# **Ashburnham Digital Equity Plan**

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## **1. Introduction to Digital Equity Planning**

The Town of Ashburnham received technical assistance from the Montachusett Regional Planning Commission, funded by the Massachusetts Broadband Institute (MBI), under the Municipal Digital Equity Planning Program, to draft a municipal digital equity plan.

The goal of achieving digital equity within a community is one that aims to ensure everyone has equitable access and opportunities to the digital information and technology needed for full participation in society, democracy, and the economy through a process known as digital inclusion. The focus is on bridging digital gaps associated with the availability of high-speed broadband internet service and digital devices, affordability of internet service and devices, and overall adoptability of those services and devices. Increasing access and removing barriers affecting digital inclusion and equity requires a fuller understanding of those barriers, and how they affect certain segments of the population, particularly within varying geographic areas such as urban centers, suburban neighborhoods, and rural regions.

In certain areas or among certain segments of the population, bridging the digital divide by increasing "access" may mean developing programs that address affordability issues or language barriers that limit access to services and devices. In other areas, it may focus on increasing "adoptability" among aging adults over 60, through digital literacy classes intended to build confidence, trust, and overall comfort-levels through lessons in basic computer use and online safety and security. In more rural areas, where residential internet services are limited and publicly accessible spaces with reliable connectivity are few and far between, it may focus on expanding service

to remote locations, creating public workspaces, increasing staffing and hours to those spaces, or, providing convenient, connected outdoor workspaces in places where hours or staffing are limited.

Regardless, increasing digital inclusion, or bridging the digital divide to achieve digital equity requires an understanding of the existing challenges and barriers that may be preventing inclusion, creating the divide, or limiting equity. Without a comprehensive understanding of the conditions, it is impossible to identify what is needed to address and overcome those conditions. The primary purpose of Digital Equity Planning is to evaluate the existing conditions around digital equity, define the community "needs" required to overcome any challenges or barriers contributing to digital inequities or limiting digital inclusion, and, finally, to develop strategies, goals, and actions required to increase digital inclusion, bridge the digital divide, and achieve digital equity. Achieving Digital Equity is the vision and desired outcome of this planning process.

### **1.1 Digital Equity**

## The Challenge, The Opportunity, and The Vision

The first two decades of the 21<sup>st</sup> century have been defined by the emergence of global economies, increasing private enterprise, widescale technological and tele-communications advancements, including an increase in personal, internet-enabled mobile computer devices (aka cell phones or smart-phones), the development of digital social media and "user-generated content", the rise of artificial intelligence and machine learning, drastic climatic and ecological changes related to global warming, a global pandemic leading to the death of over 6-million people worldwide and causing major disruption to the global economy, and an increase in the world population from 6.1 billion to 8.2 billion people (as of October 2024). This seems like a lot of change in such a short time – and it is – but human knowledge, technology, and information, specifically *digital* information, is growing at an exponential rate like never before. Consider this: More than half the world's population, approximately 4 billion people, now have access to the internet and own a cell phone. Further, in 2010 former Google CEO, Eric Schmidt, noted that the entire written works of humanity (in all languages) prior to 2003, was estimated to be about 5 exebytes of data. At that time, in 2010, it was estimated that an equivalent amount, 5 exebytes, of digital information was created every two days! <sup>1.2</sup> Now, in 2024, only 14 years later, the amount of data created every day is estimated to be 400 exebytes! (That is equivalent to 400 million terabytes of data.)<sup>3</sup>

In 2020 alone, internet users generated 64.2 zettabytes of data, which is more than the number of stars in the universe.

<sup>&</sup>lt;sup>1</sup> "Digital in 2018: World's internet users pass the 4 billion mark". We Are Social. 30 January 2018.

<sup>&</sup>lt;sup>2</sup> "Eric Schmidt: Every 2 Days We Create As Much Information As We Did Up To 2003". 4 August 2010.

<sup>&</sup>lt;sup>3</sup> https://explodingtopics.com/blog/data-generated-per-day

Since 2020 and the COVID-19 pandemic, people rely more than they ever have before on broadband internet and online, web-based platforms for employment, education, healthcare, shopping, dining, business development, news and information, and everyday living. This reliance is now a dependency of necessity, rather than a matter of convenience or conscious choice as may have been considered just a few short years ago. To put today's daily internet usage and data creation into perspective, in 2024, there are 5 billion internet searches performed daily; Every minute of each day there are over 500,000 photos shared on Snapchat; Even more astoundingly, there are 156 million emails sent every minute of every day, an amount that equates to 250 billion or more emails sent per day, or over 91 trillion per year!

To understand the importance of digital equity and the purpose of this planning process, it is necessary to know the answer to two questions: "What is Digital Equity?", and "Why is Digital Equity Important?".

#### What is Digital Equity?

Digital equity efforts seek to ensure everyone has the same access and opportunities to the information technology needed for full participation in society, democracy, and the economy. The focus is on bridging the affordability of internet service and devices, building skills to use programs and equipment, increasing trust, and overcoming language or other barriers that keep individuals from fully participating.

#### Why is Digital Equity Important?

Access to broadband internet and digital devices through equitable availability, affordability, and adoptability is essential for people to participate in society, the economy, and democracy, and to receive essential services, education, and job opportunities. It is a necessity of everyday life and living.

Digital equity aims to address the digital divide, which is the gap in access to digital services and devices that poses certain barriers or challenges to some people more than others. Digital equity can be achieved or improved by:

#### Digital Equity Defined...

"The condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services."

National Digital Inclusion Alliance

#### Key components of digital equity include:



Internet Connection: Do all populations experience internet connection that is affordable, fast, and reliable? Can all populations access the internet?



**Devices:** Do all populations have devices that are adequate, needsappropriate? Are devices affordable or otherwise accessible?



Literacy and Skills: Do all populations have the ability to use technology and the internet to achieve their needs? Do concerns around trust, privacy, and safety exist?



- Ensuring equal access to technology, such as devices, software, and the internet
- Providing training for educators to help students of all ages use digital tools
- Developing digital literacy in schools and other public institutions
- Preparing all people, including lower-income households, aging adults, incarcerated individuals, Veterans, individuals with disabilities, individuals with language and literacy barriers, individuals who are members of a racial or ethnic minority group, and rural residents, for success in the digital age

### 1.1.1 The Challenge: The Digital Divide

## **Digital Equity Gaps Impact:**

- Social Connectivity
- Workforce Readiness
- Civic Participation
- Healthcare Access
- Educational Opportunities
- Financial Resources

Inequitable access to the internet, sometimes referred to as the digital divide, is related to issues with internet supply (i.e., availability and affordability of broadband service connections), internet demand or adoptability (i.e., utilization or adoption of those services), and digital literacy and technology (access to and affordability of digital devices and technologies, and digital skills, confidence, and convenience, and comfort levels associated with use of such devices).<sup>4</sup> This plan examines the existing conditions of the Town of Leominster, with a focus on social and economic demographics of populations or groups determined to be most susceptible to digital inequity.

The purpose of the plan is to better understand the "Digital Divide" that exists within the community and among its residents and neighborhoods, and particularly among certain populations or groups determined to be most susceptible to digital inequity. Overall, factors of internet availability, affordability, and adoptability, all

play a role in determining an individual or group's access to reliable high-speed broadband internet and digital devices and technologies. The purpose of this plan is to understand barriers and challenges to digital inclusion, and to develop strategies, goals, and actions capable of narrowing the digital divide by increasing inclusion and thereby enhancing digital equity.

<sup>&</sup>lt;sup>4</sup> U.S. Census Bureau, SEHSD Working Paper Number: 2019-15, *Deconstructing the Digital Divide: Identifying the Supply and Demand Factors That Drive Internet Subscription Rates*, Micheal J.R. Martin

#### **1.1.2 The Opportunity: Digital Inclusion**

The importance of access to reliable broadband internet service and overall access thorough availability, affordability, and adoptability of digital technologies and devices has been recognized by local, state, and Federal officials as well as digital equity advocacy organizations. It has become clear that broadband connectivity and digital literacy are increasingly critical to how individuals-participate in the society, economy, and civic institutions of the United States, and access health care and essential services, especially for obtaining education and building careers. There are high societal and economic costs associated with digital inequality and exclusion. A person's for success, opportunity economic



educational achievement, health and wellness, social well-being, community involvement, and civic engagement are dependent upon access and proficiency related to broadband internet and digital technology, devices, and skills. Digital exclusion can materially, socially, and physically harm and hinder an individual's personal and financial status and situation. Inequalities associated with other socioeconomic, demographic factors can increase such exclusions and exacerbate existing wealth and income gaps and lead to further challenges and barriers to successfully accomplishing the necessary tasks of daily life in the pursuit of one's own livelihood and inalienable rights of living.

#### 1.1.3 The Vision: Digital Equity

Sustained investment toward identifying and understanding the causes contributing to digital inequity is necessary to increase digital inclusion and achieve an equitable digital environment to prevent further exclusion and individual and societal degradation. Achieving Digital Equity is a matter of social and economic justice and is worthy of its pursuit.

The vision for broadband and digital equity in the Commonwealth of Massachusetts was established within the *Massachusetts Internet for All Plan*, and contends that:

"Every resident in Massachusetts has high-speed, high-quality internet availability and can confidently adopt and use the internet regardless of who they are or where they live. This universal connectivity will ensure that everyone has the support they need to enjoy full personal, civic, and economic digital participation throughout their lives with safety and security."

## 1.2 The Digital Equity Act

The Digital Equity Act [47 USC 1721(8)] of 2021<sup>5</sup> calls for the establishment of certain "covered programs" that focus on empowering those most impacted by the digital divide, referred to as "Covered Populations". The term "covered programs" means the State Digital Equity Capacity Grant Program established under section 1723 of the Digital Equity Act and the Digital Equity Competitive Grant Program established under section 1724 of the Act.

The primary intent and purpose of such programs is to increase internet access and the adoption of broadband among covered populations through activities such as those intended to:

- Develop and implement digital inclusion activities that benefit covered populations
- Facilitate the adoption of broadband by covered populations in order to provide educational and employment opportunities to those populations
- Implement digital literacy training programs for covered populations that cover basic, advanced, and applied skills other workforce development programs
- Make available equipment, instrumentation, networking capability, hardware and software, or digital network technology for broadband services to covered populations at low or no cost
- Construct, upgrade, expend, or operate new or existing public access computing centers for covered populations through community anchor institutions
- Undertake any other project and activity that the Assistant Secretary finds to be consistent with the purposes for which the Program is established

As an initial step in the development of such programs for digital equity improvements, like with most publicly funded planning initiatives, a community engagement and public involvement process was established and implemented to document existing conditions, identify challenges, barriers, or limitations contributing to digital exclusion or inequality among covered populations, assess related community needs, and develop meaningful, attainable goals and feasible, implementable actions or activities capable of reducing the digital gap, thereby increasing digital inclusion, and improving or achieving digital equity. The resulting Digital Equity Plan is intended to provide a

<sup>&</sup>lt;sup>5</sup> https://uscode.house.gov/view.xhtml?hl=false&edition=prelim&req=granuleid%3AUSC-prelim-title47-chapter16-subchapter2

strategy to enhance digital equity community-wide, and particularly among certain "covered populations" of the Digital Equity Act. These specific segments of the population are described and defined in **Section 1.3** below.

## **1.3 Covered Populations of the Digital Equity Act – Definitions**

The eight covered populations of the Digital Equity Act of 2021 listed above are defined in greater detail below<sup>6</sup>:

#### 1.31 Individuals who live in Covered Households

The. term "covered household" means a household, the taxable income of which for the most recently completed taxable year is **not more than 150 percent** of an amount equal to the poverty level, as determined by using criteria of poverty established by the Bureau of the Census.

#### 1.3.2 Aging Individuals

The term "aging individual" has the meaning given the term "older individual" in section 102 of the Older Americans Act of 1965 (<u>42 U.S.C.</u> <u>3002</u>), within which the term "older individual" means an individual who **is 60 years of age or older**.

#### **1.3.3 Incarcerated Individuals**

The term "incarcerated individuals" refers to inmates at state and county jails and correctional facilities, other than individuals who are incarcerated in a Federal correctional facility.

#### 1.3.4 Veterans

The term "veteran" has the meaning given the term in section 101 of title 38, United States Code.

#### **1.3.5 Individuals with Disabilities**

The term "disability" has the meaning given the term in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102).

#### 1.3.5 Individuals with a Language Barrier

<sup>&</sup>lt;sup>6</sup> Actual proportions of residents covered by each of the eight covered populations relative to and Leominster's total populations are provided within Section 5, Existing Conditions.

The term "individuals with a language barrier" includes any individuals who are subject to a communication barrier among people who are unable to speak or write in a common language including those who are English learners and any individuals who have low levels of literacy regardless of whether or not their spoken and /or written language is English or another language.

#### 1.3.6 Individuals who are Members of a Racial or Ethnic Minority Group

The term "individuals who are members of a Racial or Ethnic Minority Group" includes all individuals who are members of any racial or ethnic minority group other than non-Hispanic Whites who constitute the majority (58.4%) in the United States.

#### 1.3.7 Individuals who Primarily Reside in a Rural Area

The term "rural area" has the meaning given the term in section 601(b)(3) of the Rural Electrification Act of 1936 (7 U.S.C. 950bb(b)(3)). A town other than a city or town that has a population of greater than 50,000 inhabitants.

