# DIGITAL EQUITY PLAN

*June 2025*

**MBI**
MASSACHUSETTS
BROADBAND INSTITUTE
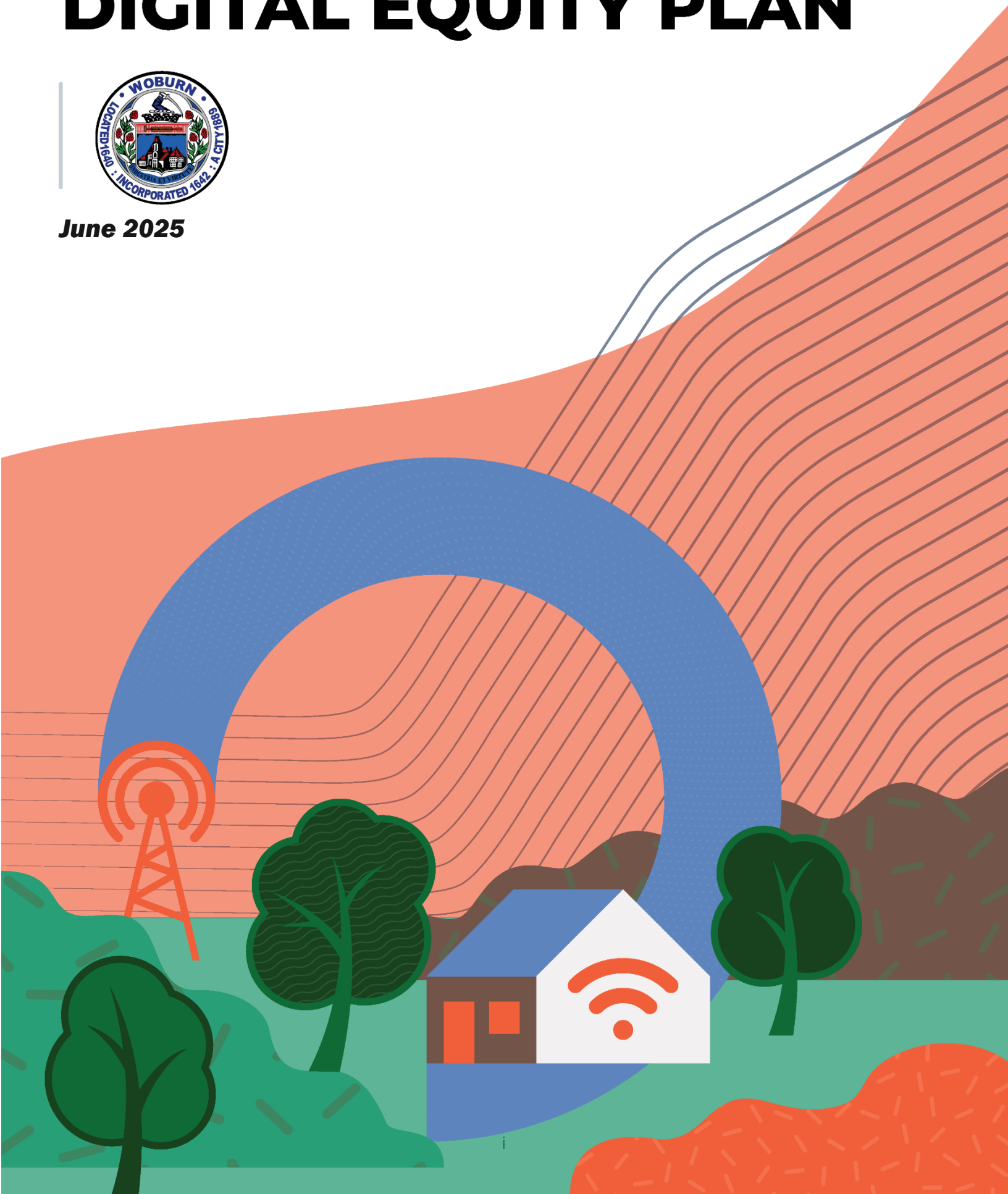
at the MassTech
Collaborative

Kimley»Horn

# DIGITAL EQUITY PLAN | CITY OF WOBURN

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# 1  Introduction

## 1.1  Project Background

Chapter 231 of the Acts of 2008 established the Massachusetts Broadband Institute (MBI) as a new division within the Massachusetts Technology Collaborative to provide for a program to achieve the deployment of affordable and ubiquitous broadband access for every citizen of the Commonwealth of Massachusetts.[1] This legislation provided funding to MBI to oversee and administer across the Commonwealth.

Additionally, the National Telecommunications and Information Administration (NTIA) allocated $147 million to Massachusetts under the BEAD program to build out broadband infrastructure to remaining unserved[2] and underserved[3] locations across the state.[4] The NTIA has also allocated $1 million to Massachusetts to develop a State Digital Equity Plan and another $14.1 million to implement that plan under the Digital Equity Act. Funds from the American Rescue Plan Act (ARPA) were then used to establish a Municipal Digital Equity Planning Program, supporting these efforts at the local level. Specifically, the Municipal Digital Equity Planning activities will accomplish two goals:

1. Guide municipal decision-making and investments that will increase access, adoption, and usage of the internet for the populations most impacted by the COVID-19 pandemic.

2. Prepare municipalities to submit grant proposals to existing or forthcoming state or federal programs to support digital equity activities.

## 1.2  What is Broadband?

The term broadband, also known as high-speed internet, is the transmission of data using a wide range of frequencies that allows for the fast and efficient transfer of large amounts of information. In contrast to traditional Digital Subscriber Lines (DSL) or dial-up access, which require a telephone line to connect, broadband remains consistently connected to the internet without requiring manual connection initiation.

Broadband can be split into two (2) types, fixed and mobile. Generally speaking, fixed broadband includes those types of connections with a physical wire and cables to the home (e.g.: VDSL (Very High Speed Digital Subscriber Line), fiber optic, cable modem, fixed antenna, and satellite) and wireless broadband includes anything without a physical wire connection (e.g.: mobile and cellular). Broadband speed can vary based on factors such as technology, level of service, or congestion. In March 2024, the Federal Communications Commission (FCC) voted to increase the threshold for

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[1] Source: https://broadband.masstech.org/

[2] An unserved service project is defined as a project in which not less than 80 percent of broadband-serviceable locations served by the project are unserved locations. An "Unserved Service Project" may be as small as a single unserved broadband serviceable location (NOFO Section I.C.ee). An unserved location is defined as a broadband-serviceable location that the Broadband DATA Maps show as (a) having no access to broadband service, or (b) lacking access to Reliable Broadband Service offered with - (i) a speed of not less than 25 Mbps for downloads; and (ii) a speed of not less than 3 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds (NOFO Section I.C.dd).

