000 or more per year.

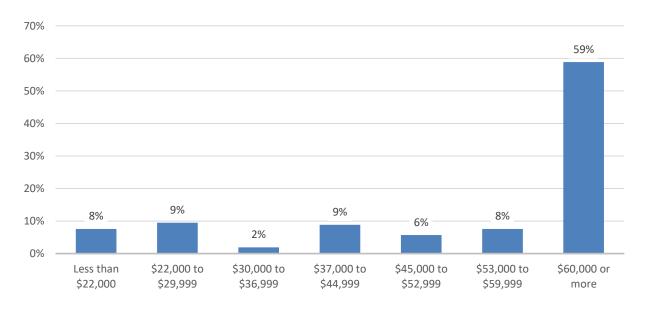


Figure 31: Annual household income

Respondents were asked if they belonged to certain other demographic groups. Twenty-two percent of those who responded said they identify as a person with a disability (see Figure 32). Additionally, eight percent reside in affordable housing, eight percent identify as a member of the LGBTQIA community, and four percent serve on active duty in the US Armed Forces.

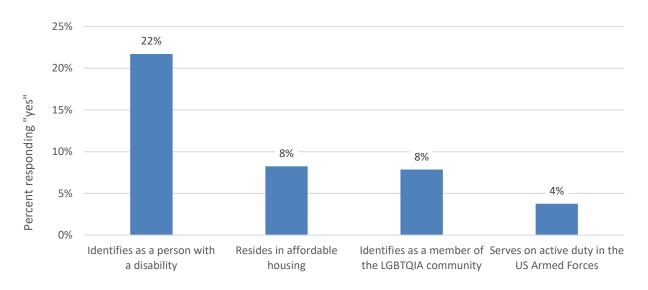


Figure 32: Respondent belongs to particular demographic groups

Additionally, respondents were asked if they faced difficulty in a variety of areas, as shown in Figure 33. Most respondents (85 percent) did not indicate any areas of difficulty. A small segment of respondents does face difficulties, such as with remembering or concentrating (seven percent) and walking or climbing steps (seven percent).

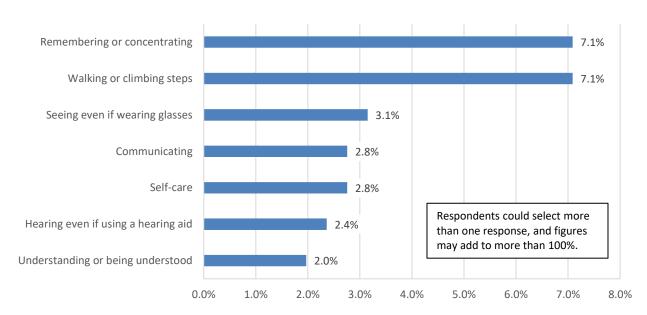


Figure 33: Respondent has difficulty in various areas

Respondents learned about the survey through a variety of sources, including 25 percent who heard about it from a government website, email list, flyer, or other outreach and 19 percent from a community meeting, community anchor institution, or other local institution. Other sources include an organization's website, email list, flyer, or other outreach (13 percent), and friend, colleague, or acquaintance (eight percent; see Figure 34).

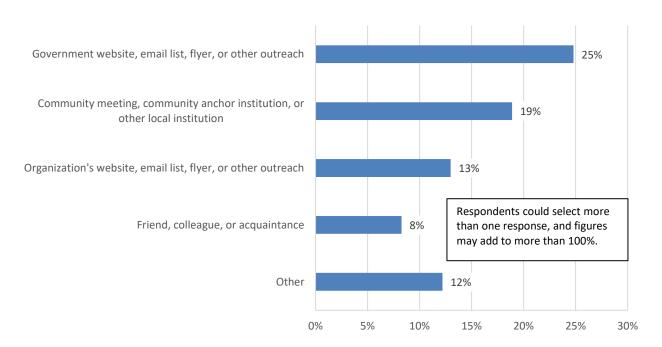


Figure 34: Where respondents heard about survey

## **Appendix A: MBI survey**



## **Massachusetts Statewide Digital Equity Survey**

The Massachusetts Broadband Institute (MBI) wants to hear from you about your experiences with getting and using internet service! This survey is completely anonymous and should be completed by one individual per household. Your feedback is vital to understand barriers to internet access, affordability, and adoption to help close the digital divide. Thank you for your time and participation.