## 2. Digital Equity Values & Best Practices

## 2.1 Digital Equity Values

Equitable access to broadband internet varies across demographic groups based on geographic location, race, age, income, education, and other related factors. Physical, geo-spatial, and socioeconomic challenges and barriers associated with these factors have resulted in noticeable gaps in equity related to broadband access, affordability, and adaptability at local, regional, and national scales. Similarly, broadband service and cost-based gaps also exist at each of these scales and often correlate to the same demographic factors specified above. These gaps, and their associated challenges and barriers are often exacerbated in rural areas at the community and regional scales. The rural communities of Northwest Worcester County of the Montachusett Region are no exception, and perhaps are a prime example of how Digital Equity gaps affect certain groups or segments of the population within rural areas.

With local and regional partners, in consultation with the Montachusett Regional Planning Commission, under the Massachusetts Broadband Institute's Municipal Digital Equity Planning program, the Town of Ashburnham is undergoing a Digital Equity Planning process to better understand the needs of their communities and the region. The outcome of the planning process will be a Digital Equity Action Plan that will identify a vision, associated goals and implementable actions, to improve broadband internet access, enhance digital equity, and increase digital literacy among residents, businesses, and institutions.

As with many other communities, broadband internet accessibility and connectivity issues currently exist and are related to various factors, including gaps in reliable internet availability, the, local and regional socioeconomic demographics affecting income and opportunity, higher-than average services costs, affordability and convenient access to devices and technology, gaps in digital literacy training, accessibility issues, and the lack of digital resources and programs preclude access for many individuals. Further, the populations of communities and the surrounding region include a high proportion of individuals representing a covered population of the Digital Equity Act<sup>7</sup>.

The overall purpose of Digital Equity Planning is to understand the existing conditions around internet access and digital technology, specifically those related to, availability, affordability, and adoptability of broadband internet and digital devices with a focus on certain covered populations of the Digital Equity Act.

<sup>&</sup>lt;sup>7</sup> https://www.congress.gov/bill/117th-congress/house-bill/1841/text

### 2.2 Broadband Internet Access

Broadband internet "access" encompasses the "**Three A's of Digital Equity**", availability, affordability, and adoptability relative to broadband internet service, digital devices, and digital technologies. Identifying challenges and barriers related to broadband internet access (i.e., availability, affordability, adoptability) within underserved, rural communities, like Ashburnham, and understanding the needs of the residents to overcome those challenges and barriers is both critical and essential, and the primary purpose of this Plan.



#### **Digital Skills &** Internet **Applications &** According to the U.S. Census Bureau, the digital Devices **Tech Support** Services divide was an omnipresent issue in 2018.8 Having access to continued to be an issue in 2019,9 and the factors internet that is The knowledge and Including diverse The computers disproportionately affecting certain segments of users in the design affordable, skills required to use and accessories sufficient, and the equipment, necessary to be and rollout of services reliable to obtain applications, and productive, create while considering internet effectively placement, outreach, content, and necessary with training and training, user resources and participate both download support provided in (homework, job controls, privacy, a culturally application, universal design, and and contribute content online. appropriate manner. reading, etc.). language.

Source: Elements of Digital Equity, City of Seathle: www.seattle.gov/tech

<sup>8</sup> https://www.census.gov/content/dam/Census/library/working-papers/2018/demo/SEHSD-WP2018-12.pdf
<sup>9</sup> https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-15.pdf

the population were exacerbated and highlighted by the Covid-19 pandemic in 2020<sup>10</sup>, resulting in the passage of the Digital Equity Act in 2021.

Prior to the pandemic, most evaluations of internet access and use focused on survey data on internet subscriptions, however, these assessments often failed to consider availability, or whether Internet Service Providers (ISPs) provided service to a given area. Since passage of the Digital Equity Act, research, evaluations, and investments have attempted to understand and address the digital divide in a more comprehensive and inclusive way, by considering not only internet subscription rates, but actual access to broadband internet services based on measures and metrics of availability, affordability, and adoptability (inclusive of knowledge, skills, abilities, and willingness to adopt internet services, technology, and devices).

While past and recent studies indicated that throughout the nation, most geographic areas had high-speed fixed broadband service available, that service was not universally or equitably available among all segments of the population or within certain areas. For example, there were noticeable differences in availability and quality of service (i.e., types of technology, and levels of reliability or speeds), particularly between urban and rural areas, and among factors related to income, race and ethnicity, language and literacy, and geographic areas where percentages of the population represented by those factors were greater. Nationally, some states have high availability throughout, while regionally, availability varies from one county to the next. Locally, even greater variation exists at the Census Tract level, as shown within the U.S. Census Bureau's Digital Equity Act Population Viewer Map, and that variation often correlates to the socio-economic demographic factors referenced above. Income is often an indicator of internet service availability and strongly correlated with affordability and adoptability of service types. However, geography cannot be overlooked when understanding and addressing the Digital Divide, as the rural location of an area is often one of the greatest predictors or limiting factors of internet availability.

Since 2020 and the COVID-19 pandemic, people rely more on broadband internet and online, web-based platforms for employment, education, banking, social interaction, and access to essential services and information than they did even a few short years ago. Broadband internet is more important now than ever, and is as important, or even more important in rural areas as it is within more developed, suburban and metropolitan areas.

<sup>&</sup>lt;sup>10</sup> https://www.census.gov/library/stories/2022/05/mapping-digital-equity-in-every-state.html

## 2.3 Broadband Internet Availability

Internet availability can be assessed in terms of the number of Internet Service Providers (ISPs) serving and providing direct, connections to the internet at households, businesses, or institutions within a certain location or area. Further, it can be assessed based on the type of internet service provided (e.g., Fiber-optic, Cable, and Fixed Wireless Internet), and the average and maximum speed of that service (i.e., Digital Data Upload & Download Speeds measured in Megabytes per second [Mbps]).

A location, or more specifically, an address, that has "service" access to Broadband Internet service by an ISP is considered a **Serviceable** location. According to the Federal Communications Commission (FCC), as of March 14, 2024, the minimum "benchmark" for high-speed fixed broadband internet is now 100 megabits per second download speed and 20 megabits per second upload speed – a four-fold increase from the 25/3 Mbps benchmark set by the FCC in 2015<sup>11</sup>. This new minimum speed benchmark increase is now consistent with standards established by the National Telecommunications and Information Administration (NTIA), Broadband Equity Access and Deployment (BEAD) program and multiple U.S. Universal Service Fund programs. Under these established standards,



locations with fixed broadband internet service "that meets or exceeds 100 Mbps download speed and 20 Mbps upload speed", are considered "*Served*". Alternatively, according to the standards set by the NTIA BEAD Program under their Internet for All initiative, addresses "with broadband service below 100 Mbps download speed and 20 Mbps upload speed but higher than 25 Mbps download speed and 3 Mbps upload speed" are considered "*Underserved*". And finally, again, according to the NTIA BEAD standards, any address location without access to any broadband service or "with broadband service below 25 Mbps download speed and 3 Mbps upload speed". <sup>12</sup>

A community specific evaluation of internet availability is provided within **Section 4.4** of this Plan.

<sup>&</sup>lt;sup>11</sup> FCC News, Office of Media Relations, Press Release dated March, 14, 2024: <u>https://docs.fcc.gov/public/attachments/DOC-401205A1.pdf</u> <sup>12</sup>NTIA BEAD Program, Program Documentation:

https://www.ntia.gov/funding-programs/internet-all/broadband-equity-access-and-deployment-bead-program

## 2.4 Broadband Internet Affordability

According to a recent report published by the National Skills Coalition<sup>13</sup>, thirty-two percent of U.S. households are subscription vulnerable, meaning they are unable to afford and maintain an internet service subscription. This gap contributes to differences in learning experiences, as 65 percent of families with income levels below the poverty threshold reported that a lack of access to broadband internet prevented their children from participating in school and completing schoolwork because their child had no option other than to participate through a mobile device. Among families with income levels below the national median and with access to broadband, 56 percent stated the service was too slow, and among families with home access to a computer, 59 percent stated their device runs too slowly or does not work. Sixty-five percent of families with incomes below the national poverty level, 66 percent of Hispanic parents, 75 percent of families headed by immigrant Hispanic parents, and 56 percent of Black parents with incomes below the national median reported technology-related disruptions to their



children's learning. It should be noted that these figures, representing socio-economic influenced digital gaps, could be even higher. For example, according to that same National Skills Coalition report, *The Roadmap for Racial Equity*, Spanish-language-dominant Americans are less likely to report having high-speed internet at home.

One of the greatest measures to improve internet affordability following the Covid-19 pandemic was the Affordable Connectivity Program (ACP), a Federally funded internet subsidy program which was available to income eligible households until June 1, 2024, when funding officially expired. To better understand the program's impact, the FCC surveyed ACP recipients in December 2023. According to the survey, 77% of respondents say losing their ACP benefit would disrupt their critical aspects lives by making them change their plan or drop internet service entirely. Approximately three-fourths report using their internet service for work, health care appointments, job applications and schoolwork. Finally, when asked how losing their ACP benefit would affect them, many say they would need to cut other basic expenses such as food or gas if they had to pay \$30 more out of pocket for their internet. Others say they would drop their internet service.<sup>14</sup>

A community specific evaluation of internet affordability is provided within **Section 4.4** of this Plan.

<sup>&</sup>lt;sup>13</sup> Johnson, M., Bashay, M., Bergson-Shilcock, A., Richardson, M., & DeRenzis, B. (2019). *The roadmap for racial equity*. National Skills Coalition. https:// nationalskillscoalition.org/resource/publications/the-roadmap-for-racial-equity/

<sup>&</sup>lt;sup>14</sup> https://www.ncsl.org/state-legislatures-news/details/without-federal-program-whats-the-outlook-for-affordable-broadband

## 2.5 Broadband Internet Adoptability

Digital adoptability and connectivity is a combined measure of people accessing and utilizing the internet (particularly broadband internet) and digital devices at home. Some factors that can be assessed to "measure" digital connectivity are: Average Household Size, Percentage of the Population Working from Home, Percentage of Households with Digital Computing Devices, Percentage of Households with Internet, Percentage of Households with Broadband Internet (defined as download/upload speeds above 100/20 Mbps, and Broadband Internet Usage vs. Availability (percentage of households which have a Broadband Internet connection to their home that actually subscribe to a Broadband Internet Service).

Of the estimated 15–16 million K-12 learners who have insufficient broadband access or access to devices to support learning at home, approximately 6 million face adoption barriers apart from availability and affordability. Learners who have immigrated to the U.S. and learners from multilingual homes face unique challenges in getting connected and engaging with learning once connected. Children with disabilities, who disproportionately live in low-income households, experience additional technology barriers, such as outdated equipment, non-accessible web content, inaccessible online platforms and course materials, and a lack of in-person support to engage with technology tools for learning.

Even with increasing technology usage in the classroom, few professional learning opportunities focused on effective technology use in the classroom are provided to educators. Further, the National Center for Education Statistics has found that on average, educators working with low-income and rural learners are the least likely to receive access to training on effective technology use in instruction. Combined, these barriers further contribute to the digital divide.<sup>15</sup>

A community specific evaluation of internet adoptability is provided within **Section 4.4** of this Plan.

### 2.6 Alignment with Existing Efforts Through Strategic Visions

In line with the National Telecommunications and Information Administration (NTIA), Internet for All program's Digital Equity Plan Guidance, this Digital Equity Plan recognizes and will strive to align with existing local and regional efforts, goals, plans, and enhanced outcomes related to the following critical aspects of society:

<sup>&</sup>lt;sup>15</sup> U.S. Department of Education, Office of Educational Technology, Advancing Digital Equity for All: Community-Based Recommendations for Developing Effective Digital Equity Plans to Close the Digital Divide and Enable Technology-Empowered Learning, Washington, DC, 2022. (<u>https://tech.ed.gov/advancing-digital-equity-for-all/</u>)

	Economic and Development Workforce Development Goals, Plans, and Outcomes
	Educational Outcomes
F	Health Outcomes
$\bigcup_{i=1}^{n}$	Civic and Social Engagement
	Delivery of other Essential Services

As recommended by NTIA, this Plan also encourages continued and ongoing assessment of existing conditions using measurable objectives aimed at reducing the digital divide through the implementation of the strategies, goals, and actions identified within this Plan to further digital inclusion and equity relative to the following related categories or sectors:

To become a municipal leader in digital equity and inclusion a town, through the work of dedicated leaders, or digital equity "champions", the National League of Cities recommends focused investment in solutions related to two important Digital Equity categories, Digital Equity Infrastructure and Digital Equity Programs:

City Leaders: Areas of investment for achieving Digital Equity Solutions			
Digital Equity Infrastructure-based Solutions:	Digital Equity Program-based Solutions		
<ul> <li>City-owned conduit</li> </ul>	<ul> <li>Affordable (and free) home internet</li> </ul>		
Dark Fiber	<ul> <li>Public networks and connections</li> </ul>		
Lit Fiber	<ul> <li>Affordable and free devices</li> </ul>		
<ul> <li>Community (Municipal) Broadband</li> </ul>	<ul> <li>Digital Navigators (trainers)</li> </ul>		
<ul> <li>Fixed Wireless Network</li> </ul>	Digital Literacy Training & Skills Building		
Wireless Mesh Network	Tech-Support		

#### The following

Section, 2.7

offers a set of Best Management Practices and a Strategic Approach or Frameworks to guide Ashburnham's Town Leaders in their effort to enhance digital equity and inclusion town-wide and to successfully implement the goals and actions set forth in **Section 6**.