[3] An underserved service project is defined as a project in which not less than 80 percent of broadband-serviceable locations served by the project are unserved locations or underserved locations. An "Underserved Service Project" may be as small as a single underserved broadband serviceable location (NOFO Section I.C.cc). An underserved location is defined as a broadband-serviceable location that is (a) not an unserved location, and (b) that the Broadband DATA Maps show as lacking access to Reliable Broadband Service offered with - (i) a speed of not less than 100 Mbps for downloads; and (ii) a speed of not less than 20 Mbps for uploads; and (iii) latency less than or equal to 100 milliseconds (NOFO Section I.C.bb).

[4] The current federal administration has halted the continuation of the Digital Equity Act and terminated grants to states as of May 12, 2025, including MA's award of $14.1 million.

speed from 25 megabits per second (Mbps) download speed and 3 Mbps upload speed to 100 Mbps download speed and 20 Mbps upload speed.

Three (3) main metrics must all be adequate for the internet to be considered high-speed.

- **Speed** is typically measured in Mbps, which is a measurement of the amount of data capable of being transmitted each second.
- **Bandwidth** is the connection's capacity for transmitting data. Broadband is like an internet highway; the higher the bandwidth, the more lanes your internet highway has, and the more devices you can connect simultaneously.
- **Latency** is the time it takes for the information to reach its destination related to potential delays. It is critical to applications that use live connections. The effects of high latency include jittery connections and frequent pauses while connected.

*In 2015, the FCC defined high-speed internet as download speeds of at least 25 Mbps and upload speeds of at least 3 Mbps. In order to keep up with the increasing data demands, a new definition of "high-speed" is recommended by the 2021 Infrastructure Investment and Jobs Act (IIJA). The law sets a minimum threshold of 100 Mbps download speeds and 20 Mbps upload for new projects to receive federal broadband funds.*

## 1.3   What is Digital Equity and Why is it Important?

Digital equity is a concept that ensures individuals and communities have equitable access to and use of information technology, enabling them to fully participate in social and economic life. It recognizes that in today's digital age, access to technology and the internet is essential for various aspects of life, including education, employment, healthcare, and civic engagement.

*According to the National Digital Inclusion Alliance (NDIA), "Digital Equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services."*

## 1.4   Vision and Goal

The City of Woburn recognizes the importance of digital accessibility for all its members to better identify the disparity and promote inclusivity within our digital ecosystem. Approximately 28% of the households are at or below 300% the poverty line and 13.5% are at or below the 185% the poverty line.  Specifically, 300% of the poverty line represents an income that is three (3) times higher than the officially defined poverty level, while 185% represents an income that is 1.85 times the poverty level. The City is dedicated to ensuring that every individual has the opportunity and ability to access reliable, affordable, and high-speed internet service. Additionally, the City will provide the necessary knowledge and skills to effectively utilize devices that meet individual needs in a safe and adequate manner. By prioritizing digital equity, the Woburn community aims to promote full personal, civic, and economic participation. Access to reliable internet service and digital literacy skills are essential for individuals to fully engage in the community and contribute to its growth and prosperity.

Consistent with the Massachusetts Broadband Strategic Plan, the strategy involves these four (4) pillars.

- **Extend and Improve Broadband Access and Infrastructure.** Investments in reliable infrastructure where it's lacking, which may be found in pocket locations along City edges, low-density areas, and low- income urban neighborhoods.
- **Reaching Target Populations through Partnerships.** Best practice from the Mass Internet Connect implementation experience is that it is vital to have a distribution partner trusted in

the community with the ability to reach the target population and deliver support on devices, subsidies, and digital literacy training.

- **Digital Literacy.** Go beyond connectivity by providing the necessary digital and computer skills for vulnerable populations. More than one out of four participants in the Mass Internet Connect program with MassHire have requested Digital Literacy support.
- **Adoption and Affordability.** Getting devices to people who need them and directing consumers to broadband service subsidies and low-cost service options.

# 2   Community Engagement

## 2.1   Steering Committee

The Digital Equity Steering Committee included representatives from the City of Woburn's Mayor's Office such as the Mayor's Assistant for Community Outreach, Planning and Economic Development Department, Engineering Department – GIS coordinator, Information Technology (IT) Department, Library Director, Senior Center Director, along with the Woburn's Housing Authority. The Digital Equity Steering Committee was informed on the project's process, provided strategic support, and facilitated communication with selected stakeholder groups.

- **Steering Committee Meeting #1 (September 13, 2024):** Introduced the committee to the consultant team, explained the concept of the Digital Equity Plan and initial research findings, and held an open discussion for any additional information to consider. A high priority in the discussion was digital literacy, discount services that may be available, and how best to share the MBI Survey with the public.
- **Steering Committee Meeting #2 (May 29, 2025):** Presented to the committee the recap of the milestones that were completed and presented on the draft recommendations. Feedback from the committee included that the hot spots at the library are used all the time and the library has talked about loaning laptops but the security issues arises.

## 2.2   Stakeholder Interviews

During the development of the Digital Equity Plan, the consultant team interviewed stakeholder groups to receive insight on challenges and opportunities in their work and with groups they are involved with. The following groups were selected to proceed with interviews:

- Samantha Stone, Mayor's Assistant for Community Outreach of **Mayor's Office**
- Leslie Gangi, Resident Service Coordinator of **Woburn Housing Authority**
- Hermayne Gordan, Director of **Woburn Public Library**
- Nelly Alonge, Family & Community Engagement Liaison Assistant of **Woburn Public Schools**
- Marie Lingblom, Council on Aging (COA) Director of **Woburn Senior Center**

## 2.3   Community Outreach and Workshops

In addition to the Steering Committee and stakeholders, the broader Woburn community was involved in the development of the Plan through community events where citizens could provide input on the challenges they face with digital access and literacy – pop-up events were hosted at the Senior Center and Woburn Public Library. The pop-up events were held on Wednesday, December 4, 2024, and provided opportunities for citizens to learn about Digital Equity and provide their input for incorporation into the plan. There were different activities for the public to engage with, identifying areas with limited or no mobile coverage, good experiences with wireline or mobile connections, and specific input on devices, affordable/reliable connection, and digital literary.