Section 1: Please answer the following questions.
What is your zip code?      Which Massachusetts municipality do you live in?
Do you have internet service in your home?  YES – Please proceed to Section 2 below  NO – Please skip to Section 3 (flip this page over)
Section 2: Please answer the following questions only if you CAN connect to the internet from home.
3. Who is your internet service provider?
<ol><li>What kind of internet service do you have at home? Please check all that apply.</li></ol>
☐ A data plan for a smartphone, hotspot, or tablet ☐ Dial-up internet
☐ Home wireline connection (cable, fiber, DSL, etc.) ☐ Satellite internet
5. How well does your home internet service work?
☐ Good enough to meet my household's needs ☐ I don't know
☐ Not good enough to meet my household's needs
<ol><li>Is your home internet service bundled with other services such as telephone or TV?</li></ol>
☐ Yes
□ No
7. How much do you pay for the internet every month? \$
8. How hard is it for you to pay your internet bill?
☐ Very hard ☐ Not too hard
□ Somewhat hard □ Not at all hard
9. Have you heard about the Affordable Connectivity Program (ACP) that provides discounted internet service for low-income households?
☐ Yes ☐ I don't know
□ No
For more information and to find out if you qualify for ACP, call the Federal Communication Commission's ACP Support Center: 877 384-2575.
When complete, skip to section 4 below.

sectio	on 3: Please answer the following					
	you do not have internet service in you	ir home, what is the reaso				
	Service is not available in my area			I can't afford or access	s a device to use the interne	
	Service is too expensive			I don't want / don't use	e the internet.	
	I am concerned about online privacy			Other (please specify):		
	I don't feel confident navigating the using online tools	internet or				
	you do not have internet at home, where do you go to use the internet? Please check all that apply.					
_	A workplace				s a park or government	
_	A friend or family member's home		П	building On public transit		
_	School, college, or university			•	es internet in these or any	
	A library or community center		ш	I do not regularly access internet in these or ar other spaces		
	A business such as a restaurant, cafe (e.g., McDonald's, Taco Bell, Starbuck			Other (please specify):	:	
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12. Do use  13. Wh  14. Ho  15. Are  16. Ple  Searc  Healtd	pes everyone in your household have a e? (Computers, smartphones, tablets, Yes No hich of the following devices do you us Cellphone Desktop computer Laptop computer ow much would you be able to pay for \$0-50 \$50-100 \$100-150 e you able to regularly use the interne Yes No ease rank the level of difficulty for wha thing and applying for a job h care or telehealth services cipating in your local community	access to the computer decor other internet enabled or other internet enabled see most of the time to confine a laptop or desktop computer for online activities?	nect tr	o the internet? (Check a Tablet (or similar devic Other (please specify): \$150-250 \$250-500 More than \$1,000  Not easy, Hard)  Not easy	Il that apply) ce) :	
12. Do use  13. Wh  14. Ho  15. Are  16. Ple  Searc  Healt!  Partic  General	pes everyone in your household have a e? (Computers, smartphones, tablets, Yes No hich of the following devices do you us Cellphone Desktop computer Laptop computer ow much would you be able to pay for \$0-50 \$50-100 \$100-150 e you able to regularly use the interne Yes No ease rank the level of difficulty for wha	access to the computer decor other internet enabled on other internet enabled in the seems of the time to confide a laptop or desktop computer for online activities?	nect tr	o the internet? (Check a Tablet (or similar devic Other (please specify): \$150-250 \$250-500 More than \$1,000	Il that apply) ce) :	