### 2.7 Best Practices for Municipalities

Below is a comprehensive list of "best practices" for Municipal Officials and Community Leaders, including Town Administrators, Select Board Members, Commission Members, Purchasing Agents, Grant Writers, Planners, Heath Agents, Parks & Recreation Departments, School Administrators and Teachers, and others:

#### 2.7.1 Municipal Digital Equity Best Management Practices

Below is a comprehensive list of "best practices" for Municipal Officials and Community Leaders, Town Administration, Board & Commission Members, Purchasing Agents, IT Directors, Grant Writers, Planners, Heath Agents, Parks & Recreation Departments, School Administrators and Teachers, among others:

- Develop and adopt policies and measures to accelerate broadband deployment and adoption and increase access to reliable highspeed internet in public spaces to achieve Digital Equity.
- Request all Departments to identify and implement strategies that integrate Digital Inclusion into ongoing services and programs.
- Participate in a Regional Digital Equity Coalition or Leadership Group to coordinate plans and actions to achieve economies of scale and optimal impact.
- Recognize remote workers and embrace the value of broadband access as workforce development strategy and climate resiliency measure.
- Incorporate Digital Equity Planning into Master Planning, and Land Use and Economic Development related plans to promote digital inclusion and improve quality of life for residents.
- Maintain a map of unserved and underserved areas and households and digitally disadvantaged neighborhoods with preferred broadband strategic corridors and identified public assets to accelerate broadband deployment.
- Incorporate high-speed Internet infrastructure into all public projects, especially major transportation, affordable housing, parks & recreation, and public utility projects.
- Develop a robust "green technology ecosystem" to refurbish and reallocate retired computing devices and for donation to unconnected low-income households participating in adoption programs. Encourage all public departments and local businesses and larger employers to participate in the program and donate retired devices.
- Provide online access to all policies, plans, ordinances, and services information, including remote participation in public meetings.

- Deliver online as many public services as possible "online" to reduce vehicle trips and improve efficiency, productivity, and convenience.
- Develop and continue to support digital literacy programs and digital navigation services to residents at public facilities, particularly libraries, senior centers, Veterans services centers, community centers, maker spaces, digital labs, internet cafes and third space/remote work hubs.

## 2.8 Strategic Approach to Digital Equity & Inclusion

To pursue and uphold the Best Management Practices outlined above, which are aimed at enhancing digital equity and inclusion throughout a community and among its covered population groups, it is important to develop overarching strategies for key sectors or components of digital equity and inclusion. Below are common, overarching strategies related to six primary sectors or components of Digital Equity and Inclusion. Consideration of these recommended strategies relative to the six identified sectors, or components of Digital Equity and Inclusion will help to provide context and an organizational framework to assess the associated challenges, barriers, and needs evaluated and assessed within **Sections 4**, (**Existing Conditions**) and **Section 5** (**Community Needs**) of this plan, and will ultimately provide a set of guiding principles for establishing meaningful **Goals and Actions** (**Section 6**) to address those challenges, barriers, and needs, which is the primary purpose of this Plan.

#### 2.8.1 Leadership (Champions)

The first step in pursuing enhancements to digital equity and inclusion is to establish a team of digital equity leaders, or champions within the Town of Ashburnham. These leaders, many of whom were likely involved in the development of this Plan, will continue to assess and evaluate the existing conditions and community needs around broadband internet access and digital literacy and inclusion in the short-term and over time.

The leadership group should participate in local or regional digital equity and inclusion coalitions or working groups and meet regularly (at least quarterly) to advance the goals of the Digital Equity Plan and guide the Plan's evolution over time. It will be critical to ensure that the Town Administration, Select Board and Planning Board are well-informed of the Digital Equity Plan's key goals and objectives, and that they may continue to seek funding for digital equity initiatives and treat the implementation of this Plan's recommended goals and actions as a priority.

Leaders should stay coordinated with regional, state, and federal stakeholders in digital equity, including the Massachusetts Broadband Institute and Montachusett Regional Planning Commission. They should continue to track and monitor development of the statewide BEAD initiative and other funding and engagement opportunities and seek recognition through programs like the Digital Inclusion Trailblazers



Expand community outreach and strengthen partnerships. award program. In addition to their ongoing pursuit of digital equity and inclusion, the town should also recognize and celebrate Digital Inclusion Week, in October of each year, through hosting local events or by promoting and joining other local, regional, state, or national events.

Further, Digital Equity Leaders should coordinate with state and Federal legislators to ensure that funding mechanisms for Community Cable Access T.V. providers are preserved and that they evolve and advance in conjunction with the evolution and advancement of the provision and consumption of streaming media and digital services and in the face of declining cable T.V. subscriptions.

#### 2.8.2 Community Engagement & Partnerships



Identify a core team of digital equity champions, pursue increased funding, and become a leader in digital equity. The Town of Ashburnham should continue to improve upon the Town's processes for engaging with the community and building digital equity and inclusion partnerships. This should be considered when disseminating information (physically and virtually), collecting feedback, and announcing public events, especially relative to digital equity and inclusion. When disseminating information or promoting events around digital literacy, it is often overlooked, that some segment of the population you are intending to serve may not have a computer or internet subscription or are not comfortable receiving information digitally. For this reason, the Town should consider existing alternative (traditional) methods of outreach and engagement such as physical postings, yard-boards, digital notification displays, posting in the Senior Center Calendar/Newsletter, in tax bills or water bills, and on the Leominster Television (LTV). Digital methods of outreach, such as social media and new, innovative methods like video "shorts" or other digital media content created for posting on Town's Social Media accounts should be used but should not be the sole method of communicating with the public. Hybrid methods of engaging with the community to deliver important

information or notices, such as though automated "code-red" calls or text messages should also be used but should not be the primary or sole means of communication.

Leaders, particularly those who are Town staff or appointed and elected officials, should evaluate municipal websites, media, and communications to ensure that they are accessible to all users, and all Internet-enabled devices including cell phones and tablets. Refer to the U.S. Department of Justice Civil Rights Division's guidance on web accessibility and compliance with the Americans with Disabilities Act (ADA) and strive to meet the standards for information and communication technology (ICT) under section 508 of the Rehabilitation Act and Section 255 of the communications Act.

Leaders should create a Digital Equity & Inclusion webpage on the Town's websites and draft a one-page circular identifying digital equity goals & priority actions and providing access to the full Digital Equity Plan within each community. Other digital equity and inclusion resources, such as digital literacy and skills building opportunities should also be listed on the webpage(s), and the locations where they

are offered should be provided. The webpage should also list contact information for local and regional digital equity leaders (champions) and trainers (navigators).

Finally, the Town of Ashburnham's Digital Equity Leaders should maintain and improve relationships with community partners dedicated to increasing digital equity throughout the Town and the Montachusett Region. Such partners, or stakeholders may include the libraries, local boards and committees, local/regional non-profits, civic organizations, business owners, other social services organizations, local Cable Access stations, including LTV, Fitchburg Access Television (FATV) Lunenburg Public Access (LPA) Television, Gardner Educational TV (GETV), Sterling-Lancaster Community Television (SLCTV), and Templeton Community Television (TCTV). The Youth Innovation Center/MOC, inc., UMass Lowell Digital Equity Partnership, Mount Wachusett Community College, and MassHire North Central Mass Career Center, the Boys & Girls Club, and Leominster Public Schools should also be listed as an important regional digital literacy and inclusion programs or services or considered Digital Equity "Champions" or "Navigators", especially those providing improved access broadband internet, affordable devise, and digital literacy training, should also be listed.

#### 2.8.3 Access to Broadband Internet and Digital Devices

The Town of Ashburnham should strive to establish and build upon existing coordinated partnerships to expand access to broadband internet and affordable devices. One way to accomplish this goal is to improve access to the internet and internet-connected workstations and devices in public spaces like the Library, Town Hall, Land at other public areas and meeting spaces, including outdoor public spaces and parks and playgrounds. Another option is to continue to offer hotspots and provide additional hotspots through an enhanced reservation-based loaner program. Such a program can be facilitated by the Public Library but may also offer hotspots reservable through the library. Similarly, access to digital devices and workstations like laptops, computers, printers, video-conferencing stations, and other technology and equipment (such as music, art, audio, and video, equipment and programs) should be acquired and made available.

Additionally, the Town should continue to support, promote, and enhance their Public Library, Senior Center, and Veterans' Center as digital resources and "digital inclusion hubs", where computers and reliable high-speed internet and digital devices, services, and programs can be accessed by the public. These spaces should feature modern, well-maintained laptops, computers, hotspots, copiers, scanners, printers, and audio-video equipment in line with community needs and available for free use or loan by the public.

The Town and their digital equity partners should aim to strengthen connections with groups who facilitate device donation programs and provide free or discount refurbished devices to households who need them. They should also consider developing partnerships with Leominster Schools, Monty Tech, MOC, and Boys & Girls Club amongst many others, who could potentially provide opportunities for digital

Promote access to affordable devices and broadband

internet.



literacy training, refurbishing devices, and potentially establish additional partnerships and/or a regional network for digital device refurbishment and distribution.

#### 2.8.4 Digital Literacy Training & Opportunities



The Town of Ashburnham should continue to create, strengthen, and expand digital literacy opportunities and partnerships throughout the community and the Montachusett Region. The Town, and its local and regional partners, should engage with and promote the certification of qualified, local Digital Navigators (digital literacy trainers, educators, and support specialists), or partner with a qualified Digital Navigator to offer digital literacy courses at their Public Library, Senior Center (Town Hall) and at other public community gathering locations.

Strengthen digital literacy throughout the community There is strong demand for increased digital literacy class offerings and an expanded curriculum focused on specific needs of urban residents of Gateway Cities and Environmental Justice Areas, and specifically "covered populations" of the Digital Equity Act. General tech-help for all ages, but particularly aging adults over 60, and general tech-help and skill-building related to various applications from business, everyday living, to digital art, media, music, and crafting and hobbies are also essential needs. Information and training focused on accessing and using digital services and public administration applications like public transit and transportation, online shopping and food/grocery home-

delivery, Veterans Assistance benefits, retirement and social security benefits, Medicare, healthcare appointments, medical results, registry of motor vehicles online applications, renewals, and admirative forms, and many other online activities and requirements, are also of great need. Many of the most pressing and desired needs of the community for digital literacy training topics are identified within later sections of this Plan and supported by the results of the public survey.

The Town should seek a contract with a local digital navigation training consultant (Digital Navigator) or establish necessary coordinated partnerships to ensure that digital literacy training and skills building opportunities are available to residents of the Town and surrounding region. The Town and its partners should also seek to offer training for local residents, leaders, and staff at Community Anchor Institutions to become certified Digital Navigators following the National Digital Inclusion Alliance's (NDIA) Digital Navigator Model, a proven method of digital literacy training, skills-building, and inclusion.

#### 2.8.5 Addressing the Needs of Covered Populations

The Town of Ashburnham should provide targeted support for vulnerable segments of the community, including lower income households, individuals with disabilities, individuals with language barriers and lower levels of literacy, students, young adults, adults seeking jobs, aging adults over 60, Racial & Ethnic Minority Groups, Individuals with a Language Barrier, and Veterans.

The Town should prepare covered populations to avoid scams and remain safe from common online risks, such as hackers, identity thieves, and (increasingly common) online scams by providing dedicated training to aging adults over 60, students, and other community members.

The Town, in consultation with a Digital Navigator or other Digital Literacy stakeholders and partners, should develop an online submission form and call-in system to log tech-help questions and develop an on-site tech-help office hours program at the Public Library, Senior Center, Veterans Center, and Housing Authority community rooms. In addition,

the Town should offer and expand upon digital literacy courses through consultation with a Digital Navigator or in partnership/consultation with the MassHire North Central Mass Career Center, UMass Lowell Digital Equity Partnership, MWCC, and other potential partners focused on inclusion and overcoming specific barriers and challenges faced by covered populations.

#### 2.8.6 Commercial & Economic Community Development

The Town should promote local economic development opportunities related to digital literacy and inclusion and encourage digital/internet-focused entrepreneurship, home businesses, and professional development. In partnership with the MassHire Central Mass Career Center, UMass Digital Equity Partnership program, and/or a consulting Digital Navigator, residents and students should be encouraged to develop web-based applications, tools, and business models that benefit the provision of services and improved livability and well-being in Gateway Cities and among their communities and neighborhoods. Similarly, they should encourage jobseekers of all ages and backgrounds to become qualified Digital Navigators, or digital literacy trainers. Such efforts can be supported through enhanced vocational tech education, and as part of the ongoing community-based digital literacy training recommended and supported by this Plan.



Provide targeted support for vulnerable segments of the community, including students, adults seeking jobs, and seniors.

## 3. Digital Equity Planning Process

Community engagement was an essential component of the development of the Town of Ashburnham Digital Equity Plan. Answers to a comprehensive stakeholder questionnaire, input from stakeholder interviews, feedback from Core Team members, information gathered at focus group meetings, responses to the statewide public survey (and a local survey), and comments and feedback provided by the public at various community engagement events informed the existing conditions evaluation and community needs assessment as well as helped to define the visions, goals, actions and strategies documented within this Plan.