## DIGITAL EQUITY PLAN

Join us for the upcoming pop-up events focused on Digital Equity in Woburn. Let's bridge the digital divide together and create a more inclusive community.
Save the date and we hope to see you there!

### Wednesday, December 4th

**Pop-Ups**

🕐 **10:00 am – 12:00 pm**
📍 **Senior Center**
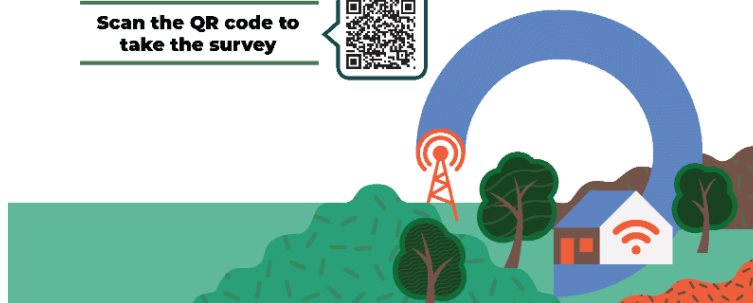(144 School St, Woburn, MA 01801)

🕐 **4:00 pm – 6:00 pm**
📍 **Woburn Public Library**
(45 Pleasant St, Woburn, MA 01801)

Scan the QR code to take the survey

### 2.4 MBI Survey

MBI also prepared a survey to assess broadband access and needs across the state. This anonymous survey included questions regarding residents' internet service provider, type(s), quality, and cost, as well as questions regarding their personal experiences with device access and desires to participate in training opportunities. As of January 2, 2025, Woburn residents had submitted 51 responses to the survey. Some of the information gathered from these responses includes the following:

- On average, respondents are spending $138.32 per month on their internet subscription. However, it should be noted that when communicating with the folks, many had bundle subscriptions and were unaware of the breakdown between cable, internet, and landline. Therefore, the average may be slightly skewed.
- About 96% of respondents have internet access in their home, with 47% having Verizon as a provider, and 32% having Xfinity/Comcast.
- About 10% of respondents claim that their internet is not good enough to meet their household needs.
- Most households access the internet using a cellphone (57%) or laptop computer (45%), with desktop computers and tablets being slightly less common.
- About 67% of respondents said they were concerned about internet safety, with the most common concern being that their data could get stolen or used without their consent (47%).

## 3   Community Overview

Woburn is a densely developed suburb with a large employment base due to its excellent highway access and covers an area of 12.6 square miles. As a city, Woburn is governed by a Mayor and City Council, who represent their constituents. Woburn is home to about 40,876 residents, across 16,121 households and 10,458 families. Vulnerable groups, such as non-native English speakers, low-income residents, and the elderly, face unique challenges to broadband access and digital literacy.

As noted in the *Woburn Plan for Progress Master Plan | 2015-2025*, the dominant land use in Woburn is single-family homes (36%), with multifamily and two family homes occupying only about eight percent (8.0%) of the City as shown in Figure 1. Commercial and industrial uses take up ten percent (10.0%) of the land area, while water and wetland are about nine (9.0%) percent. Condominium development occupies a comparatively smaller amount of land (192 acres), with a total of 1,657 units in 2015. This represents a 30% increase of units over the 2005 total of 1,265 condominiums. About eight percent of the developed land area in the City is in multi-family units which occupy 24 acres. These two and three-family style homes are found in various Woburn neighborhood. In addition, the Housing Authority's two largest developments by land area are at Spring Court (10.3 acres) with 100 units of affordable housing and on Webster Avenue in North Woburn (7.4 acres) with 60 units of affordable housing. There is also the Kimball Court affordable 40 B rental development on Kimball Court (27 acres).
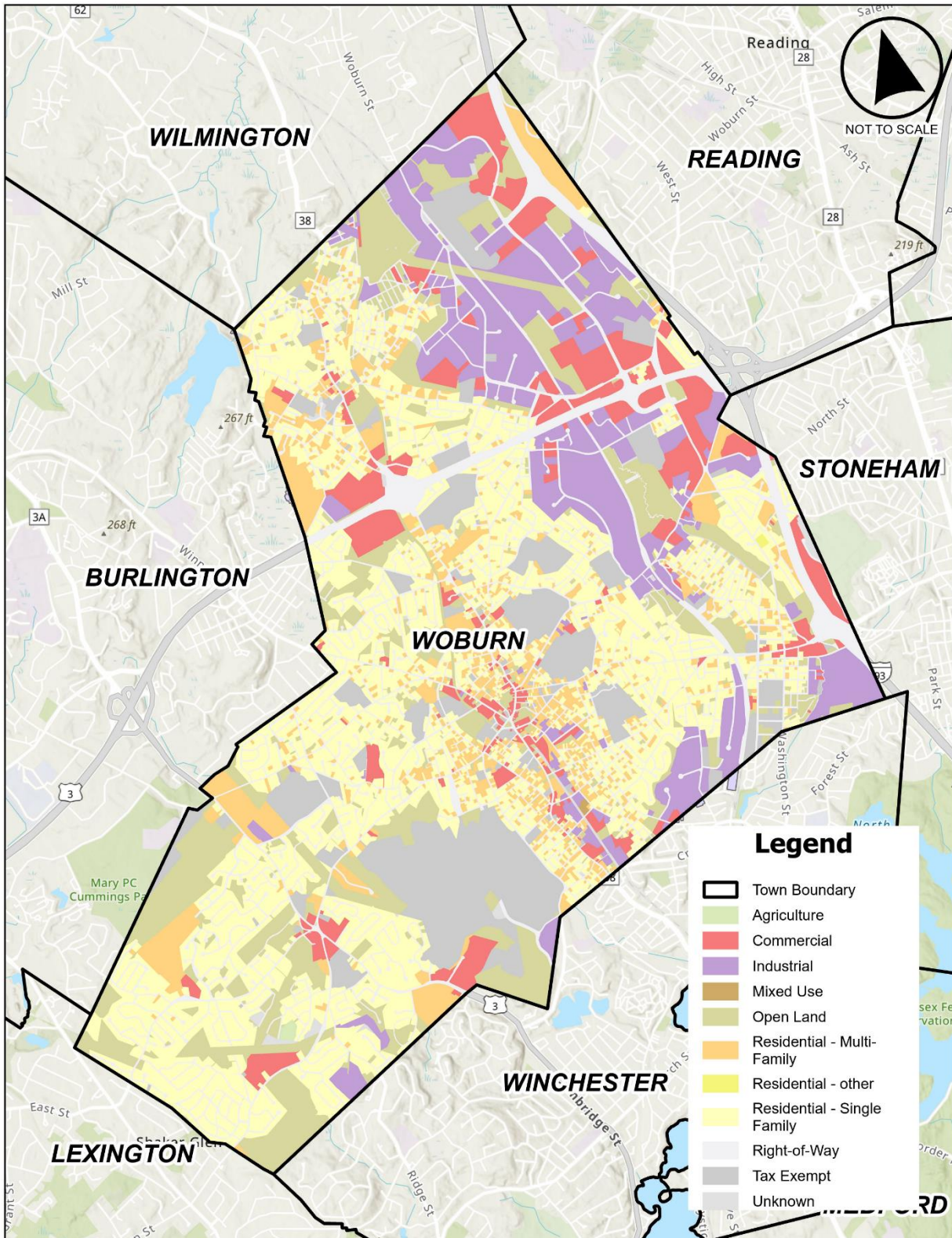
Figure 1: Land Use