17.	f ye	ou do not have regular access to the internet, what would most li Searching and applying for a job Health care or telehealth services Participating in your local community General internet searching Transportation information	       	o use it for if you could?  Searching and/or applying for benefits or resources for you and your family  Something else  I don't want to use the internet regularly
18.	Wh	at kind of digital skills support would you be most interested in?		
		In person classes		In person support from a friend or instructor
		Online classes		A do-it-yourself training module
19.	Hov	w concerned are you, if at all, about internet safety?		
		Very concerned		Not very concerned
		Somewhat concerned		Not at all concerned
20.	Wh	at are you most concerned about? (Select all that apply)		
		That my data could get stolen or used without my		That I could be tracked or surveilled
	_	consent		That I or a loved one could be harassed or abused
	ш	That I or a loved one could get scammed or tricked		online
21.	Are	you aware of tools or resources you can use to stay safe online?		
		Yes, I have tools and resources I use stay safe online		I know of tools or resources to stay safe online, but they don't work for me
		No, I don't know of any tools or resources to stay safe online		Other (please specify) :
22.	Hov	w accessible are online government services like benefits portals,	, RM	V services, or paying for permits or tickets to you?
		Very accessible		Not very accessible
		Somewhat accessible		Not at all accessible
23.		en you have used online government services like benefits portal I did they work for you?	ls, Ri	MV services, or paying for permits or tickets, how
		Very well		Not too well
		Somewhat well		Not well at all

When complete, proceed to section 5 below.

☐ Native American/American Indian/Alaska Native

Section 5: All respondents should answer these questions. We collect demographic information so that we can make sure we are representing all neighborhoods, towns, cities and groups across the Commonwealth. 24. What is your age? ☐ 18 to 24 ☐ 60 to 74 25 to 34 75 and older Prefer not to answer 35 to 44 45 to 59 25. What is your gender identity? Woman ☐ Gender fluid ☐ Man ☐ Other Prefer not to answer ■ Non-binary 26. How many people, including yourself, currently live in your household? (Note: A household is defined as all the people who currently occupy the housing unit where you live). **1** 1 6 □ 2 ☐ 8 or more **3 4** Prefer not to answer □ 5 27. How many children under age 18, currently live in your household? (Note: A household is defined as all the people who currently occupy the housing unit where you live). 0 □ 1 ☐ 5 or more □ 2 ☐ Prefer not to answer 28. What is the highest level of school you have completed or the highest degree you have received? Less than high school, or high school incomplete ☐ Four-year college or university degree/Bachelor's (Up to grades 9-11 or Grade 12 with NO diploma) degree (e.g., BS, BA, AB) High school graduate (Grade 12 with diploma or Postgraduate or professional degree, including GED certificate) master's, doctorate, medical or law degree (e.g., MA, MS, PhD, MD, JD) ☐ Two-year associate degree from a college or Prefer not to answer 29. Are you of Hispanic, Latino, or Spanish origin, such as Mexican, Puerto Rican, or Cuban? ☐ Yes □ No Prefer not to answer 30. Which of the following best describes your race? (Select all that apply) ■ White or Caucasian ☐ Pacific Islander/Native Hawaiian ☐ Black or African-American Some other race (please specify) Asian or Asian-American Prefer not to answer

## Appendix B: Stakeholder questionnaire

Massachusetts B	ton is undertaking a study of local broadband needs under the croadband Institute's Municipal Digital Equity Program, in C Technology & Energy, a consulting firm with offices in
questionnaire is facilitated by org	is questionnaire to the best of your ability. The goal of this to understand the active programs and initiatives currently ganizations located in or that serve Taunton, and to understand unding existing efforts or starting new ones.
1. Please provide t	the information for a point of contact in your organization.
Name	
Organization name	
Email address	
Phone number	
2. Has your ora	anization created a broadband and/or digital equity plan?
Yes	anization created a broadband and/or digital equity plans
○ No	

Digital Equity Programs Introduction
Digital equity programs aim to ensure that individuals have the skills, technology, and capacity to use broadband to its fullest extent. Examples of digital equity programs include those that promote computer skills, internet access, and computing device access.
3. What do you believe are the most pressing challenges associated with digital equity and access in Taunton, and for whom?
A
* 4. Does your organization offer digital equity programs?
○ Yes
○ No