## 3.1 Digital Equity Core Team Working Group

To develop an effective community engagement strategy, provide information about potential stakeholders, local resources, and community assets, a Core Team of municipal officials was formed. This Core Team also played a primary role in guiding the planning process and informing the development of meaningful goals and actions. In addition, they offered insights on key stakeholders to engage and provided guidance and input on the development of the Plan over the course of several meetings, interviews, and inquiries.

Members of the Core Team met on:

- June 12, 2024
- September 4, 2024

• February 4, 2025

Ashburnham & Ashburnham Digital Equity Planning Core Team Working Group Participants		
Name	Position/Role	
Rebecca Merrill (through 11/30/24)	Town Planner	
Jess Mynes	Library Director	
Jan Robbins	COA Director	
Brooke Czasnowski	Ashburnham Municipal Light	
Jennifer Gibbons	Town Administrator Admin. Asst.	

## 3.2 Public Engagement

Enter summary of public engagement here including tech help sessions and focus group meetings.

MRPC staff implemented a two-step stakeholder engagement process that included a questionnaire and follow-up interview. A particular goal of this planning process was to engage individuals and organizations representing covered populations within the community who are particularly impacted by the digital divide. Key community engagement activities included:

- Survey distribution
- Stakeholder interviews
- Community pop-up events
- Focus Group Meetings
- Digital Equity Core Team Working Group Meetings

A public presentation of the Plan was made to the Ashburnham Select Board at their meeting on May 5<sup>th</sup>, 2025. A 14-day comment period was also held in conjunction with the public presentations.

## 3.2.1 Statewide Digital Equity Survey

At regular intervals in 2023 and 2024, outreach emails were distributed, and announcements were made at MRPC meetings and events to encourage everyone in our region to fill out the Statewide Digital Equity Survey. In addition, paper surveys and collection boxes were provided in the following locations in Ashburnham:

- Town Hall
- Library
- Council on Aging Meeting Location

During the Planning Process, MRPC received some feedback that the statewide survey was too long, asked too many personal demographics questions, and appeared not to be locally relevant. So, in the Fall of 2024, a local survey was also distributed to address low response rates to the statewide survey and provide additional local input.

Survey results are discussed in greater detail and presented within Section 5 of this plan.

## 3.2.2 Community Events and Pop-ups

MRPC attended community events to promote the Digital Equity Planning project and gather public input to the Plan, by promoting the Digital Equity survey.

Community Events			
Event (Location)	Date	Activity	
National Night Out (cancelled)	8/6/24	Internet safety fliers	
Celebrate Ashburnham Street Fair	9/21/24	Survey & DEP Information	
Ashburnham Health Fair	10/7/24	Survey and DEP Information	



The overall purpose of Digital Equity Planning is to understand the existing conditions around internet access and digital technology, specifically those related to, availability, affordability, and adoptability of broadband internet and digital devices with a focus on certain covered populations of the Digital Equity Act.



## 3.3 Stakeholder Engagement

### 3.3.1 Stakeholder Questionnaires & Interviews

The MRPC Team distributed stakeholder questionnaires and facilitated several follow-up interviews with digital equity stakeholders identified as part of the planning process. The questionnaire and interviews focused on digital services and programs (including public internet, workstations, and digital literacy programs) offered by each stakeholder-organization, department or facility, and any key challenges and opportunities related to their day-to-day work. It also aimed to identify the critical needs of the clients that they served, particularly as they pertained to specific covered populations.

Stakeholder Questionnaires &/ Interviews				
Organization/Department/Board	Date Completed	Interviewee	Questionnaire Completed	
Ashburnham Public Library	6/13/24	Jess Mynes	Y	
Ash-West Regional School Dept.	6/4/24	Eric DeHays	Y	
Council on Aging/Senior Center	9/25/24	Jan Robbins	Ν	
Ash-West Community Media (AWCM)	9/21/24	Matt Bourgault	Y	
LUK, Inc.	8/16/24	E McMillan	Y	
Wachusett District Veterans' Services	6/12/24	Cory Hasselman	Y	
Clear Path for New England Veterans	5/31/24	J Vance	Y	
Mass Hire Career Center	11/26/24	Jeff Roberge	Y	

## 3.3. Focus Group Meetings & Round Table Discussions

The MRPC team conducted focus group meetings to discuss the needs of specific covered populations served by the respective stakeholder organization or entity.

Focus Group Meetings & Round Table Discussions			
Focus Group Meetings	Date	Covered Population or Focus Group	
Montachusett Veterans Outreach Center	6/12/2024	Veterans, and Aging Adults, Covered Households, Racial & Ethnic Minority Groups, Individuals with a Language Barrier, Individuals with a Disability, and Residents of Rural Areas	
Social Services Roundtable	12/11/ 2024	Aging Adults and Residents of Rural Areas, Veterans, Covered Households, Individuals with a Language Barrier, and Individuals with a Disability	

4

## 4. Existing Conditions

Equitable access to broadband internet varies across demographic groups based on geographic location, race, age, income, education, and other related factors. Physical, geo-spatial, and socioeconomic challenges and barriers associated with these factors have resulted in noticeable gaps in equity related to broadband access, affordability, and adaptability at local, regional, and national scales. Similarly, broadband service and cost-based gaps also exist at each of these scales and often correlate to the same demographic factors specified above.

The following Existing Conditions Analysis evaluates certain aspects of the Town of Ashburnham's population demographics with specific regard to the eight (8) Covered Populations of the Digital Equity Act. The analysis highlights vulnerabilities and inequities regarding internet access relative to availability, affordability, and adoptability – the three pillars of digital equity and broadband internet accessibility.

In addition to providing information about available broadband internet services and devices, the analysis also aims to identify and evaluate the barriers and challenges experienced by people, especially covered populations, relative to broadband internet service accessibility or availability, adoption, and affordability. Further, it assesses not only people *with* access to, or using such services or devices, but also those portions of the populations *without* access or use of or otherwise lacking fixed broadband service and or lacking computers or other devices. It aims to better understand the barriers and challenges of populations not using the internet, and populations not using a device. Sometimes those challenges or barriers extend beyond access, affordability, or digital literacy levels, and at times are related to a person's

willingness to adopt such technology (services and devices, alike), rather than their ability or access. The analysis also includes references to community needs; however, an in-depth analysis of those needs can be found in **Chapter 5** of this Digital Equity Plan.

Much of the data for this analysis was obtained from input from the members of the **Ashburnham Digital Equity Planning Core Group**, stakeholder interviews, the Massachusetts Broadband Institute (MBI) survey results, FCC Data, other local and regional data and information, including the Massachusetts Division of Local Services' Data Analytics and Resources Bureau, and US Census data.

## 4.1 Community Context

Demographic trends throughout a geographic region or within a community can impact local internet service demand and technology support needs. Understanding the demographic profile, socioeconomic indicators, and distribution and proportion of covered populations, is essential to understanding and evaluating the needs of a community, and a critical component of any planning process which aims to identify strategies and actions for addressing those needs, especially when a primary focus of the Plan is achieving equitable outcomes.

## Town of Ashburnham

Located in North Worcester County on the New Hampshire Border, Ashburnham is home to 6,315 residents. The median income in the community is \$112,133 which is above the Worcester County median income of \$86,258 and state median income of \$94,488. Over 7.9% of residents in the town the town live below the poverty line, which is lower than the Worcester County average of 10.6%. Of its residents, 5,786 (91.6%) report as white alone, greater than the county and state averages. The 2022 unemployed rate in Ashburnham was estimated at 2.0%, below Worcester County's 5.0%. Of residents over the age of 25, US Census data shows 95.5% have completed a high school education, with 39.1.0% obtained bachelor's degrees or higher.<sup>16</sup>



## 4.2 Assessing Digital Equity in Ashburnham

**Figure 4-1** is a summary of Digital Equity Indicators for Ashburnham Town.<sup>17</sup> According to the 2022 ACS 5-year estimates, computer and internet use in Ashburnham is comparable to the county and statewide averages with **99.1%** of all **households** having a computer and **96.6%** of **households** having a broadband internet subscription. Additionally, the Digital Equity Act Population Viewer<sup>18</sup> includes five (5) layers depicting pertinent information to help determine existing conditions and digital equity needs in Ashburnham. The entire town is

<sup>&</sup>lt;sup>16</sup> U.S. Census Bureau, <u>https://data.census.gov/</u> (Accessed September 4, 2024)

<sup>&</sup>lt;sup>17</sup> Massachusetts Broadband Map: <u>https://mapping.massbroadband.org/map</u> (Accessed July 9, 2024.)

<sup>&</sup>lt;sup>18</sup> The Digital Equity Act Population Viewer, https://mtgis-portal.geo.census.gov/arcgis/apps/webappviewer/index.html?id=c5e6cf675865464a90ff1573c5072b42 (Accessed July 9, 2024)

considered a covered population as it is defined as a rural community where individuals primarily live in rural areas. The viewer provides insight into the specific percentage of households lacking broadband or a computer at **5.2%** but only provides a "range" on the percentage of the **population** not using the internet and not using a device at **15-19.9%**.



#### Figure 4-1: Broadband and Digital Equity Indicators, Ashburnham, MA

## 4.3 Covered Populations of the Digital Equity Act

## Definitions & Local Characteristics

## 4.3.1 Covered Households

Individuals who live in the term "covered household" means a household with the taxable income of which for the most recently completed taxable year is not more than 150 percent of an amount equal to the poverty level, as determined by using criteria of poverty established by the US Census Bureau. According to recent estimates Covered Households from the US Census Bureau, there are 2,288 households in Ashburnham. **Figure 4-2** below provides a summary of household and income-based demographics for Ashburnham's households.



#### Figure 4-2: Household and Income-based Demographics in Ashburnham, MA.<sup>19</sup>

## 4.3.2 Aging Individuals

The term "aging individual" has the meaning given the term "older individual" in section 102 of the Older Americans Act of 1965 (<u>42 U.S.C.</u> <u>3002</u>), within which the term "older individual" means an individual who is 60 years of age or older.

**Figure 4-3** shows that Ashburnham has an aging population, with 26% of its population being age 60 or older in 2020. The population as a whole is seeing a rise in age with the median age increasing from 37 to 38.8 from 2010 to 2020.<sup>20</sup>

Outreach conducted through regional stakeholders, including the Wachusett District Veteran's Services and the Statewide Survey, indicate for digital literacy training, "tech help" sessions, and internet safety and cyber security education, as well as expanded advocacy, programs, and services for the region's aging adults in areas such as device usage, navigation of common software platforms, general computer skills, and comfort and trust of digital devices and technology.



#### Figure 4-3: Age Demographics in Ashburnham, MA.

For medical patients and persons of all ages with disabilities, but especially for persons represented by multiple covered populations, such as aging adults with disabilities, aging adults who are veterans, or aging veterans who have one or more disabilities, etc., digital equity through enhanced digital literacy and advocacy is essential to successful and comfortable living. Further, older adults who have mobility or transportation limitations that make it difficult for them to visit healthcare providers' offices, telemedicine—the provision of healthcare remotely using ICTs—offers a convenient means of accessing healthcare services, but only if they are knowledgeable and comfortable using such technologies. There are currently barriers to healthcare access in the region that affect residents of all ages. More advocacy and equity in digital access through affordability, availability, and adoptability, and therefore better digital access to healthcare for aging

<sup>&</sup>lt;sup>20</sup> U.S. Census Bureau

adults is of utmost importance, especially considering the growing popularity of web-based platforms for provider communication, medical records, scheduling, and receiving test results.

Vulnerable populations, such as aging adults, are adversely impacted by barriers to healthcare access because they lack consistent access to suitable devices and internet services, as well as the knowledge and comfort-level necessary to use these digital resources.

## 4.3.4 Incarcerated Individuals

Incarcerated individuals are inmates at state and county jails and correctional facilities, other than individuals who are incarcerated in a federal correctional facility. The closest facility to Ashburnham is the North Central Correctional Institution in Gardner, MA. There are no incarcerated individuals in Ashburnham.

## 4.3.5 Veterans

The term "Veteran" has the meaning given the term in section 101 of title 38, United States Code.

As **Figure 4-4** depicts, Veterans make up 5.0% of Ashburnham's 18 and older population and are valued within the community and region.<sup>21</sup> The town has a designated Veteran's Agent who provides financial, transition, and housing assistance to Veterans who lack support and resources. There are several Veteran's organizations serving the Montachusett Region, including the one-of-a-kind Montachusett Veterans Outreach Center. However, many veterans lack financial resource to afford internet, and, despite the presence of Veterans local and regional organizations and service programs, most do not currently offer any digital literacy resources, and veteran-specific digital equity, literacy, and affordability programs are unknown or non-existent.





<sup>&</sup>lt;sup>21</sup> U.S. Census Bureau

<sup>22</sup>
The Montachusett Veteran's Outreach Center (MVOC) services over 700 Veteran's annually, most of whom reside in the Montachusett Region including veterans housing. In addition to their many services, MVOC offers free Wi-Fi access for veterans at their Gardner office. Internet service is also available (free) to some residents and digital literacy classes are offered, however increased digital literacy programming is needed and desired by the organization and those they serve. A recent Digital Equity Veterans Focus Group meeting for the Montachusett Region was convened by the Montachusett Regional Planning Commission as part of this planning process. The meeting was hosted by the MVOC and Veteran's Services Officers from all Montachusett communities were invited to share their stories, ideas, needs, and visions for increased digital equity for the region's veterans.