### 3.1 Demographics

*KEY DEMOGRAPHICS INFORMATION*

Table 1: Summary of Demographic information

| Population[1] | Household Ownerships[1] | Race[2] | Language[1] | Education[1] | Disabilities[1] | Median Household Income[1] | Median Age[2] |
|---|---|---|---|---|---|---|---|
| 41,647 | 42.4% occupied units are rental units<br><br>57.6% occupied units are owned | 5.80% are non-White | 23.9% speak language other than English at home | 47.3% has a Bachelor's degree or Higher | 8.4% is disabled | $107,754 | 39.5 |

Notes: [1] US Census Bureau, [2] Data USA

The most recent census data indicates the City has a population of 41,647 and 16,121 households, of which 57.6% are owner-occupied. Between 2022 and 2023, the median property value increased from $612,500 to $641,800, a 4.78% increase. In 2023, 57.6% of the housing units in Woburn were occupied by their owner, a decline from the previous year's rate of 58.8%. The median rent in Woburn is $2,190. This information is important to consider when it comes to income and expenses, as it can impact the ability of individuals and families to afford better internet services. Renters may have limited financial resources, and the cost of rent can significantly impact their ability to allocate funds for internet access. "Cost burdened" refers to the percentage of households that spend more than 30% of their household income on housing expenses. More than a third of households are cost burdened, paying 30% or more of their income on housing costs; the rate is particularly high among owner households (53.9%) as noted in the *Woburn Housing Production Plan, dated 2016*.

The three (3) largest ethnic groups in Woburn are White (Non-Hispanic) (74.2%), Asian (Non-Hispanic) (8.17%), and Black or African American (Non-Hispanic) (5.88%), as shown in Figure 2. Feedback from underrepresented groups is essential to break down any racial barriers to existing access or future resources. In the Woburn Housing Production Plan, dated 2016, though the minority populations are still small in number, they represent a growing residential base whose housing needs may become a major factor in driving future housing demand and affordability.
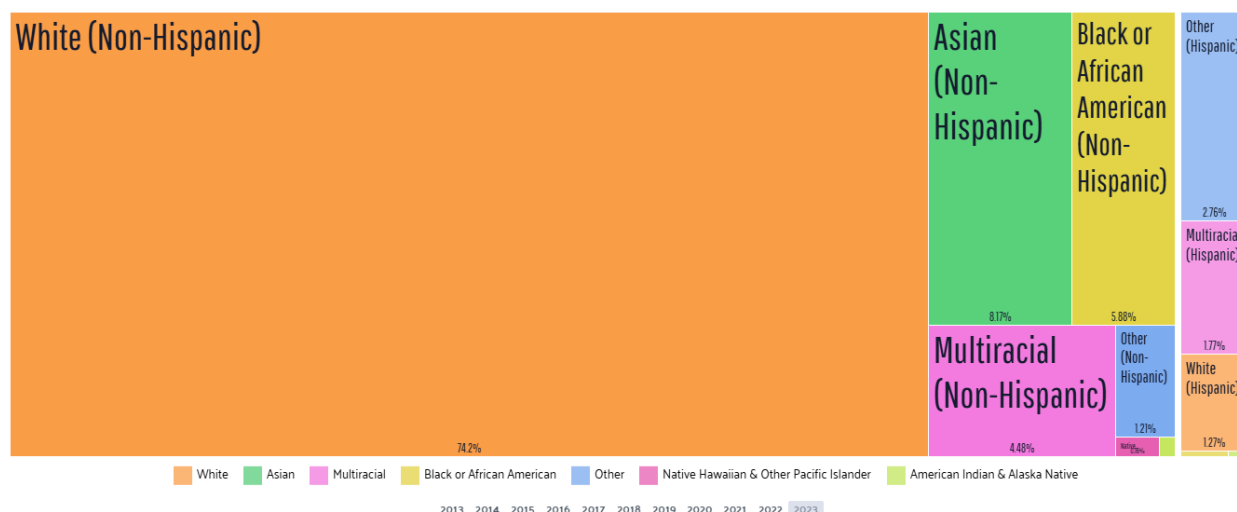


Figure 2: Race and Ethnicity 2022 (Source: Data USA)