Program Details
We want to collect data on all digital equity programs you currently provide. Please
record as many details as you can about the program you offer. If your organization has more than one active digital equity program, there is an opportunity for you to
answer the same questions for a second program.
5. What is the name of the project?
Project name
<ol><li>What aspects of digital equity does the program address? Check all that apply.</li></ol>
Availability and affordability of internet
Digital literacy
Cybersecurity
Devices and technical support
Online accessibility and inclusivity
7. Please describe the program in a few sentences:
<ol><li>Does the program focus on certain populations? Check all that apply.</li></ol>
Individuals with disabilities
Veterans
Aging individuals (60 and above)
Incarcerated individuals
Individuals with a language barrier, including individuals who are English learners; and have low levels of literacy
Individuals who are members of a racial or ethnic minority group
Individuals whose household income is lower than 150% of the poverty level
No particular focus on a population
Other (please specify)
9. What is the annual project budget?
Cost in dollars

10. How much does the program cost to each participant?
Cost in dollars
11. What is the cost per participant served?
Cost in dollars
12. Please give us a sense of the geography you serve.
Municipal-wide
Neighborhood-wide
Other (please specify)
13. How long has the program been active, in months?  Program length in
months
14. How many people were served by the program in the last fiscal year? Under 25 people
26 to 50 people
○ 51 to 100 people
More than 100 people
Other (please specify)
15. How many participants do you expect to serve over the life of the program?
1 to 50
51 to 100 people
101 to 250 people
251 to 500 people
More than 500 people
16. If you had the resources, would you want to scale the project to serve more people?
Yes
○ No
* 17. Does your organization have another digital equity program?
Yes
○ No

Digital Equity Program #2
18. What is the name of the project?
Project name
19. What aspects of digital equity does the program address? Check all that apply.
Availability and affordability of internet
Digital literacy
Cybersecurity
Devices and technical support
Online accessibility and inclusivity
20. Please describe the program in a few sentences:
20. Fredse deserbe the program in a few sentences.
21. Does the program focus on certain populations? Check all that apply.
Individuals with disabilities
Veterans
Aging individuals (60 and above)
Incarcerated individuals
Individuals with a language barrier, including individuals who are English learners; and have low levels of
literacy
Individuals who are members of a racial or ethnic minority group
Individuals whose household income is lower than 150% of the poverty level
No particular focus on a population
Other (please specify)
22. What is the annual project budget?
Cost in dollars
23. How much does the program cost to each participant?
Cost in dollars

24. What is the cost per participant served?	
Cost in dollars	
25. Please give us a sense of the geography you serve.	
Municipal-wide	
Neighborhood-wide	
Other (please specify)	
26. How long has the program been active, in months?  Program length in	
months	
27. How many people were served by the program in the last fiscal year?	
Under 25 people	
26 to 50 people	
51 to 100 people	
More than 100 people	
Other (please specify)	
20. How many posticionate do you arrest to come over the life of the arrest and	
28. How many participants do you expect to serve over the life of the program? 1 to 50	
○ 51 to 100 people	
101 to 250 people	
251 to 500 people	
More than 500 people	
20. If you had the ground would you would be apple the project to grow a second 20.	
29. If you had the resources, would you want to scale the project to serve more people? Yes	
○ No	
O	
30. Does your organization have another digital equity program?	
Yes	
○ No	

	ntly in the process of y details about the u	f planning but ha		ented.
	tion in the process of	developing a digit	al equity program?	
○ Yes ○ No				

Planned Programs
32. What kind of digital equity program(s) is your organization developing? Please select the categories that best fit the program type.
Oigital skills and literacy
Data privacy and cybersecurity
Devices (Laptops, computers, tablets)
Technical support
Oigital navigators
○ Broadband access
Creating accessible and inclusive internet content
22 What is the second had not seed?
33. What is the annual budget need?
34. What else do you need to launch the program?
35. What work (if any) has already been completed to launch the new program?