# 4.3.6 Individuals with Disabilities

The term "disability" has the meaning given the term in section 3 of the Americans with Disabilities Act of 1990 (<u>42 U.S.C. 12102</u>). Many residents of the northwest Montachusett Region have one or more disabilities. Ashburnham has 673 individuals with one or more disabilities, making up 11% of the total population.<sup>23</sup> Of those over 18 – 64 years of age, the Massachusetts Office of Disability (MOD) provides data on specific difficulties. **Figure 4-5** further identifies the specific difficulties that may create barriers and have negative consequential impact on an individual's ability to achieve digital literacy and as such needs to be taken into account when strategies are devised to meet the goals of this plan.



#### Figure 4-5: Specific Challenges 18–64-Year-olds in Ashburnham, MA.

<sup>&</sup>lt;sup>23</sup> State of Massachusetts, Overall Disability (Accessed July 9, 2024)

# 4.3.7 Individuals with a Language Barrier

The Montachusett region has many individuals who are English learners and/or who have lower levels of literacy. Both groups of people are covered populations as individuals with a language Many people born outside of the US, some non-English speaking, have immigrated to the Montachusett Region over the course of many generations. More recently, an influx of non-English speakers including those who speak Haitian-Creole, Arabic, Spanish and Portuguese have come to the Montachusett Region. Many of these individuals are also part of covered households who experience lower levels of income. Due to this recent influx, digital literacy surveys and information on digital equity must be translated to a large variety of languages to get the most accurate understanding of the region's digital equity needs.

Ashburnham is primarily a white, English-speaking town with 95.9 percent of its residents only speaking English, higher than the state average of 75 percent English speakers. Second to English is Indo-European languages, with 3.4% of residents speaking them at home.<sup>24</sup> Ashburnham consists mostly of white, English-speaking residents, however, the presence of a broad diversity of ethnicities and languages within the Montachusett Region make this an important population to consider, even in more rural English-speaking areas. Further, lower levels of education and, hence, literacy, are also more prevalent within the rural communities of the Montachusett Region, again, illustrating the importance of recognizing and considering the needs of this covered population.

### 4.3.8 Individuals who are Members of a Racial or Ethnic Minority Group

The resident population of Ashburnham primarily identifies as white with 91.6% of the population being white alone.<sup>25</sup> The number of white residents in Ashburnham has decreased over time (down from 95.5% in 2010), as people born outside of the US, some non-English speaking, and some of multiple ethnicities, have immigrated to the Montachusett Region over the course of many generations. More recently, there has been an increase of immigration of non-English speakers to nearby cities, including those who speak Haitian-Creole, Arabic, Spanish and Portuguese. The diverse ethnic make-up of the greater region of the Montachusett area makes this covered population an important one to consider, even in more rural areas with predominantly white residents.

<sup>24</sup> U.S. Census Bureau

<sup>25</sup> U.S. Census Bureau

# 4.3.9 Individuals who Primarily Reside in a Rural Area

The term rural includes all population and territory outside of urban areas. The criteria now used to define urban areas represent a significant departure from previous decades. First, population density was the primary statistic used in the delineation of urban areas from 1960 to 2010. The U.S. Census Bureau now defines rural as what is not urban—that is, after defining individual urban areas, rural is what is left. Ashburnham meets the definition of a "**Rural Area**", making all residents part of a "covered population" group.

# 4.3. 10 Distribution of Covered Populations in Ashburnham

**Figure 4-6** below shows a summary of the Town-wide percentages of the population for various indicators compiled by the US Census Bureau and Massachusetts office on Disability (MOD).



#### Figure 4-6 – Covered Populations in Ashburnham

# 4.3.11 Groups of Significance

**Figure 4-7** below shows a summary of the percentages of the Ashburnham population that may or may not be included in the covered populations but nonetheless rely on adequate internet, accessibility and digital literacy skills. The work from home category is the percentage of those in the over 18 workforce residing in Ashburnham. Percentages are compiled by US Census Bureau information.





# 4.3.10 Digital Equity and the MRCEDS<sup>26</sup>

The greatest threat identified by economic development leaders in the Montachusett region by a wide margin is the quality of aging infrastructure throughout the region. Included is digital equity and access. Many agreed that the quality of telecommunications and digital equity (ensuring equal access to / use of information and communication technologies) was a major opportunity for the region. The Plan recognizes that **"internet access is playing a larger role in everyday life, as it is required to work from home, schedule doctor appointments, access financial institutions, and promote overall business in general."** 

<sup>&</sup>lt;sup>26</sup> Montachusett Regional Comprehensive Economic Development Strategy – MRCEDS 2024

# 4.4 Broadband Access

A high percentage of Ashburnham's households currently subscribe to broadband internet service, at 96.5%. According to the U.S. Census, the proportion of residents subscribing to a broadband internet subscription Ashburnham is slightly higher than the national (93%) and statewide (90%) averages.<sup>27</sup> Since 2020 and the COVID-19 pandemic, people rely more on broadband internet and online, web-based platforms for employment, education, banking, social interaction, and access to essential services and information than they did even a few short years ago. While there has been an increase in the number of homes with broadband internet since pre-covid times, there is still not full coverage in the town. Broadband internet is more important now than ever, and identifying challenges and barriers related to broadband access and understanding the needs of the residents to overcome those challenges and barriers is both critical and essential, and the primary purpose of this Plan.

# 4.4.1 Internet Availability, Service & Digital Connectivity

**Internet Availability** can be assessed in terms of the number of Internet Service Providers (ISPs) serving and providing direct, connections to the internet at households, businesses, or institutions within a certain location or area. Further, it can be assessed based on the type of internet service provided (e.g., Fiber-optic, Cable, and Fixed Wireless Internet), and the average and maximum speed of that service (i.e., Digital Data Upload & Download Speeds measured in Megabytes per second [Mbps]).

A **Serviceable** location refers to an address with access to Broadband Internet service from an Internet Service Provider. As of March 14, 2024, the FCC's new benchmark for high-speed fixed broadband is 100 Mbps download and 20 Mbps upload, a significant increase from the previous 25/3 Mbps benchmark set in 2015<sup>28</sup>. Under these new standards<sup>29</sup>:

- "Served" locations have broadband speeds of at least 100 Mbps download and 20 Mbps upload.
- "Underserved" locations have speeds above 25/3 Mbps but below 100/20 Mbps.
- "Unserved" locations lack broadband service or have speeds below 25/3 Mbps.

This update aligns with the standards of the NTIA BEAD program and other U.S. Universal Service Fund initiatives. For more details, refer to Section 2.3, "Broadband Internet Availability," on page 16 of the plan.

<sup>&</sup>lt;sup>27</sup> U.S. Census Bureau

 <sup>&</sup>lt;sup>28</sup> FCC News, Office of Media Relations, Press Release dated March, 14, 2024: <u>https://docs.fcc.gov/public/attachments/DOC-401205A1.pdf</u>
 <sup>29</sup> NTIA BEAD Program, Program Documentation:

https://www.ntia.gov/funding-programs/internet-all/broadband-equity-access-and-deployment-bead-program

**Digital Connectivity** is a combined measure of people accessing and utilizing the internet (particularly broadband internet) and digital devices at home. Some factors that can be assessed to "measure" digital connectivity are: Average Household Size, Percentage of the Population Working from Home, Percentage of Households with Digital Computing Devices, Percentage of Households with Internet, Percentage of Households with Broadband Internet (defined as download/upload speeds above 100/20 Mbps), and Broadband Internet Usage vs. Availability (percentage of households which have a Broadband Internet connection to their home that actually subscribe to a Broadband Internet Service).

### 4.4.2 Broadband Internet Availability, Service, and Connectivity

According to the Massachusetts Broadband Map the Town of Ashburnham has 2,843 Serviceable Locations, of which 2,821 (99.23%) are classified as "Served", four (0.14%) are classified as "Underserved", and 18 (0.63%) are classified as "Unserved". **Figure 4-8** below shows the total distribution of serviceable locations, relative to their status as Served, Underserved, or Unserved.<sup>30</sup>



#### Figure 4-8 – Distribution of serviceable locations in Ashburnham

<sup>30</sup> Massachusetts Broadband Map

# 4.4.4 Digital Connectivity in Ashburnham:

Regarding **Digital Connectivity**, Ashburnham is comparable to statewide and national averages with slightly more households with internet and broadband, working from home, and using devices, as shown within **Table 4-2**, on the following page. One major variation from statewide and national averages is the availability of Fiber-optic infrastructure. Fiber-optic, which can handle greater bandwidth and provide higher speeds, has 12.44% availability in Ashburnham despite higher-than-average broadband internet and device usage.

Table 4-2 Ashburnham Digital Connectivity Index					
Metric or Measure of Connectivity	Ashburnham	Massachusetts	USA		
Average Household Size	2.7	2.5	2.7		
Work from Home Percent	17%	15%	12%		
Households with Devices	98%	95%	94%		
Households with Internet	97%	91%	89%		
Households with Broadband Internet	89%	81%	73%		
Broadband Internet Usage vs. Availability	91%	82%	74%		
Fiber-optic Availability	12.44%	55.92%	58.49%		
Source: ISP Reports (https://ispreports.org/) accessed July 9, 2024.					

Given the proportion of the population working from home, and the high numbers of households with devices using the internet, the lack of fiber-optic infrastructure could be a limiting factor for the access of higher speeds as digital data bandwidth needs increase over time.

**Internet Availability** in Ashburnham has two (2) primary Internet Service Providers (ISP), as shown within **Table 4-3** below. Cable, Fiber, and Fixed Wireless internet are available, and satellite internet may also be available from various providers such as <u>Dish</u>, <u>DirectTV</u>, <u>HughesNet</u>, <u>Viasat</u>, and <u>Starlink</u>.

Table 4-3 Ashburnham Internet Availability						
Provider Connection Availability Avg. Download Speed Max Download Speed						
Xfinity	Cable	100%	1,200 Mbps	1,200 Mbps		
T-Mobile Home Internet Fixed Wireless 100% 43 Mbps 100 Mbps						
Source: ISP Reports ( <u>https://ispreports.org/</u> ) accessed July 9, 2024.						

**Digital Connectivity** in Ashburnham is comparable to statewide and national averages with slightly more households with internet and broadband, working from home, and using devices, as shown within **Table 4-4**, below. Fiber-optic has no availability in Ashburnham despite higher-than-average broadband internet and device usage.

Table 4-4 Ashburnham Digital Connectivity Index				
Metric or Measure of Connectivity	Ashburnham	Massachusetts	USA	
Average Household Size	2.7	2.5	2.7	
Work from Home Percent	17%	15%	12%	
Households with Devices	99%	95%	94%	
Households with Internet	94%	91%	89%	
Households with Broadband Internet	89%	81%	73%	
Broadband Internet Usage vs. Availability	89%	82%	74%	
Fiber-optic Availability	0.00%	55.92%	58.49%	
Source: ISP Reports ( <u>https://ispreports.org/</u> ) accessed July 9, 2024.				

Given the proportion of the population working from home, and the high numbers of households with devices using the internet, the lack of fiber-optic infrastructure could be a limiting factor for the access of higher speeds as digital data bandwidth needs increase over time.

The shift to remote work brought about by Covid-19 has significantly increased the demand for higher internet speeds and greater bandwidth. The widespread adoption of supplementary "work-from-home" applications such as online messaging and video chatting services resulted in a need for more devices and robust broadband. The popularity of these resources is not limited to the remote work setting, as traditional office workplaces have become reliant on the heightened communication capabilities they provide. This change underscores the importance of reliable internet connectivity in today's work environment, wherever it may be.

In addition, since late 2022, national demand for Artificial Intelligence (AI) programs has increased exponentially, along with the subsequent demand and need for faster, more widely available broadband internet connectivity. The upward trend of these bandwidth-intensive internet uses will continue and require that communities increase their digital infrastructure to accommodate current and future needs, likely starting with Ashburnham's fiber-optic availability. With population growth, higher demand for broadband internet, and an increase in high bandwidth internet uses, improvement to Ashburnham's infrastructure could better provide for the existing and future populations.

# 4.5 Public Broadband Infrastructure

Ashburnham will soon benefit from a state initiative to expand high-speed broadband internet infrastructure to underserved homes, businesses, and community anchor institutions. The Healey-Driscoll Administration's "Broadband Infrastructure Gap Networks Program" grant to Verizon will help identify and rectify unserved or underserved service to the town.

"The four awardees selected in the first round will work with MBI to validate the unserved and underserved location count included in each grantee's proposal. The goal of this review is to connect 100% of the serviceable locations in each community, ensuring alignment with the goal of the federal Internet for All initiative."<sup>31</sup>

# 4.5.1 Fiberoptic

Phase 1 of the fiber optic municipal area network (FMAN) was installed in 2012 with subsequent phases in 2017 and 2019. The most recent phase (2019) added the:

- Ashburnham Safety Complex 99 Central St
- Ashburnham Municipal Light Plant -24 Williams Rd
- Briggs Elementary School 9 Oakmont Dr
- Oakmont Regional High School 9 Oakmont Dr
- Overlook Middle School 10 Oakmont Dr

# 4.5.2 Ash-West Community Media (AWCM)

AWCM digital streaming media services had increased during Covid-19 and has continued to increase since the end of the pandemic. AWCM recently created an App for streaming media that is available for download in the App Store, Google Play Store, and on Roku, and Apple TV.

Some concerns expressed by AWCM related to decreasing funding and increasing demand include:

• AWCM, like other public access cable providers, are funded by cable subscription fees negotiated by the Town; These available funds are decreasing due to decreasing cable subscriptions as more customers choose to "cut the cord" and subscribe to streaming services.