Understanding disabilities is crucial because it promotes inclusivity, fosters a more equitable society, and ensures individuals with disabilities have the same opportunities as everyone else. It is important to note that residents may have multiple types of disabilities and may require different accommodations to bridge digital literacy gaps as shown in Figure 3. In Woburn, 11.3% of residents have at least one disability.
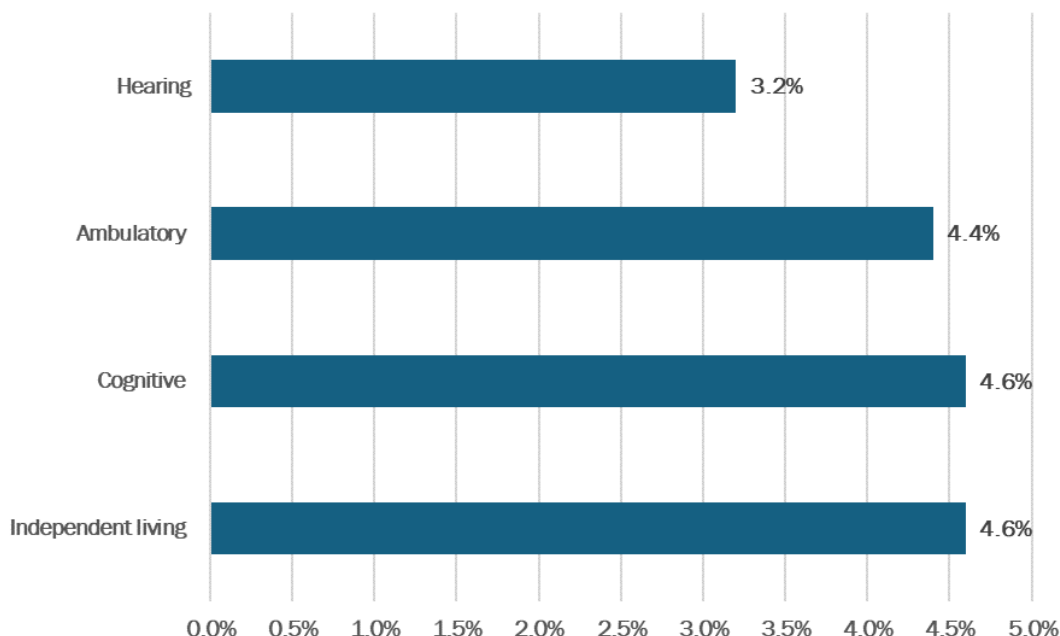


Figure 3: Common Disabilities (Source: US Census Bureau)

The median household income in Woburn is $107,754, which increased from 2022 to 2023, from the previous year's value of $104,780. Figure 4 below shows the largest share of households have an income in the $200k+ range. However, there are still approximately 28% of the households that are at or below 300% of the poverty line, and 13.5% are at or below 185% of the poverty line. Those in the group below $50,000 may face greater difficulty affording monthly internet costs, especially in areas where fewer providers are available.
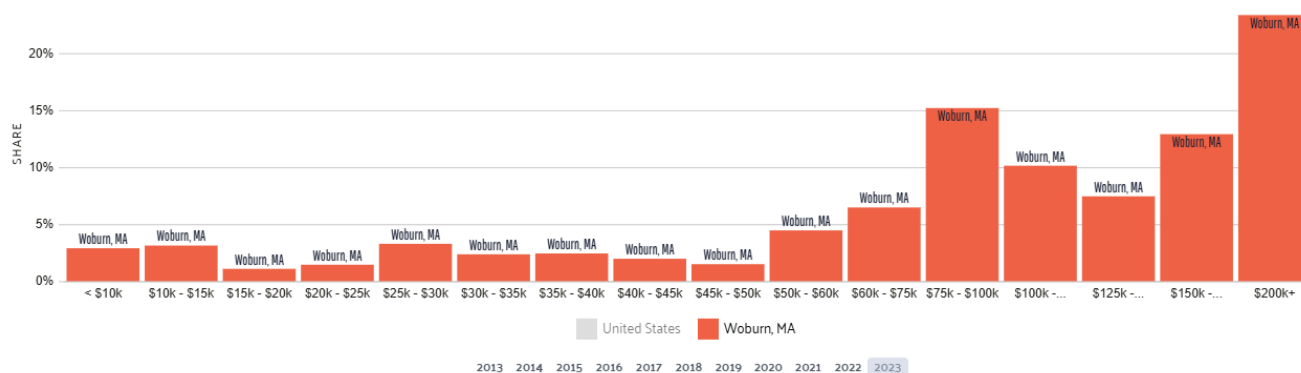


Figure 4: Household Income 2023 (Source: Data USA)

Woburn's population is slightly younger, on average, than the state of Massachusetts as a whole. About 15.8% of the population is 65 years or older, compared to 18.0% statewide. This difference is not so significant, however, that the senior population is worth considering. Elderly residents often face both a financial and educational barrier to digital literacy and technology access while having significant need for resources like virtual healthcare.
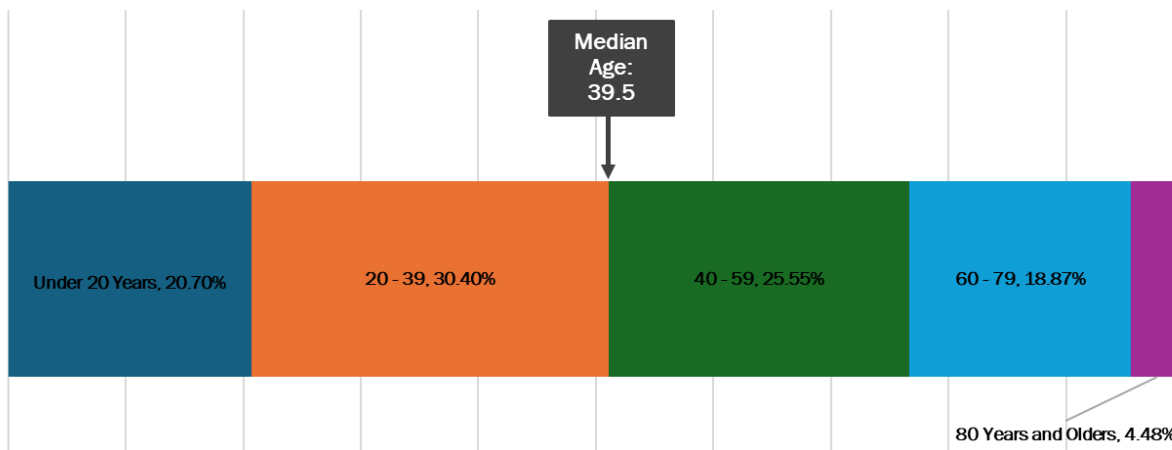


Figure 5: Age District (Source: Data USA)

## 3.2    Broadband Access

There are seven (7) providers of fixed internet connections in Woburn, three (3) of which have business-only options. Five (5) out of the seven (7) providers for the residential options qualify as broadband speeds, HughesNet and Viasat do not qualify as broadband speed. Table 2 summarizes these providers and their speeds. Note that some of these providers represent fixed options offered by wireless providers (i.e. the ability to install a Wi-Fi router in the home which is served by wireless internet). Currently, Xfinity/Comcast is the only provider offering a hard-wired (cable or fiber) internet option in Woburn.

Table 2: Summary of Fixed Internet Providers

| | Residential | | Commercial | |
|---|---|---|---|---|
| Provider | Download (Mbps) | Upload (Mbps) | Download (Mbps) | Upload (Mbps) |
| Astound* | 1,500 | 20 | - | - |
| HughesNet* | 100 | 5 | - | - |
| Starlink* | 220 | 25 | - | - |
| Xfinity/Comcast | 2,000 | 200 | - | - |
| Viasat* | 50 | 3 | 50 | 4 |
| T-Mobile* | 100 | 20 | 0.2 | 0.2 |
| Verizon* | 940 | 880 | 50 | 4 |

*High-speed internet has a minimum threshold of 100 Mbps download speeds and 20 Mbps upload.*
*\* Provider offers Wi-Fi in the home serviced by wireless internet or satellite*

There are four (4) providers available for wireless internet connections, one of which is business-only. Table 3 summarizes these providers and their speeds.

Table 3: Summary of Wireless Providers

| Provider | Network | Download (Mbps) | Upload (Mbps) |
|---|---|---|---|
| New Cingular | 4G LTE | - | - |
| T-Mobile | 5G-NR | 7 | 1 |
| Verizon | 5G-NR | 7 | 1 |
| Spectrum (business-only) | 5G-NR | 7 | 1 |

Over 99.9% of Woburn is adequately served[5], with only 0.03% in the city underserved and 0.05% unserved. Of those covered, over 99.9% also have speeds above 100/20 Mbps. Very low percentages of the population do not have access to high-speed internet.

On average, Woburn residents pay about $138.32 each month for their internet service. According to MBI survey results, 31% of residents find it hard to pay their internet bill.

Windstream is the only Metro network running through Woburn. Many buildings are connected through providers like Verizon, which lease bandwidth from ISPs like Windstream.

### 3.2.1  Affordable Connectivity Program (ACP) Enrollment

The Affordable Connectivity Program (ACP) offered monthly service and device discounts to eligible households to reduce the burden of internet and technology. Households were eligible for ACP if their income was at or below 200% of the federal poverty guidelines or if they received benefits from certain assistance programs or grants. It is estimated that about 1,298 households were enrolled in the ACP prior to its dissolution[6], out of 4,790 eligible households. In 2022, it was estimated that 949 families and 11,412 individuals would qualify by income, out of 10,458 families and 40,752 individuals across Woburn. This program ended on June 1, 2024, but it is possible that it will receive additional funding in the future.

A program called Lifeline, established in 1985, is also available to support low-income households access broadband services. However, not all residents who previously received assistance from the ACP program may qualify for Lifeline, suggesting a potential gap in residents' ability to afford internet services.

While the ACP offered a $30 per month subsidy, the Lifeline subsidy is only up to $9.25 per month.

### 3.3  Community Anchor Institutions (CAIs)

Community Anchor Institutions (CAIs) (CAIs) are places such as schools, libraries, hospitals, safety entities, or religious institutions that support their communities' access to and use of broadband service. In Woburn, several locations either currently offer technical resources or have the potential to serve as CAIs in the future.

**Woburn Public Library** set an objective in its Strategic Plan to increase technology literacy and access to technology devices, services, and support. The use of the reference team to connect residents to

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[5] The National Broadband Map shows that a location has broadband service available at a speed of at least 100 Mbps for downloads and at least 20 Mbps for uploads and latency less than or equal to 100 milliseconds using Technology Codes 71 or 72, that location will be treated as "served."
[6] Based on data published by Universal Service Administrative Co. at https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/

resources could be a significant measure to bridge existing gaps. Library computers are essential for residents whose inequity extends to basic technology access. As a public institution, the library can provide resources in scheduled classes or be available to answer questions as needed by residents.

The **Woburn Senior Center** is an unofficial hub for digital equity in Woburn, connecting senior populations to resources they otherwise may not have access to. By serving a specific population, classes can be catered to the unique needs of aging populations, who may also face higher rates of disability.

Due to existing associations with charity and public outreach, **religious institutions** are also institutions where many people feel comfortable asking for and accepting help. The First Church of Woburn, St. Charles Catholic Church, St. Barbara's Parish, and Satsang Hindu Temple could play a key role in hosting digital literacy classes or promoting outside resources to attendees.

As would be expected, **Winchester Hospital** requires fast and reliable internet as a critical infrastructure. If residents are without power or internet, whether they are unconnected or an outage temporarily takes away access, the hospital could serve as a location where residents go to use necessary internet services. Additionally, with the growing importance and prevalence of telehealth resources, hospitals may benefit from the development of programs to connect their patients to resources that support this healthcare option.

The **Woburn Community Resource Center** (CRC) is the community's outreach hub. This is a place where the community can get help, learn about Woburn, explore volunteer opportunities, and collaborate with neighbors. There are workshops and support groups that are being provided. This is a place where they can connect the community with local resources that may be able to help from food pantries to help filling out state housing applications, and so forth.

## 3.4   Device Literacy

Beyond the physical infrastructure, there is also a need to increase digital literacy so that the community has meaningful access once they are connected. Digital literacy is low among seniors, those with disabilities, English as a Second Language speakers, and immigrants, creating barriers to success for these groups. Privacy and security concerns create hesitancy that may be reduced through education on how to be safe online and how to protect personal identifiable information when accessing and utilizing the internet.

## 3.5   Device Access

According to the US Census Bureau, 96.1% of households in Woburn have a computer, while 93.3% have a broadband internet subscription. These numbers suggest that there may still be a gap in device access for some residents.

# 4 Key Findings of Existing Conditions

## 4.1 Barriers and Challenges

### 4.1.1 Vulnerable Populations

- **Senior population:** Based on the survey and people interacted with during the development of the Plan, nearly all seniors have cell phones and iPads, but many do not use their cellphones for internet access regularly because they do not feel the need to.
- **Seniors and low income:** Affordability is the main concern.
  - According to the MBI survey, respondents are spending $138.32 on average per month on their internet subscription. For about 31% of respondents, this is a cause of financial strain.
- **Telehealth users:** Approximately 16% of respondents to the MBI survey indicated they have difficulties accessing medical needs via telehealth.
- **Mixed Language Backgrounds:** Approximately 24% speak a language other than English at home.