<sup>&</sup>lt;sup>31</sup> https://broadband.masstech.org/gap-networks-grant-program

• Long-term sustainability of AWCM is at risk due to decreasing funds; However, demand is increasing and AWCM is transitioning into digital streaming offerings, but a new model, or alternat sources of funding may be imperative.

# 4.6 Critical Digital Assets & Community Anchor Institutions

Critical Digital Assets and Community Anchor Institutions are critical public resources for emergency personnel, residents, students, workers, and visitors to access internet services and devices outside their homes and for the effective and efficient administration of government and civic life. The following outlines the communities' digital assets and institutions and their current role in the availability of digital equity resources and the provision of public internet and digital literacy programs and services.

### 4.6.1 Ashburnham Critical Digital Assets

The term "Critical Digital Asset" means a digital computer, communication system, or network that is a component of a critical Information System, including assets that perform Safety-Sensitive and/or Emergency Planning (SSEP) functions. Such assets (facilities- and systemsbased infrastructure) are often critical to emergency response and public safety and provide support to protect, serve, or administer important government and public safety functions. Critical Digital Assets sometimes provide a pathway to other critical systems or a support system asset whose failure or compromise could result in a threat to public safety. Critical Digital Assets are often at risk of cyberattacks and proper digital network security and access is crucial to their protection and function. A summary of the primary Critical Digital Assets for Ashburnham is shown in **Table 4-5** on the following page:

Critical Digital Assets - Ashburnham			
Facility Type	Organization	Location	
Alert Center -Notify Me Sys	Town of Ashburnham	32 Main St	
Public Goods	Ashburnham Public Works	17 Central Street	
Public Safety	Ashburnham Fire Department	99 Central Street	
Electric Utility Co	Ashburnham Municipal Light Plant	24 Williams Rd	
Post Office	United States Postal Service	123 Central Street	
Public Safety	Police	99 Central Street	
Emergency Shelter	Oakmont Regional High School	9 Oakmont Drive	

Table 4-5: Critica	l Digital Assets,	Ashburnham,	MA.
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# 4.6.2 Ashburnham Community Anchor Institutions

The term "Community Anchor Institution" as defined within the Digital Equity Act of 2021 means a public school, a library, a medical or healthcare provider, a community college or other institution of higher education, a state library agency, and any other nonprofit or governmental community support organization. Below in **Table 4-6** is a summary of the primary Community Anchor Institutions located within Ashburnham:

Community Anchor Institutions - Ashburnham				
Facility Type	Organization	Location		
Town Hall – Civic Leadership	Town Hall	32 Main Street		
Library	The Stevens Memorial Library	20 Memorial Drive		
Nonprofit	Ashburnham-Westminster Community Media	9 Oakmont Drive		
Government Organization	Ashburnham Council on Aging	32 Main Street, 2 <sup>nd</sup> Floor		
Government Organization	Veteran Services Officer	32 Main Street		
School	John R. Briggs Elementary School	96 Williams Road		
School	Overlook Middle School	10 Oakmont Drive		
School	Oakmont Regional High School	9 Oakmont Drive		
Private School	Cushing Academy	39 School Street		
Church	Ashburnham Community Church, UCC/MCC	84 Main Street		
Church	People's Congregational Church	56 S Main Street		
Church	St. Denis Church	85 Main Street		
Church	Apostolic Lutheran Church	315 Winchendon Road		

#### Table 4-6: Community Anchor Institutions, Ashburnham, MA.

**Figure 4-9** on the following page is a map showing the locations of all Critical Digital Assets and Community Anchor Institutions located within Ashburnham, as listed. A list of additional community resources for the Town of Ashburnham can be found on the Town's webpage.



Figure 4-9: Critical Digital Assets & Community Anchor Institutions, Ashburnham, MA

# **5. Digital Equity Barriers & Needs**

In addition to the Existing Conditions Evaluation presented within **Section 4** of this Plan, the Digital Equity Planning Process also includes an assessment of "Community Needs" presented here as **Section 5**. Location-specific Community Needs are established as part of the public outreach and engagement portion of the planning process through information gathered during targeted outreach to interested stakeholders, covered populations, and local digital equity champions, including core team meetings, focus group meetings, stakeholder questionnaires, interviews, and responses to the Statewide Digital Equity Survey.

The assessment of community needs was not limited only to internet accessibility but also included an evaluation of the



Town of Ashburnham and surrounding region's digital literacy opportunities, and the community's level of digital literacy skills, abilities, comfort levels, and willingness to adopt broadband internet and digital technologies.

# 5.1 Statewide Digital Equity Survey Responses

The state's first digital equity survey launched in 2023 to help the Massachusetts Broadband Institute identify individuals' needs for accessibility and affordability of digital devices and the internet as well as digital skills needed to safely access online resources. In Ashburnham, **108** residents took the statewide survey. The overarching needs highlighted by those responding to the survey were service affordability and reliability, digital literacy and internet safety.

# 5.1.1 Affordability

Over 50 % of those responding have Xfinity as a service provider. According to the 102 respondents who answered the question, the average monthly cost of internet in Ashburnham is **\$137.47** and ranged from \$30.00 to \$296.00 Of the respondents who answered the follow-up question, **10% found that it was "very hard"** to pay for an internet subscription , **52% thought that it was "somewhat hard**", meaning that almost **two thirds** of those respondents with internet service find it hard to pay for their internet service as shown in **Figure 5-1**.



#### Figure 5-1: How hard is it to pay for Internet

# 5.1.2 Service Reliability

When asked "How well does your internet service work? **47%** report that their internet service is not good enough to meet their household needs. "**The Ashburnham Master Plan, 2024** references digital equity needs in both the Housing Chapter and Economic Chapter and recognizes the importance of fast, reliable service in both housing and for economic benefit. Specific Goals and Actions related to Digital Equity concerning Economic Development include:

#### Goal ED4:

"Create/Enhance accessible and affordable internet services that benefit a growing population of digital businesses and residents working from home, and improve residents' economic opportunities and quality of life, and foster business development."<sup>32</sup>

**ACTION ED4-1:** Ensure that Ashburnham has access to high-speed internet, especially around the town center, to make working from home or from third places practical for town residents.



#### Figure 5-2: Internet Service Reliability, Ashburnham, MA

ACTION ED4-2: Investigate the creation of municipal broadband through the municipal light company.

**ACTION ED4-3:** Promote the development of businesses that cater to employees working from home and encourage existing businesses to accommodate remote working and workers.

**ACTION ED4-4:** Develop and adopt a Digital Equity Plan to identify, target, and overcome barriers to digital equity throughout the community.

<sup>&</sup>lt;sup>32</sup> https://ashburnham-ma.gov/556/2023---2024-Master-Plan-Updates

### 5.1.3 Digital Literacy

Navigating the internet is not always Between websites or applications and among different people and population groups. It was noted in the survey that while some find general internet searching and participating in local government easy, **43.7%** still find internet searching hard or not easy and **38%** find it hard or not easy to participate in local government.

The percentages of survey participants that find it hard or not easy to search for benefits **74.7%** and/or participation in remote health care (telehealth) **63.6%** is alarming considering many of those services are unavailable by any other means. To exacerbate this, **46.7%** of survey respondents find government service portals such as the RMV, Veteran's Administration or Social Security somewhat or not accessible at all.

A primary concern for Ashburnham is the fact that many groups feel increasingly "forced" to use the internet and are provided with no other choice than to use the internet to accomplish many of day-to-day "living" tasks. In some cases, there is no longer an alternative "off-line" or "in-person" methods

#### Figures 5-3 ,5-4: Digital Literacy





#### Figure 5-5: Digital Literacy Training Preference

to accomplish tasks. When asked about what type of support for digital literacy a respondent would prefer, **two thirds** prefer a "do it yourself training module."



### 5.1.4 Internet Safety



#### Figure 5-6: Level of Concern for Safety

Cyber-security and internet safety were common topics of concern raised during stakeholder interviews, public engagement, focus group meetings and stakeholder surveys throughout the Montachusett Region. Ashburnham is no exception. **53%** of respondents to the survey are somewhat or very concerned about internet safety. An overwhelming majority of respondents concerned with internet safety are concerned that their private information is at risk and falling victim to internet scams. Digital Literacy is key to promoting cybersecurity awareness.

# 5.2 Barriers and Needs Outline

To accurately articulate the digital equity needs in Ashburnham it is imperative to understand the barriers that exist. **Table 5-1** lists both the barriers to digital equity and what needs will help work towards bridging the digital gap in Ashburnham.

Table 5-1 Ashburnham MA			
	Challenges & Barriers	NEEDS	
Availability	<ul> <li>Limited locations where free, public Wi-Fi is available</li> <li>Lack of public charging stations</li> <li>Limited digital resources in public facilities (hotspots)</li> <li>Sub-par internet service in select areas of town - downtown</li> <li>Limited devices available in public municipal facilities</li> <li>Lack of accessibility</li> <li>Limited private workspaces</li> </ul>	<ul> <li>Free Public Wi-Fi locations</li> <li>Public charging stations</li> <li>Additional hotspots</li> <li>Upgrade existing internet services in public facilities (Town Hall, Library)</li> <li>Mesh internet for downtown area</li> <li>Wi-Fi options for homebound</li> <li>Additional workspaces</li> </ul>	
Affordability	<ul> <li>Cost of internet service</li> <li>Cost of devices</li> <li>Fixed/limited income</li> <li>ISP programs that offer low cost but inadequate internet service</li> </ul>	<ul> <li>Low-cost/free internet programs (akin to fuel assistance)</li> <li>Device distribution programs (must include a digital literacy component)</li> <li>Equitable ISP programs</li> </ul>	
Adoptability	<ul> <li>Lack of digital literacy</li> <li>Lack of affordability</li> <li>Lack of trust for the internet</li> <li>Lack of technical knowledge to use devices effectively</li> <li>Lack of private workspaces</li> <li>Lack of one-on-one tech help</li> <li>Lack of live tech help line</li> <li>Lack of accessible formats where public internet resources and information is disseminated</li> </ul>	<ul> <li>Consistent digital literacy classes</li> <li>Device distribution (once digital literacy program complete)</li> <li>Internet Safety Classes</li> <li>Basic Computer use class (COA)</li> <li>Private workspaces</li> <li>One on one tech help</li> <li>Live tech help line</li> <li>Hard copy (and on-line) information pertaining to available digital resources</li> </ul>	

# 5.3 Summary of Specific Needs

#### A. Digital Availability

- Limited Wi-Fi internet outside of public buildings An important outcome of this planning process and assessment of community needs was the identification of the need and desire for free charging stations, public workspaces and public wi-fi in additional outdoor public spaces such as outside of the Library, Town Hall, Parks and Recreational spaces.
- Access to Public Workspaces that provide privacy Many individuals only access to the internet and/or devices is in public buildings. Groups, such as the Council on Ageing (COA) meet in shared spaces and perform a variety of tasks in concert with each other. While the social aspect of this practice may be effective, there is an important need to provide individuals with privacy while using the internet/devices for tasks such as a telehealth appointment, financial matters or any other sensitive situation that requires privacy. Private workspaces are needed in public buildings.
- Limited access to Digital literacy resources Aa a rural community, Ashburnham's entire population qualifies as a member of a Covered Population of the Digital Equity Act. Given the understanding that covered populations face greater challenges and barriers to digital inclusion and equity, strong, coordinated partnerships that promote and provide digital literacy training and leadership are needed. Partnerships with existing digital literacy training organizations should be established. Additional resources and funding should also be sought to provide ala-carte or at-home, learn-as-you-go services through existing free programs like www.DigitalLearn.org or programs funded by the Town of Ashburnham or partner organizations.
- Access to Assistive Technology and Devices It was noted that some public computers and workstations are not fully "accessible" to individuals with disabilities. Even government webpages are not always fully ADA accessible or compliant with the established standards for Information and Communication Technology (ICT) under Section 508 of the Rehabilitation Act and Section 255 of the Communications Act. Additional digital and internet ADA accessibility measures through enhanced web content, devices and workspaces meeting the ICT standards and improved public access to assistive digital technology and devices are needed.

#### B. Digital Affordability

- Affordability of Broadband Internet In many parts of the Montachusett Region there are few choices in internet service providers (ISP) which prevents market competition and leads to expensive services. In general, the internet is expensive in Ashburnham and there are few affordable internet options for low-income households except for those that are based on a lower level of service, resulting in lower speed and reliability. The Internet is now considered an essential service, or utility, like heat, electricity, and water, and therefore, programs to supplement the cost must be considered for those needing financial assistance.
- Affordability of Digital Devices Whether devices and workstations are made available for use in public buildings and spaces, or for personal ownership use through free or reduced-cost device distribution programs, it is essential to increase access not only to affordable, reliable broadband internet, but also to affordable, up-to-date, high-tech digital devices and technologies. Following the model established by NDIA and other digital literacy and device distribution advocates and training professionals, it is recommended that public device distribution programs are inclusive of or offered in conjunction with Digital Literacy training.