### 4.1.2 Broadband Access and Quality

- In general, when speaking with the community, there were no specific areas with significant cellular coverage issues.
- Approximately 96% of respondents have internet access in their home, with 47% having Verizon as a provider, and 32% having Xfinity/Comcast. The FCC indicates that less than 0.07% of homes have no service available, but the FCC also indicates only 92.53% of households have internet subscription. Less than a quarter of the respondents indicated their internet services don't work well enough to meet their household needs.
- Poor quality/consistency makes it very hard for residents to work from home. This is also a challenge for non-residents who work in Woburn because the business's internet may also be down.
- According to the MBI survey, 37% of residents would not be able to afford over $500 for a new laptop or desktop computer, and 4% would not be able to pay $50. Even those who do not struggle to pay their monthly bill may struggle if a major unexpected expense arises.
  - If the ACP receives additional funding, it may benefit many of these residents, with 27% of respondents already aware of the program.
- It should be noted that, according to MBI's evaluation prior to the BEAD Challenge, the high number of cellular fixed wireless connections was a challenge in Woburn. Some of these issues may be resolved as a result of BEAD funding.

### 4.1.3 Digital Literacy

As part of the surveys and discussions with Woburn residents, a number of statements were made, and the key items are listed below:

- Most people's primary device is a cellphone, which means there may be limited experience in using other digital devices.
  - MBI survey: Most households access the internet using a cellphone (57%) or laptop computer (45%), with desktop computers and tablets being slightly less common
- Mostly, residents use technology to access emails and pay bills, and do not feel comfortable accessing the internet outside of their homes.
- Autopayments; comfortable shifting from checks. Trusts online banking.
- Access the Internet to check email, recreational research, and play games.
- Aware of resources to stay safe online, but family member helps when needed.
- Does not use online government services because it seems "too complicated."
- Concerned about internet safety, because they receive a lot of spam on email.

- Norton security used to come at "no cost" with Comcast services. Has Norton subscription, but still does things the "old fashioned" way.
- Aware of the web browser DuckDuckGo to stay safe online.
- According to the MBI survey, approximately 63% of respondents would be interested in digital literacy training.
    - Approximately 39% indicated a do-it-yourself training module and online classes.
- About 67% of respondents said they were concerned about internet safety, with the most common concern being that their data could get stolen or used without their consent (47%).
- The City is partnering with Eversource to do a bill review to see if there are possibilities to bring costs down.

## 4.2  Assets and Strengths

### 4.2.1  Access

- **Library:** laptop vending machine for laptops that can be checked out for use in the library, hot spot program, which is actively used, printing services such as printing, faxing, and scanning.
    - Does not have laptops or Chromebook that can be checked out for use outside the library.
    - The Library would like to expand workstations that have the space for library staff to sit next to folks.
    - Have hotspots for people to loan out, and they are in high demand.
- **Woburn Housing Authority:** does not have public Wi-Fi in the buildings because it is too expensive. There is a van that will take residents to the COA's programs to assist. The Woburn Housing Authority also brought in High School students once to help people learn how to use their phone, set up their home internet & etc.
- **COA:** The COA provides free Wi-Fi to visitors and there are network extenders since it is an old concrete building.
- **Low Cost Home Internet Service:** Families eligible for free/reduced price lunch also qualify for the Comcast Internet Essentials Program, which is $9.95 per month with no hidden fees.

### 4.2.2  Literacy

- **COA:** The COA has staff available to provide technical support upon request.
- **Library:** Have technology on-staff to assist.

### 4.2.3  Devices

- **Woburn Public Schools:** As part of a 1:1 device initiative, Woburn Public Schools provides Chromebooks to all students in grades 6-12. This initiative is designed to enhance educational opportunities and provide students with access to digital tools for various learning activities

# 5  Recommendations and Conclusions

## 5.1  Action Plan

The City of Woburn's Digital Equity Plan provides a framework to unite existing work efforts and build new initiatives under a focused, evidence-based strategy for cooperative effort. Achieving digital equity for all residents will require a concerted effort by the government, community-based organizations, higher education organizations, and individuals who are committed to the goals of the Digital Equity Plan. To achieve the vision and goals, the Digital Equity Steering Committee is committed to taking the following strategies, as shown in Table 4. Each strategy identifies the focus areas, lead organization, cost, funding opportunities, and timeframe. The cost is an approximation of the financial cost (capital or operational), defined as follows,

- "$": less than $5,000
- "$$": $5,000 to $50,000
- "$$$": more than $50,000

The timeframe is the anticipated length of time for the completion of a given strategy, defined as follows

- "short-term": 0 months to one (1) year
- "mid-term": one (1) to three (3) years
- "long-term": more than three (3) years

Table 5 depicts the nine (9) focus area icons for the different strategies.

Table 4: Action Plan

| Focus Area(s) | Strategy | Description | Lead Organization | Cost | Funding Opportunities | Timeframe |
|---|---|---|---|---|---|---|
| 👤 | Establish Fiber Task Force | Establish a group dedicated to bringing additional internet connectivity to businesses and residents and apply for funding | Digital Equity Steering Committee | $ | N/A | Short-term |
| 👤 | Designate a Digital Champion | Designate a Digital Champion to lead the Fiber Task Force and coordinate with external groups | Fiber Task Force | $ | N/A | Short-term |
| 🦠 | Continue working to bring fixed cable/fiber providers into the City | Pursue discussions with Xfinity/Comcast to expand their existing connections, and/or other service providers to gauge interest in working with City | Fiber Task Force | $ | N/A | Mid-term |
| 📶 | Improve Wi-Fi speeds to COA/provide Wi-Fi access to the Woburn Housing Authority. | Increasing upload and download speeds and capacity to keep up with the demands from residents while access to the home remains an issue | City IT Department/Internet providers | $$$ | MBI Digital Equity Implementation Program | Long-term |
| 💬 👤 | Champion for Funding | Designate a champion to be responsible for continuous coordination, guiding, pursuing funding for improvements, and equipment & etc. | Digital Equity Steering Committee / Fiber Task Force | $ | N/A | Short-term |
| 💬 📖 | City's Website Digital Services/ Resources | Enhance the City's website, specifically focused on digital services/resources, which can include updates on the Digital Equity Planning Process. This website may include short training videos on various topics of "how to", security protections, etc. | Digital Equity Steering Committee / Fiber Task Force, City Staff | $ | N/A | Short-term |
| 👤 📖 | Establish "Digital Navigators" | Assign "Digital Navigators" at Woburn Housing Authority, COA, & other public facilities if needed. A Digital Navigator typically involves assisting individuals, especially those from marginalized | Fiber Task Force | $* | High School Student Volunteers / Seniors or Outside | Short-term |