#### C. Digital Adoptability

- **Concerns about Cyber-Security & Internet Safety** Cyber-security and internet safety were common topics of concern raised during stakeholder interviews, public engagement, focus group meetings and survey responses.
- Limited Basic Computer Skills It was noted that many residents, particularly aging adults and Veterans need basic computer skills. Often, digital literacy and computer classes assume that people already know what may seem like common knowledge to others. Many people now need to use the internet for everyday living activities not associated with work or school. Understanding this need and accommodating the digital literacy and skills needs of people other than students and working professionals is necessary.
- Limited Basic Internet Skills Navigating the internet is not always intuitive between websites or applications and among different people and population groups. It was noted that many of the region's residents could use basic instruction or assistance navigating the internet. Individuals with a language barrier or lower levels of literacy, and aging adults, and veterans may face increased challenges and barriers to accessing and acquiring basic internet skills and other digital literacy needs.
- Difficulty Navigating Government Websites and Online Applications and Forms It was noted that residents, particularly Aging Adults and Veterans need assistance navigating federal, state, and local government websites and need assistance completing and

submitting online applications, permits, and forms and uploading supporting documentation to related online application systems. Of interest, it was noted that assistance was needed with the following:

- a. DMV Forms (license and registration renewals)
- b. Online bill or tax payments
- c. Online Medical Records/Telehealth
- d. Veteran's Administration Website
- Difficulty Setting up digital devices and accessing and changing device settings Many people noted that the hardest part of using a digital device can be setting it up or finding and changing settings within the device. While some are comfortable operating and using a digital device like a cellphone, laptop, computer, or tablet, they are not comfortable enough to set one up if they need to purchase a new device. This can be intimidating or stressful for some and often prohibits them from making necessary changes or updating old, out-of-date technology.
- Difficulty Managing online subscriptions and accounts –The need for more and more online accounts to accomplish everyday tasks (Veteran's Administration, Tele-Health platforms, Amazon, Netflix, etc.) creates a challenge managing numerous account usernames and passwords. This can be a challenge for anyone, but especially for people who do not have a high level of confidence using the internet and digital devices. And, if setting up and managing these accounts is challenging, it can be almost impossible to cancel or make changes to an account, especially one that is connected to a bank account, credit or debit card. These types of issues were noted as a challenge for people of all ages and with varying degrees of digital literacy and confidence.

#### Needs of Individuals who Reside in Rural Areas

• According to the Pew Institute<sup>33</sup>, many parts of rural America lack high-speed internet which means that communities face significant barriers to learning and working. Individuals residing in rural areas are less likely than suburban or urban residents to have a home broadband internet subscription and less likely to own a smartphone, tablet, laptop, or computer. While the number of rural residents having a broadband internet connection at home has increased from six-in-ten people (63%) in 2016, to seven-inten people (72%) in 2021, it is still lower than in urban and suburban areas. Similarly, access to reliable, high-speed internet service is also lower in rural areas than in urban and suburban areas, like nearby Fitchburg.

<sup>&</sup>lt;sup>33</sup> Some digital divides between rural, urban, suburban America persist | Pew Research Center https://www.pewresearch.org/short-reads/2021/08/19/some-digital-divides-persist-between-rural-urban-and-suburban-america/

# 5.3.1 Organizational Needs

- **Technology & Infrastructure Gaps** Aging digital networking equipment, computers, and lack of workstations in public spaces like the Senior Center and departments throughout town need to be updated with modern, up-to-date equipment and technology.
- **Partnerships** Consider developing partnerships with MOC, Mount Wachusett Community College, and MassHire Career Center to coordinate with and build upon their existing Digital Literacy programs.
- Understanding Digital Equity & Inclusion in Rural Areas Better define the town's role and importance in identifying ways to bridge the digital equity gap to bring digital technology and services to disadvantaged populations throughout town. According to the Pew Institute<sup>34</sup>, many parts of rural America lack high-speed internet which means that communities face significant barriers to learning and working. Individuals residing in rural areas are less likely than suburban or urban residents to have a home broadband internet subscription and less likely to own a smartphone, tablet, laptop, or computer. While the number of rural residents having a broadband internet connection at home has increased from six-in-ten people (63%) in 2016, to seven-in-ten people (72%) in 2021, it is still lower than in urban and suburban areas. Similarly, access to reliable, high-speed internet service is also lower in rural areas than in urban and suburban areas, like nearby Fitchburg.

The Assessment of Community Needs presented within this section (**Section 5**) informed the Community Vision, Goals, and Actions provided in the following section, *Digital Equity Vision, Goals, Actions & Implementation*, Section 6 of this Plan.

<sup>&</sup>lt;sup>34</sup> Some digital divides between rural, urban, suburban America persist | Pew Research Center https://www.pewresearch.org/short-reads/2021/08/19/some-digital-divides-persist-between-rural-urban-and-suburban-america/

# 6. Digital Equity Vision, Goals, Actions & Implementation

Broadband internet accessibility and connectivity issues in Ashburnham are related to various factors, including gaps in reliable internet service, diverse socioeconomic demographics affecting income and opportunity, higher-than-average services costs limiting access and affordability, limited access to public internet and digital workspaces, affordable devices and technology, and digital literacy training and tech help. Through the information provided in this Plan and upon its eventual implementation, rural communities will have the tools necessary to enhance digital equity and inclusion to bridge with the final goal of bridging the digital gap.

# 6.1 Digital Equity Community Vision

To ensure that all can connect to the internet with accessible, internet-enabled, adequate devices and obtain the skills, information, and services specific to their needs.

# 6.2 Digital Equity Goals

- 1. Improve the effectiveness, efficiency and quality of local initiatives that promote digital equity.
- 2. Increase access to affordable, fast, reliable internet.
- 3. Expand internet service, device distribution and digital literacy through community engagement and partnerships.
- 4. Increase the capabilities of Ashburnham's technological resources and public digital workspaces.
- 5. Seek and secure funding opportunities for investments and long-term support of digital equity programs and services.

# 6.3 Digital Equity Implementation **Focus Areas**

Actions outlined in this plan and displayed within the Digital Equity Action Plan (Section 6.4), were devised using the following seven (7) project focus areas specified within the Municipal Digital Equity Implementation Program.





MBI - Digital Equity Project Focus Areas			
8	<b>1. Staff Capacity for Digital Equity</b> A full- or part-time staff person to oversee, project manage, and execute municipal digital equity activities in coordination with municipal leadership, various municipal departments, stakeholders, and residents.		
<b>(</b>	<b>2. Wi-Fi Access and Innovative Connectivity Technology</b> Assessment, design, and establishment of an appropriate technology solution to provide in-unit access to the internet for residents living in affordable housing and/or low-income neighborhoods.		
۲	<b>3. Public Space Modernization</b> Improvements to inadequate broadband infrastructure and digital use in public spaces, such as libraries, community centers, senior centers, educational facilities, workforce training locations, and commercial corridors.		
	<b>4. Connectivity for Economic Hardship</b> Provision of Wi-Fi cellular hot spots to individuals lacking stable housing where they are unable to have a fixed broadband internet subscription.		
	5. Digital Literacy Provision of training programs to improve digital literacy and skills to use devices, online resources, and other digital tools. Literacy program curricula and models may vary based on learner needs and familiarity with devices and the internet, such as in-person group instruction, a-synchronous online instruction, or one-on-one training.		
	<b>6. Device Distribution and Refurbishment</b> Provision of new or used internet- connected devices, such as laptops, tablets, and smart phones, to distribute to target populations.		
Ţ	7. Education, Outreach, and AdoptionEnrollment ofeligible residents in discounted options for broadband, devices, and digital skills.Outreach may include workshops, call center phone banking, door-to-dooroutreach, online/printed communications, and public service announcements.		

# 6.4 Digital Equity Action Plan

Table 6-1 Ashburnham Digital Equity Action Plan				
Goal	Action	MBI Project Category	Potential Lead (s)	Funding/Program
	Promote and Support Digital Literacy Training Programs like those available through MassHire Central Mass Career Center, MWCC Adult Education, North Central Educational Opportunity Center, Montachusett Opportunity council (MOC) and other digital literacy partners.	5,7	Library/COA	Municipal
1. Improve the	Continue to evaluate and update the Ashburnham Digital Equity Plan and pursue opportunities, services, programs, and partnerships that enhance digital equity and inclusion initiatives.	5,6,7	Planning Dept.	Municipal
efficiency, and quality of local initiatives that promote digital equity.	Encourage peer-mentorship and "train-the-trainer" models where individuals of covered population groups are empowered to become qualified digital literacy and certified Digital Navigators such as senior-to-senior tech help sessions, peer-to-peer youth-led and youth driven initiatives.	5	Library/COA	MBI Digital Equity Implementation Grant, MBI programs
	Identify and train a Digital Navigator (Qualified Trainer) at each Anchor institution. (Town Hall, Library)	1	Library Director/Town Administrator	MBI Implementation Grant, MBI programs, NDIA
	Join a Regional Digital Equity Coalition and play a role in future implementation and evolution of regional broadband internet access and digital literacy initiatives.	2,4,5,7	Planning Dept.	MBI Digital Equity Implementation or MBI programs
	Create an outdoor public Wi-Fi mesh network in the downtown area and install workstations and charging stations to enhance and support residents, businesses,	3,4	IT(Suzor)	Community Compact IT Grant, MBI programs

	consumers, and town functions. <b>Refer to Goal ED-4 in</b> Community Master Plan.			
2. Increase access to affordable, fast, reliable internet.	Install kiosk or map-boards showing locations of public Wi- Fi, workspaces, charging stations, Community Anchor Institutions, and digital literacy resources.	3,4	Planning Dept.	MBI Implementation Grant , Municipal Budget
	Create public Wi-Fi mesh networks at Parks and Playgrounds <b>Refer to Goal ED-4 in Community Master Plan.</b>	3,4	IT(Suzor)	MBI programs
	Provide adequate spaces for connectivity in Anchor institutions.	3,4	IT(Suzor)	MBI Implementation Grant
	Expand capabilities on the town webpage for improved accessibility, ease of use, and enhanced function, with a goal toward meeting the established standards for information and communication technology (ICT).	5,7	IT(Suzor)	Municipal/Community Compact IT Grant
<ul> <li>3. Expand internet service, device distribution and digital literacy through community engagement and partnerships.</li> <li>4. Increase the capabilities of</li> </ul>	Create a Digital Equity and Inclusion webpage within the town website to host the Ashburnham Digital Equity Plan and a related interactive Local Digital Resources Map displaying locations of digital equity/literacy resources.	5,7	IT(Suzor)	Municipal/Community Compact IT Grant
	Create print copies and a digital downloadable/printable version of the Local Digital Resources Map for distribution and display, including the installation of kiosks at Community Anchor Institutions and public outdoor digital spaces (workstations, charging stations, and outdoor public Wi-Fi areas).	5	Town Planner	MBI Implementation Grant, MRPC GIS Allocation
	Partner with social service agencies to create device distribution programs.	5,6,7	COA/Library	MBI Implementation Grant
	Purchase Wi-Fi hotspots (with internet service subscription) for the library to loan out.	1,2,4	Library	MBI Implementation Grant
Ashburnham's technological	Provide a consultant to the library to determine a program that will support a public device management system. Purchase software if appropriate.	1,3,4,	Library	MBI Implementation Grant

resources and public digital workspaces.	Create public workspaces outside of the library that includes charging stations. (consider solar powered options where feasible)	1,3,4,	Library	MBI Implementation Grant or MBI programs
	Provide upgraded devices and computers for Town Departments.	1,3,4,	COA, Library, Town	MBI Implementation Grant
	Expand and improve upon audio/visual capabilites at Town Hall and the Library.	3	Town, Library, IT Consultant	MBI Implementation Grant , Community Compact IT Grant, Municipal Budget
	Provide workspaces, cloud storage capabilites and enhanced software (fillable forms, etc.) for public facing departments in town.	1,3,4,	Town	MBI Implementation Grant , Community Compact IT Grant, Municipal Budget
	Leverage existing and potential funding sources and programs to enhance digital equity and inclusion in Ashburnham.	7	Town Staff/Planner/COA	Municipal/Area Digital Equity Resources
5. Seek and secure funding opportunities for	Identify meaningful partnerships and seek coordinated joint-funding applications for developing, expanding, or sharing resources to support the mission of existing Digital Equity & Literacy partners and Community Achor Institutions.	1,7	Town Staff/Planner	Municipal/MassHire Central Mass Career Center Partnership
investment and long-term support of digital equity programs and	Coordinate closely with MassHire Central Mass Career Center and Montachusett Opportunity Counsel, (MOC) to understand existing Digital Literacy funding mechanisms and sources to best plan for future funding needs over the course of the next 5 years and beyond.	1,7	Town Staff/Planner/COA	Municipal/Area Digital Equity Resources
services.	Develop framework and partnerships and seek funding to establish mobile, site-site and in-home digital literacy trainers and training services and/or corresponding Rideshare Transit and Transportation Programs that provide "rides for digital literacy and inclusion".	5,7	СОА	Municipal/Area Digital Equity Resources

### 6.4 Digital Equity Implementation

Leominster can and should leverage numerous state and federal funding opportunities to support digital equity initiatives to bridge the Town's' digital divide, increase digital inclusion, and enhance digital equity. These funding programs target critical implementation areas of digital equity planning, including workforce development, digital literacy education, device distribution, broadband adoption, infrastructure, and community outreach & engagement.

#### 6.4.1. Municipal Digital Equity Implementation Program

Municipalities participating in the Municipal Digital Equity Planning program (the program associated with the development of this Plan) are directly eligible for another funding program administered by the Massachusetts Broadband Institute (MBI), the Municipal Digital Equity Implementation Grant program. Municipalities that have completed a Digital Equity Plan may select and apply for funding to implement one or more activities or "actions" identified as priorities within the Plan. The funding program allows for projects related to several project focus areas relevant to achieving or enhancing digital equity and providing services or programs supporting digital inclusion.