| Focus Area(s) | Strategy | Description | Lead Organization | Cost | Funding Opportunities | Timeframe |
|---|---|---|---|---|---|---|
| | | communities, in accessing and utilizing technology to improve their lives. | | | Consultant Assistance | |
| | Continue to explore and promote lower-cost digital connectivity for seniors and low-income residents | | Digital Equity Steering Committee | $* | N/A | Mid-term |
| | Purchase additional digital devices for public use at the Library | Acquire additional laptops and hot spots. | Library, IT Department | $ | AARP, Healthy Aging Funds | Mid-term |
| | Update Broadband Infrastructure at Housing Authority Buildings | Provide new and updated capabilities for residents to connect to the internet with durable, high-quality infrastructure | City Manager and Woburn Housing Authority | $$ | Residential Retrofit Program | Mid-term |
| | Explore laptops/ Chromebooks/ESL tablets to loan out at the Library | Explore laptops/Chromebooks/ESL tablets to be taken home (not just in library use) | Library | $ | N/A | Mid-term |
| | Increase device support staff at Library, Woburn Housing Authority, and Community Resource Center | Provide additional staff at Library and Housing Authority to manage new digital devices and provide troubleshooting support to the public. | Library, Woburn Housing Authority, City Administration, Community Resource Center | $* | AARP, Healthy Aging Funds | Mid-term |
| | Create a digital library of on-demand digital skills training | Create/compile a library of on-demand training that can be hosted in-person or viewed online for free. | Digital Equity Steering Committee | $ | Municipal Digital Equity Implementation Program | Mid-term |
| | Work with a local/regional refurbishing organization for local device refurbishing and reuse[7] | Work with a local/regional refurbishing organization such as Micro Center and/or TEK Collaborative for residents to drop off old electronic devices (working laptop or desktop) for refurbishing and reuse to protect the environment. | City Staff | $ | Municipal Digital Equity Implementation Program | Short-Term |
| | Identify a Telehealth Champion | A Telehealth Champion is a trusted individual within the community who | City Staff, COA | $* | AARP, Healthy Aging Funds | Mid-term |

[7] Partner with groups like Micro Center and/or TEK Collaborative to collect and distribute devices. Consider reaching out to them for collaboration and guidance.

| Focus Area(s) | Strategy | Description | Lead Organization | Cost | Funding Opportunities | Timeframe |
|---|---|---|---|---|---|---|
| | | advocates for and promotes the use of telehealth services. This person acts as a bridge between healthcare providers and community members, ensuring that everyone has access to necessary telehealth resources. The Telehealth Champion should be well-versed in using telehealth technology, empathetic to the needs of the community, and proactive in engaging with community members to address and eliminate barriers to digital health access. | | | | |
| 📖💬 | Provide digital skills workshops | Host in-person workshops covering online safety, digital skills, and device troubleshooting | Library, COA, Woburn Housing Authority, Digital Equity Steering Committee | $* | Municipal Digital Equity Implementation Program | Mid-term |
| 📖 | Review Internet Services Bills | Review the resident's internet services bill and discuss ways for a lower-cost service. | Digital Equity Steering Committee | $ | N/A | Mid-term |
| 🕐 | Update Woburn's Zoning Code to include accommodating fiber service | For new private developments, require as part of the design and local permitting for the applicant to install at minimum conduit and any other underground infrastructure to accommodate fiber service to the development with connection capability to the main street "line." | Planning and Economic Development | $ | N/A | Mid-term |

\*   This strategy could be accomplished at no cost by volunteers but may require paid staff.

Table 5: Focus Area Legend

| Focus Area Icon | Focus Area Description | Focus Area Icon | Focus Area Description |
|---|---|---|---|
| | Staff Capacity for Digital Equity | | Digital Literacy |
| | Wi-Fi Access and Innovative Connectivity Technology | | Device Distribution and Refurbishment |
| | Public Space Modernization | | Education, Outreach, and Adoption |
| | Connectivity for Economic Hardship | | Access Diversification |
| | Policies for Future Access | | |

## 5.2 Funding Programs

Various funding programs are available to help address the needs listed in Section 4. Project-specific applications should be researched and prepared before the application deadlines, but the following programs have been identified as applicable to the City of Woburn's identified needs.

- BEAD Program: https://broadband.masstech.org/bead-program
- MBI Digital Equity Implementation: https://broadband.masstech.org/digital-equity-implementation[8]
- USDA's Distance Learning and Telemedicine Grants: https://www.rd.usda.gov/programs-services/telecommunications-programs/distance-learning-telemedicine-grants
- Affordable Housing Trust: https://www.mass.gov/info-details/affordable-housing-trust-fund-ahtf
- Residential Retrofit Program: https://broadband.masstech.org/retrofit
- Community Compact IT Grant: https://www.mass.gov/community-compact-it-grant-program
- Community Compact Municipal Fiber Grant: https://www.mass.gov/municipal-fiber-grant-program
- Gap Network Grant: https://broadband.masstech.org/gap-networks-grant-program
- Massachusetts Community Health & Healthy Aging Funds: https://mahealthfunds.org/
- AARP Foundation Grants: https://www.aarp.org/aarp-foundation/grants/
- Retrofit Ancillary Grantee (RANGE) Program: https://broadband.masstech.org/RANGE
- Launchpad Program: https://broadband.masstech.org/launchpad-program

## 5.3 Conclusion

The City of Woburn has completed a holistic analysis of its existing infrastructure with regard to digital equity. From organizational opportunities, like the Fiber Task Force to "Digital Navigators," there are quick wins that can help build upon the success and energy already established within the community. Sharing the successes of these programs while mid and long-term funding is being secured can provide a continued sense of ownership among the residents, who can act as project champions in future endeavors.

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[8] As of May 2025, the MBI Digital Equity Implementation Program is on pause.