As with some related planning activities in the economic development field, it may be beneficial to adopt a regional approach to digital equity implementation. Such an approach would enable resource sharing that could reduce staff time and costs through coordinated efforts and support thereby increasing efficiency and likely offering mutual, joint benefits, and increased success. At present, MBI has set aside a total of \$56,603.77 in implementation funds for the Town of Ashburnham. Through an application to MBI, the town is eligible to receive those funds for the implementation of actions identified within this Plan. It should be noted that the Municipal Digital Equity Implementation Grant Program allows a municipality to apply for up to \$100,000.

The intent of the Municipal Digital Equity Implementation Program is to enable municipalities who need funding to mobilize, start-up, and implement digital equity activities locally to access a one-time grant to execute a project (or projects) defined in their Digital Equity Plan or related document that MBI deems of sufficient standard. Project implementation will increase access and usage of the internet for the populations most impacted by the COVID-19 pandemic.

Municipalities are strongly encouraged to utilize their planning consultants from the Municipal Digital Equity Planning Program to define a project (or set of projects) scope and budget for implementation. Upon approval from MBI, municipalities may start project implementation and will be accountable to MBI's reporting requirements, which vary by proposed focus area(s).

Specifically, the Municipal Digital Equity Implementation Program will accomplish three goals:

1. Enable municipalities to make local digital equity investments that will increase access, adoption, and usage of the internet for the populations most impacted by the COVID-19 pandemic.

- 2. Transition municipalities from the planning to implementation phase by providing funds to execute a project (or projects) indicated in their Digital Equity Plan, Digital Equity Planning
- 3. Encourage collaboration and synergy with the Digital Equity Partnerships Program, which includes statewide and regional grantees with high capacity for digital equity work. Charette, or pre-existing plan deemed sufficient by MBI

MBI will administer the Implementation Grant round in the process outlined below:



#### 6.4.2. Additional Digital Equity Funding

#### Lead for America American Connection Corps

#### https://broadband.masstech.org/massachusetts-digital-equity-opportunity

The Lead for America American Connection Corp (ACC) is a service membership focused on advancing economic prosperity and bridging the digital divide. The ACC supports broadband development, digital inclusion, and civic leadership in communities through a network of ACC Members. Organizations currently engaging in digital equity and inclusion work that want to expand their initiatives and impact can apply to host a digital equity practitioner directly through the Lead for America American Connection Corps (ACC) program. MBI and Lead for America have committed to placing a cohort of practitioners to ensure a broad range of organizations can take advantage of this program. Individuals will be recruited in partnership with selected host sites from the communities that they will serve.

#### **Digital Equity Partnerships Program**

#### https://broadband.masstech.org/partnerships

The Digital Equity Partnerships Program <u>launched in September 2022</u> to support organizations across the state in implementing projects that meet the digital equity goals outlined in the Commonwealth's <u>2021 ARPA COVID recovery legislation</u>. The Program is comprised of six initiatives that applicants can focus on within proposals:

- 1. Wi-Fi Access: Implementing Wi-Fi in affordable housing and/or low-income neighborhoods.
- 2. Public Space Internet Modernization: Improving infrastructure and resources in public.
- 3. Connectivity for Economic Hardship: Providing "hot spots" to low-income/housing insecure individuals.
- 4. Digital Literacy: Establishing digital literacy programs to train populations on devices, resources, and digital tools.
- 5. Device Distribution and Refurbishment: Securing new and/or refurbished devices for distribution.
- 6. Education, Outreach, and Adoption Support Initiative: Conducting outreach to increase the success of digital equity programs like the <u>Federal Communications Commission's Affordable Connectivity Program</u> (ACP).

In December 2023, the Healey-Driscoll Administration and the Massachusetts Broadband Institute (MBI) at MassTech announced \$20 million in new grants through the state's <u>Digital Equity Partnerships Program</u>, which supports high-impact and scalable initiatives that reach residents most affected by the digital divide.



As part of this funding announcement, the University of Massachusetts Lowell was awarded \$4 Million to spearhead a Digital Equity Partnership project covering the Gateway Cities of Leominster, Fitchburg, Lowell, Haverhill, and Lawrence, and more broadly across the many communities of the Merrimack Valley, Northern Worcester County and the North Shore. Through the funded partnership the UMass Lowell team will offer technical skills, a student digital navigators' model, project management resources, and procurement expertise. Specific outcomes will include deploying three neighborhood-scale mesh Wi-Fi networks, improving six public facilities with broadband service, creating a multi-tiered digital literacy 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 finally,

providing outreach at six community-based organizations to promote individual of adoption the Federal Communication Commission's, Affordable Connectivity Program.

Several aspects of the UMass Lowell Digital Equity Partnership Program including, Wi-Fi Access Initiative, Public Space Modernization Initiative, Digital Literacy Initiative, Device Distribution and Refurbishment Program, and Education, Outreach & Adoption Program are aimed to serve several Gateway Cities including Fitchburg and Leominster, as well as other parts Northern Worcester County within the Montachusett Region.

#### <u>Metropolitan Area Planning Council Apartment Wi-Fi</u> and <u>MBI Residential Retrofit Program</u> https://www.mapc.org/our-work/expertise/digital-equity/apartment-wi-fi/ https://broadband.masstech.org/retrofit

The Metropolitan Area Planning Council's (MAPC) <u>Apartment Wi-Fi Program</u> works with municipalities, public housing authorities, and affordable housing developers to build Wi-Fi networks for residents. The Apartment Wi-Fi Program provides funding, project management, and procurement support to fund the construction of Wi-Fi networks, providing residents with equal or superior service to what is available from commercial ISPs at no cost to residents. Program funding covers all capital costs associated with network design, construction, equipment, and the first year of ongoing operating expenses. MBI's <u>Residential Retrofit Program</u> (funded through the federal Capital Projects Fund) works in tandem with MAPC's apartment Wi-Fi Program, utilizing the same expression of interest form for housing operators.



Housing Authorities and Redevelopment Authorities involved in affordable public housing projects should connect with representatives from MBI and/or MAPC to learn about the Apartment Wi-Fi Program and Residential Retrofit Program to find out if there are any opportunities to leverage these resources for existing and planned affordable housing buildings and properties.

#### Community Compact Cabinet Municipal Fiber Grant Program

#### https://www.mass.gov/municipal-fiber-grant-program

The Massachusetts Division of Local Services Municipal Fiber Grant Program assists municipalities with the construction and completion of municipal fiber networks. A cohesive municipal network "allows for centralized management of IT infrastructure, including an enterprise approach to network monitoring, cyber security, records management, and backup and recovery." All municipalities that are not previous grantees of the program are eligible.

Eligible communities can leverage Municipal Fiber Grant Program funds toward developing a municipal wireless mesh network to provide free public internet outdoors. These funds can also support the promotion of job opportunities within the local broadband economy and workforce training opportunities.

#### **Community Compact Cabinet IT Grant Program**

#### https://www.mass.gov/community-compact-it-grant-program

The Massachusetts Community Compact IT Grant Program, administered by the Division of Local Services, provides grants of up to \$200,000 to support the implementation of local innovative IT projects, including one-time capital needs related to planning, design, installation, implementation, and initial training. Eligible communities can leverage the IT Grant Program funds toward developing a municipal wireless mesh network to provide free public internet outdoors.

#### **Community Compact Cabinet Efficiency and Regionalization Grant Program**

#### https://www.mass.gov/efficiency-regionalization-grant-program

The Community Compact Efficiency and Regionalization (E&R) Grant Program, administered by the Division of Local Services, is a competitive grant program provides financial support for government bodies interested in regionalization and other efficiency strategies. Funds may be administered by government entities, regional school districts, regional planning agencies, and councils of governments. Example eligible expenses include equipment or software, technical assistance, or transition or project management costs for one year.

Eligible communities can use E&R funding to secure software packages needed by municipal offices, including but not limited to permitting software for the Public Health Department. Communities can also partner with adjacent communities to secure a shared resource, like a Resident Engagement Coordinator.

#### **Enhancing Digital Literacy for Oder Adults Grant**

#### https://www.mass.gov/info-details/enhancing-digital-literacy-for-older-adults-grant

The Enhancing Digital Literacy for Older Adults Grant is a \$1.5 million program funded by American Rescue Plan Act Home and Community-Based Services (HCBS) that is designed to help councils on Aging (COAs) improve the digital literacy of older adults. Grants of up to \$100,000 per COA are available for COAs in Massachusetts to:

- Purchase devices, software, or broadband for older adults; technology purchases for the COA are also allowed if they facilitate the goal of increasing the digital literacy of older adults
- Provide training, education, or support to enhance digital literacy for older adults in a COA's service area or older adults who access the COA



Overall, the goal of the grant is to help older adults use technology in a way that strengthens,

enhances and expands HCBS. This may include helping older adults engage in telehealth, access medical information, connect with family or caregivers, participate in preventive health courses, participate in healthy aging programming, or find and access supports to age in the community.

#### Hybrid Programming for Councils on Aging Grant

#### https://www.mass.gov/info-details/hybrid-programming-for-councils-on-aging-grant

The Hybrid Programming for Councils on Aging Grant is a new \$1.45 million program from the Executive Office of Elder Affairs (EOEA). Funds are available to help Massachusetts Councils on Aging (COAs) expand access to high-quality hybrid (i.e., both in-person and virtual) programs for Massachusetts residents who are 60 years of age and older. That way, the same programming is available, accessible, and enjoyable for Older Adults who attend in person or virtually.

Each COA may be awarded up to \$100,000. Two COAs applying together can request up to \$200,000. Three or more COAs applying together can request up to \$300,000.

Applicants should use funds to achieve one or more of the following objectives:

- Deliver high-quality virtual and in-person programming in which Older Adults attending in-person and virtually both have their needs met.
- Enhance programming to reach previously unserved or underserved Older Adults in their service area.





• Ensure the sustainability of the program after the grant period ends (March 2025). The grant round for 2024 is closed but more funds are expected to be available in 2025.

#### <u>Municipal Americans with Disabilities Act Grant</u> https://www.mass.gov/info-details/municipal-adaimprovement-grant-program

The Municipal Americans with Disabilities Act Grant program is aimed to support capital improvements specifically dedicated to improving programmatic access and/or removing barriers encountered by persons with disabilities in applicant facilities throughout the Commonwealth. Grants will be awarded to successful applicants to remove barriers and create and improve accessible features and programmatic access including, but not limited to, Limited Use/Limited Application (LULAs) signage, and communication access devices.



#### **Determination of Need (DoN)**

#### https://www.mass.gov/determination-of-need-don

The Massachusetts Department of Public Health (DPH) Determination of Need (DoN) program was established to "encourage competition with a public health focus; to promote population health; to support the development of innovative health delivery methods and population health strategies within the healthcare delivery system; and to ensure that resources will be made reasonably and equitably available to every person within the Commonwealth at the lowest reasonable aggregate cost."

The Massachusetts Executive Office of Elder Affairs (EOEA) created the Massachusetts Community Health and Healthy Aging Funds initiative in partnership with the Massachusetts DPH in 2017 as a revision to the DoN program. This program aims "to enhance the capacity of multi-sector collaboratives to authentically engage residents and work together" to remove barriers to health."

Communities can leverage funding through the DoN program to establish training opportunities for local consumers regarding tracking medical records.

#### Commonwealth Corporation (CommCorp) YouthWorks Funding

#### https://commcorp.org/program/youthworks/

Commonwealth Corporation's YouthWorks is a state-funded youth employment program that supports skills training for youth up to age 25 from households earning less than 200% of the federal poverty rate.

YouthWorks funding could be leveraged to support workforce training in North Central Massachusetts and throughout the Montachusett Region to enhance digital literacy & inclusion and support the local broadband economy. YouthWorks participants can also benefit from a statewide network of digital navigators through past program participants, and established MassHire Workforce Development programs, Job Boards, and Career Centers.

### Massachusetts Department of Elementary and Secondary Education: Digital Literacy Now Grant

#### https://www.doe.mass.edu/grants/2022/147-2/

The purpose of this trust continuation grant is to establish and promote rigorous, engaging, and standards-aligned digital literacy and computer science (DLCS) education in public schools from kindergarten through grade 12. School districts are the unit of change toward creating rigorous, inclusive, and sustainable K–12 digital literacy and computer science education.

A list of additional Resources can be found in the Appendix.

### 6.5 Conclusion

Plan implementation will be accomplished by adhering to the principles of this plan and by utilizing its strategies and recommended actions as a guidance to achieving its overall vision. In some cases, the completion of an action may be contingent on the Town obtaining outside funding or other resources, separate from the Municipal Digital Equity Implementation grant funding program. Where possible, potential funding sources have been provided.

Monitoring, evaluating, and enhancing the Town's Digital Equity Plan are important steps in maintaining an effective document and enhancing Digital Equity over time. Periodic revisions and updates of the plan will be required to ensure that the goals of the plan are kept current, consider potential changes in digital equity and inclusion priorities and accomplishments over time. It is recommended that this plan be revised every 3 years and that accomplishments, new priorities, or evolving needs, are evaluated and tracked over time to aid in the Plan's implementation and eventual update.
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## 7. Appendix